

SEX IN SOCIAL LIFE

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SEX IN SOCIAL LIFE

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FOREWORD BY

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FOREWORD

I HAVE been asked to write a short introduction to this important work, and have undertaken to do so, not without some trepidation, since I am in no way an expert such as are the fifteen authors whose contributions follow. I call it an important work because it is based on objective statement of facts, and starts from biology; it proceeds through psychology to the study of individual and social relationships of all relative kinds; it never loses sight of the truth that right conduct in all matters of sex relationships is governed and decided by ethical or religious principle. Human beings are normally responsible to themselves, to their families, and to the next generation. In speaking about the misuse of sex, which has been the major cause of the spread of venereal disease, Mrs. Neville Rolfe says: "We have knowledge which, if applied effectively, can eliminate these diseases within a generation. Their removal will not, however, affect the major problems of attaching a sense of personal responsibility to the use of the sex function, of directing the vital power derived from sex to the service of personal and racial development." Dr. Crew, in the last chapter, sums up what is implicit throughout the book when he writes: "We must wait upon the rekindling of spiritual values. Men and women must come to believe in themselves and in the society they create," and again: "The individual must know that one of the major forms of service to the community and the species that can be rendered is the creation of a home and the peopling of it." In a word, man can direct his own future if, having the knowledge, he has also the power of self-discipline. Others would put it more simply by saying that man can shape his own development so long as he does not leave God out of consideration, a truth to which the present state of Europe bears witness. This whole book must be considered as a contribution made in all earnestness to individual and racial improvement, to the making of happy individual lives, and the great cause of human health and development.

I would therefore recommend this book to all those who have to advise and control other human beings in the course of their work, since, though sex may not be quite so universal and all-inspiring as some recent psychologists have in their enthusiasm represented it to be, it is certainly much more potent and influential than the taboos and repressions of the nineteenth century allowed. In the first place, clergymen and general practitioners would not rise unrewarded from

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reading these pages, nor, quite certainly, schoolmasters and schoolmistresses, who, speaking generally, have been slow to open their minds to biology and psychology, although they have had to handle young people of both sexes at the age of puberty. In the second place, magistrates, police court missionaries, and all those who have to deal with juvenile and adolescent crime and wrong-doing, should have clear views on the part which sex may play in producing irregularity, and will find some of the ensuing chapters valuable. In the third place, the book should not be without interest to directors of education, members of education and local government committees, and all indeed who have to deal with the problems arising from the social life of our great cities, particularly social workers and members of after-care committees. And probably every educated person may have something to learn, for if the motto "Know Thyself" once inscribed at Delphi has validity, much may be gathered here to help understanding of self and sympathy with others, and to clear up the course of individual lives. How many a life in old days was darkened and rendered fruitless by pure misinterpretation of physical facts and pure misunderstanding of common sexual problems?

There are statements in the following chapters, and perhaps in not inconsiderable number, which will not carry instantaneous conviction to many minds, and in some cases will be rejected; they will at any rate make people think for themselves. One can imagine the sort of criticism which might be made, for instance, by contemporaries of myself, who came of age while Queen Victoria was still on the throne. They would say that here is another book in which the high priests of modern science are pontificating, and telling us with a solemnity somewhat devoid of humour how to get on with our sweetheart and how to succeed with our wives. We read their portentous advice, and feel what miles away we are from the fine abandon of

"In delay there lies no plenty,
Then come kiss me, sweet and twenty,
Youth's a stuff will not endure."

We feel that we Victorians may have been stuffy, conventional and prim, but for all that we did not make anything like such a mess of our marriages as the bright young things of the present day do, in a period when psychologists and psychiatrists have brought the Tables of a new Law from their own Sinai with a confidence not less than that of the old Prophets, and when, if you only begin a sentence with "Science tells us that . . .," you can get away with almost any statement.

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But this, after all, is but the reactionary voice of the wrong sort of Conservatism, and ignores the change of tide and the new set of the violent currents which are sweeping humanity along. Since those peaceful Victorian days there have been two major wars, and twice the young men of the nations have been swept away from their moorings of family control, social conventions, and religious faiths. In this last war both sexes have been carried away, and there has been an exhibition of sexual incontinence and shameless conduct in our streets and lanes which must have shocked many more than just the old-fashioned Christians. There is a terrible bill of unhappiness, of child suffering and of disease, affecting innocent and guilty alike, new being paid in full by both sexes in each combatant nation. Everywhere in our picture papers, in the cinema, and in our novels, we are unable to escape from either over-emphasis or the wrong sort of emphasis upon sex. Right-minded citizens cannot but feel that something must be done, but at the same time they know that the direct attack of the Puritan is not likely to have much success. It is certain in this generation to receive the reply of Sir Toby: "Dost thou think, because thou art virtuous, there shall be no more cakes and ale?" with the Clown's addition on the top of it: "Yes, by Saint Anne, and ginger shall be hot i' the mouth, too." Can any good, then, be done by such a book as this, which presupposes in the reader a certain amount of education and a certain ability to weigh scientific evidence? Not directly, for it is never likely to be read by the great mass, and would not be understood if it were. But indirectly the mass can be effectively influenced, particularly if we start from the right sort of education.

For who are the "great mass" in any nation? Perhaps more than half of any people, the men and women who are not even readers, much less students, and are incapable of profiting by any but the most elementary academic training. A recent enquiry in the United States conducted by Harvard University has placed the percentage of the population which is capable of managerial and directive control as not more than ten per cent., the percentage capable of acquiring a high degree of skill as not more than twenty-five per cent., from which it follows that the unskilled number sixty-five in every hundred. Let us put the number in Great Britain at sixty per cent., and realise that it is now proposed under the Butler Act to give to all these a secondary education in the sense that all the children are to be kept at school in an appropriate course of study continued to the end of what will be eventually the sixteenth year. This is not the place in

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which to discuss the tremendous problem of what are to be the curricula best suited to the needs of this non-academic mass, but it is at least clear that they must be trained in the main for the business of living healthy, happy, and useful lives and for the exercise of citizenship. It seems to follow that they must acquire some conception of science, and yet that it is unlikely that they can, or will, gain much from the study of either chemistry or physics. Is it not obvious that the study of biology is the right basis of their general science training and the right foundation for the whole business of living? In this way the whole mass of the nation would pick up important truths about sex and hygiene in a perfectly natural way, and would appreciate both the point of view which is taken in a book such as this, and the line of thought which is followed. Is it too much to hope that they would at least gain the habit of looking for facts? How great an advance that would be can be estimated by those older people who remember how false or exaggerated were the "facts" with which moral advisers of unexceptionable motives sought to frighten them in former days, and how baseless were those other "facts" with which the weak were accustomed to deceive and to defend themselves. There is much to be said for an education which is based on biology and the New Testament.

It will be said, not without a certain amount of truth, that "homo sapiens" is a misnomer, that man is not governed by reason, but by the emotions, and nowhere so absolutely as in the realm of love and of passion. All this must be admitted, since, if man were rational, there would be no more war, no more crime, and no more broken homes. This book is not and does not claim to be a substitute for religion, nor for the appeal of the moral law, nor is it meant to enlist the emotions. But it does give the facts, and it tries to give all the facts. It does recognise the facts that in practically all normally healthy human beings there is this strong sexual urge seeking satisfaction and making itself felt often almost irresistibly through the stages of puberty and adolescence, that it is present, though its potency is usually less, through the fully adult period as well, and that it is apt to take violent revenges for the complete repressions that are often attempted. It also recognises the fact that the conventions surviving from the past cause many ill-adjustments between individuals and the society of which they form a part. Its purpose is to bring it about that on neither side shall these maladjustments continue so far as they are capable of being removed in the daylight of knowledge. The fact of life which this book faces is that which is

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put very clearly by H. G. Wells in his Autobiography: "In the secret places of my heart I wanted a beautiful body and I wanted it because I wanted to make love with it, and all the derision and humour with which I treated my personal appearance in my talking and writing to my friends . . . did not affect the profundity of that unconfessed mortification. Each year I was becoming much more positively and urgently sexual, and the desire to be physically strong and attractive was intense. I do not know how far my psychology in these matters is exceptional, but I have never been able to consider any sort of love as tolerable except a complete encounter of two mutually desirous bodies—and they have to be reasonably lovely bodies. The circumstances must be beautiful or adventurous or both. I believe this is how things are with nine people out of ten: as natural as hunger and thirst."

Yet under the misuse of hunger lies ill-health, under the misuse of thirst drunkenness, under both death. And so it is with the misuse of sex, and yet it can be the finest thing in life: this book is meant to show how.

CYRIL NORWOOD

St. John's College,
Oxford.

December, 1946.

(The book was finally published in 1949.)

EDITOR'S NOTE

This book was planned in 1937 and was ready for publication at the outbreak of war. An apology is due to all contributors for the double work involved for each in bringing the material up-to-date. The editor's thanks are due to them for their willing co-operation.

Four of the leading scientists summarise current knowledge in each of their own biological sciences, while those of wide experience in different branches of social work indicate practical ways in which this knowledge can be applied.

S. NEVILLE-ROLFE

5, Tite Street,
Chelsea, S.W.3.

January, 1947.

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PART I
SEX AND SCIENCE

CHAPTER ONE

THE BIOLOGY OF SEX

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I. THE PROCESS OF SEXUAL REPRODUCTION

MAN breathes and eats and drinks and digests and excretes; and in all these things he does something which every animal does. He rarely troubles to think of that. But probably most people, thinking of their own experience of love, have reflected about their relation to all the other living things who share this world with them.

Perhaps this is because sex is the only animal function of man which essentially needs more than one single individual. One has to come out of oneself, to get to know someone else intimately, to understand that other person's feelings and thoughts. This demands sympathy; and some of the sympathy, as it were, spills over on to the rest of the world. The proverb says that all the world looks kindly on a lover; but it is also true that a lover looks kindly on the world.

The connection between the sex of man and of the rest of the animal creation goes further than that. Love-making is only the beginning of sex. The full experience of sex needs not two people but three; a man, his wife, and their child. It is the child who does most to take a man and a woman out of themselves, to make them think of something larger than themselves.

A child is part of a family, and so part of a nation, part of the whole human race, and of the structure of the whole world. Anyone who begets a child does something to the world, and it is the realisation that this is what sex really means which makes a person think. Why this peculiar rigmarole of passion and kissing and copulation, and the long waiting of pregnancy? Why is reproduction, which is probably the most serious and important act which most people ever accomplish, mixed up with such an unexpected amount of pleasure and an overmastering excitement, which may lead the wisest people to do the most absurd things? Why is sex a subject on which people do some of their deepest thinking, and yet also one about which they most enjoy being flippant; the subject of the most beautiful poetry and the lewdest jokes?

One can see some of the reasons for this only when one knows something about the place of sex, not only in man's life, but in the life of the world. A man and woman by their sexual union contribute a child to the human race. They have added something to the great stream of life. Starting from the very simplest living things, that stream has flowed in many directions, through jellyfish, worms, spiders, fish, snakes and all kinds of animals. Some of its branches seem to have meandered down side tracks and come to an end; others have flowed backwards again, so that complicated animals have regressed towards simpler forms. But on the whole, as the world has grown older, its inhabitants have become more complicated and their capacities have become greater. We feel confident in saying that evolution has generally been upwards and we think that man, its last product, is also its finest.

There is no reason why this great progression of living beings should finish with man as he is to-day. But we can only ensure that evolution continues upwards, and that our descendants shall be better than ourselves, if we take conscious steps to ensure that end. The evolution of all other animals proceeds by natural causes which are independent of the will and effort of the animals concerned. But man is a conscious being, to some extent responsible for his own acts. This sense of responsibility is perhaps the highest attribute which he possesses. Any further upward evolution must be an evolution of this sense.

In the last few thousand years there has been very little evolutionary change in the crude animal nature of man; skeletons from those early times are not very different from those of to-day, and there is no evidence that man has progressed in any kind of bodily structure; even the brains of Stone Age man were the same size as those of some civilised peoples of to-day. But during this time there has been an enormous evolution in something which we can only call civilisation. This includes all forms of knowledge and learning, and artistic creativeness; it also includes the ethical and moral ideas which are embodied in what we call conscience. This kind of evolution must continue in the future. The very fact that we can decide what we consider to be good, and can then act so as to bring it about, means that we *must* do this if we wish to go forward. If we do not do it we are by that fact alone moving backwards in evolution.

A continued upward evolution is something which, we must resolve, will happen to our descendants. And our descendants will be born because of our sexual activity. That is the reason why the

question of our sexual life is so closely linked with that of evolution. Sexual reproduction is not merely the method by which children happen to be produced; it is actually a process which has itself been evolved, and which is so cunningly arranged to increase the rate of evolutionary change that the animals and plants in which it occurs have prospered so much that they have almost replaced those who persisted in a more primitive system. We shall examine the process of sexual reproduction as it occurs among animals other than man, and we shall see in detail how it helps onwards the changes in hereditary nature which constitute the evolution of these lower creatures.

We must remember that man possesses another kind of "heredity"; he can pass on knowledge and ideas by speech and writing. Purely biological heredity, with which sexual reproduction is concerned, is therefore not the only, or even perhaps the most important, factor in his evolution. But it is not by any means trivial; and, as we have seen, if man neglects it, he is refusing to use his conscience, and is in that fact alone slipping backwards in evolution.

Do you know what life is? Most people, when asked the direct question, hesitate and then say that they do not; though all the time they probably feel that they really do know, only they cannot put it into words in a way which cannot be criticised. But the more you go into the matter the more you will find that the answer, "I do not know," is literally correct. Not because we do not know much about life; we know an enormous amount about it in all sorts of different forms; but because life is not any definite thing, with sharp, clear boundaries. True, of most things it can be said with certainty that they are living or non-living. It is the intermediates which make it impossible to give a clear definition of life. These are common enough—in fact some of them are too common, and we are much too intimately concerned with them. For all that, we are not conscious of their presence; they are too small.

Whenever you have a cold you are infected with what is called a virus. If your dog gets distemper, another virus is the cause. A virus is a particle of matter, far too small to be seen with the naked eye, in fact only just on the very limit of vision with the most powerful microscopes. It has three important properties: when it is in a suitable place, such as inside a human body, it can multiply, so that if a few particles get access to the body, and overcome the body's defences, they can become an innumerable host. It can also change occasionally, and when a virus particle changes, and the changed

particle multiplies, the new ones keep their new character. Finally, the viruses inhabiting the human body have the property of causing disease. There are others which live in other situations and do no particular harm, so that this property is not a fundamental one.

The first two of these properties are among the most important characteristics of living things. A thing which merely multiplies in suitable conditions is not necessarily alive. If you put a crystal of salt into a very strong solution of salt, it will cause new crystals to form, and thus will multiply, although it clearly is not alive. But if a thing can multiply, and also change, and then multiply in its changed form, it could undergo a gradual progressive change throughout a long period of time. In fact it could evolve; and that is one of the most fundamental properties of life.

But is that really enough to allow us to say that viruses are alive? A virus is a comparatively simple thing. Each particle consists of a single chemical substance; it is a molecule, only a little more complicated than a molecule of fat or sugar. A collection of virus particles will join up to form a crystal, just as a set of sugar molecules will form a crystal of sugar. Most authorities frankly do not know whether to call viruses living or non-living. They agree that the difficulty is really that there is no absolutely sharp line between the living and the non-living.

The importance of the viruses from our present point of view is that in them is the most elementary thing which can possibly be called life: we have an example of reproduction in its simplest terms. It has two essential features. Virus particles increase in number. The material for the new particles must come out of the surroundings. So somehow the virus can affect its surroundings in such a way that a new virus is formed. Secondly, the reproduction of living things involves the possibility that a change may occur, and that if it does the changed form can also reproduce itself in its new condition. Without the first feature there would be no increase in number, and without the second there would be no evolution.

In passing, we may mention that there is another essential condition of living reproduction, and that is something which at first sight looks like its opposite—death. If living things could grow, and were never destroyed, they would eventually fill the whole earth, and there would be no room for any new offspring and any further progress. The appearance of new forms requires, as an essential complement, the disappearance of at least some of the old ones. But there is no reason why any particular unit should die. If a certain

number of new virus particles appear, or a certain number of animals are born, the same number must die if the race is not to grow until it covers the earth. But it does not matter, fundamentally, which ones die.

With viruses, and with some simple animals, it is mere chance, depending on which happen to be eaten or otherwise disposed of, and it is quite possible that a few lucky ones have persisted right from the beginning of the history of the race. In all the higher and more complicated animals, however, the subtle co-ordination of the different parts, on which the life of the organism depends, is eventually broken down, and every individual becomes at last worn out and dies.

To return to reproduction. This is seen in viruses in its very simplest form. Obviously there is nothing to do with sex here. We must look at the more complicated and larger animals to find what sexual reproduction involves, and what part it plays in evolution.

When very small things, like virus particles, increase, they do so in numbers only, not in size. Each virus particle, we must imagine, affects the materials in its immediate surroundings in such a way that they come together to form a new particle like the old one. More complicated things which can really be called living are always larger than virus particles, and when they increase they first grow before they multiply in numbers. They take in materials from their surroundings, and transform them into parts of their own bodies.

The simplest form of this eating and drinking occurs in animals much too lowly to have mouths. Their food and drink seep in through every part of their body surface. This must happen in bacteria (germs) which are the lowliest creatures which one can certainly, without any qualification, call living. But they are so small that we do not know much about the processes by which they grow.

Slightly larger than bacteria are beings known as protozoa. These are little lumps of jelly: some of them secrete a hard shell for themselves, but many exist naked. One of the best known of the naked forms is the amoeba, one particular kind of which causes dysentery if it lives in the human gut. There are very many other sorts, some of which even have structures rather like a mouth, through which they take in solid food, while others are like plants and contain chlorophyll, the green pigment which enables plants to use the energy of sunlight to manufacture their food.

Protozoa grow by taking in and digesting food. Like bacteria they can multiply merely by dividing into two, when they have grown

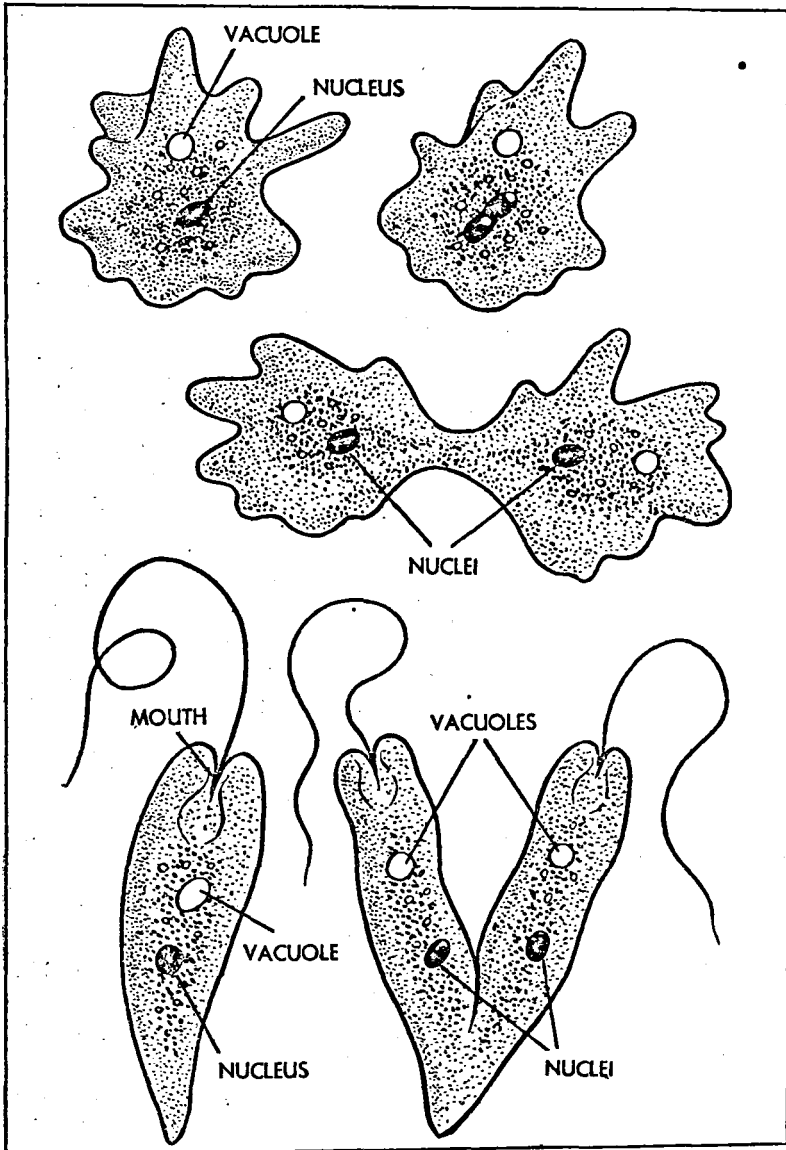


Fig. 1. REPRODUCTION "WITHOUT SEX."

The picture shows the process of reproduction in two kinds of Protozoa (one-celled animals). In the upper row is Amoeba; it merely divides in two, first the nucleus and then the rest of the animal. The lower two figures show a more complicated Protozoan, which has a mouth, a whip-like flagella and a vacuole, as well as its nucleus. It also reproduces by dividing in two.

big enough. But although they are very small, they are not entirely simple homogeneous lumps. They have a structure, and this seems to be of the utmost importance to their life, since it is very carefully divided into exact halves whenever the protozoon divides.

All the more highly evolved animals are more complicated than the protozoa. In the first place, they are usually, though not invariably, larger. Secondly, instead of consisting of a single lump of jelly, they are made up of a large number of lumps stuck together. The lumps of jelly are known as cells, and each one looks very like a single rather simple protozoon. When a many-celled animal grows, it does so mainly by increasing the number of its cells. Some of its cells, in fact, divide and form new cells.

The process of cell division is extremely like the division of protozoa. Just as with the protozoa, the cells of an animal's body are not simple lumps, but contain the same kind of essential structures which have to be sorted out in exactly equal ways to the new cells. These essential structures play a fundamental part throughout the whole of evolution, and their behaviour lies at the root of the whole sexual apparatus. That is why it is worth seeing first what happens to them in the lowliest animals in which evolution has not got very far.

When a protozoon, or the body cell of a higher animal, is feeding and growing, the only sign which can be seen of its fundamental internal structures is a small lump, usually with a clear transparent appearance, lying somewhere near the middle of it. This is known as the nucleus. When the division of the cell takes place, the nucleus becomes aggregated into a certain number of rod-like or small round lumps. They are rather more solid than the rest of the cell contents, which are fairly watery. They are not easy to see in living cells, since they are quite clear and transparent; but in microscopical preparations of cells which have been killed and stained, these rods and lumps take up the stain more readily than the rest of the cell and show up very clearly. For this reason they are called chromosomes, from two Greek words meaning coloured bodies.

Chromosomes are extremely small. Even protozoa or animal cells are only just visible with the naked eye. Cells average about a hundredth of an inch across; the width of the nucleus would not usually be much above a thousandth of an inch, and the chromosomes have got to fit inside this. The usual rod-shaped kind is rather longer than the nucleus is wide (usually it is coiled up inside), say about two- or three-thousandths of an inch, while it is probably only

about a ten-thousandth wide. Obviously the doings of these tiny things can only be studied with the aid of very powerful microscopes.

In the reproduction of protozoa or body cells, as we have said, these chromosomes are divided exactly equally between the two new cells which are formed when the original cell splits into two. This is accomplished by each chromosome splitting along its length into two equal halves, one of which moves into each of the new cells.

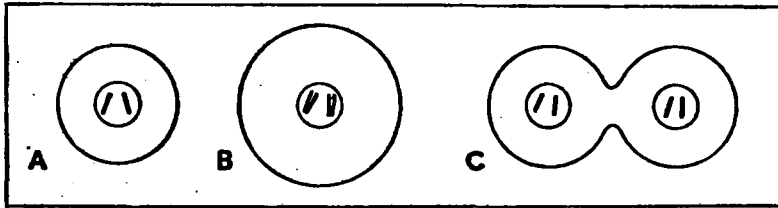


Fig. 2. THE DIVISION OF A CELL.

The cell is drawn at A with one pair of chromosomes (all cells really have more than one pair, but the others are omitted for simplicity). At B the chromosomes are splitting longitudinally. At C the split halves have separated from each other to form two nuclei, and the cell is dividing into two.

A great deal of investigation, which will be mentioned in more detail later, has revealed why the chromosomes are so important and why such a special method has been evolved for distributing them to the newly-formed cells. Chromosomes contain all the hereditary properties of the cell; they control the manufacture of all the substances which go to make up the living jelly of which the cell is composed, and thus they determine what species of cell it will be. Every cell in the human body is a human cell, because it has human chromosomes. It is the chromosomes in the nuclei of the cells which are ultimately responsible for the peculiar properties of human hair or blood, and which make it possible for a detective to determine whether stains on a "blunt instrument" are evidence of the murder of a man or the beating of a dog.

The active agents in the chromosomes which actually control the properties of the cells in this way, are tiny particles called genes. These are very minute, too small to be seen with the most powerful microscopes; they are probably not much bigger than a millionth of an inch across. Naturally there is still much we do not know about them; objects of this size are not easy to study. But we do know something about how they are arranged. They lie in a row along the length of the chromosomes. This is certainly the reason why chromosomes are always divided so carefully by splitting lengthwise into

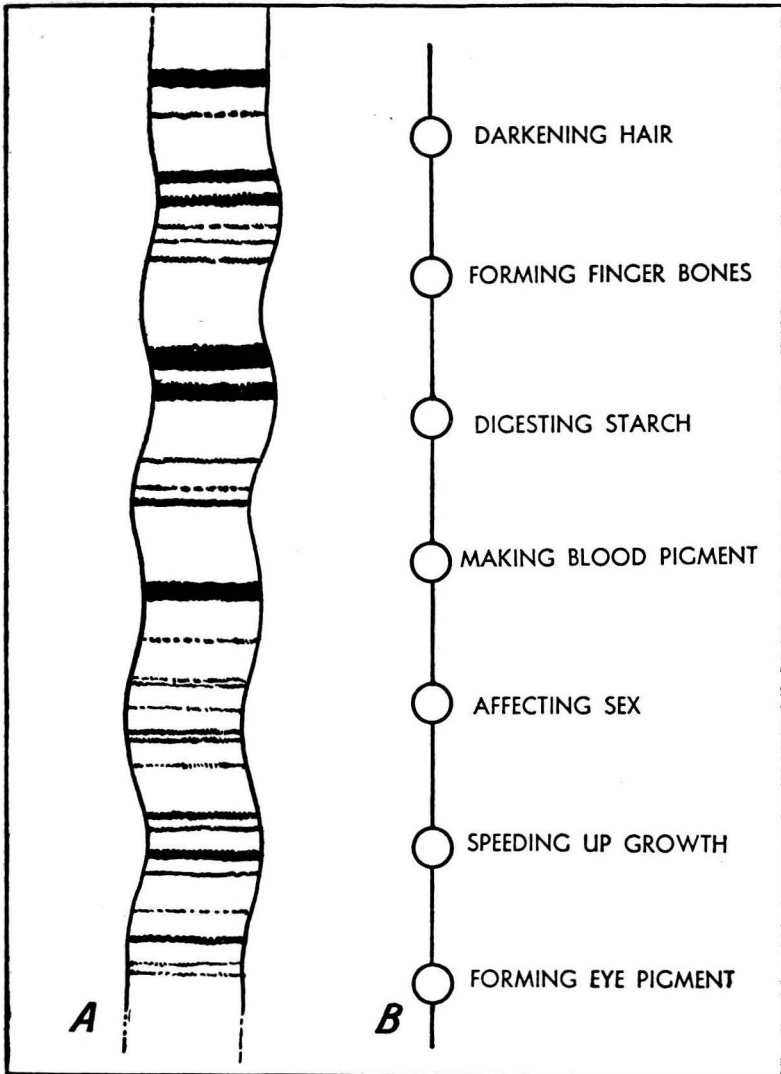


Fig. 3. GENES IN THE CHROMOSOME.

At A is highly magnified a picture of part of one of the largest chromosomes known, from the salivary gland of a fly. It has transverse bands which correspond to the genes. At B is a diagram of how the genes are arranged, in a row along the chromosome.

two halves. In this way each gene is split in two, and each new half cell gets one of each gene, which then controls the process by which the newly-formed cells grow into full-sized ones.

A few pages back we mentioned the properties which suggest that even a virus particle may be in some sense alive. They were twofold; a capacity to increase and multiply, in the right conditions, and a capacity to change and then multiply in the new form. In protozoa and animals with cells, it is really the genes in the chromosomes which have these properties. True, genes can only grow and multiply if they are in the conditions provided by the inside of a cell. But granted that, each gene goes on making new genes just like itself; whereas the other materials in the cell cannot, as far as we know, continue to increase in this way, unless there is a gene present which enables them to. The kind of substance formed in the body of a growing cell is dependent on the kind of genes it contains, while the kind of genes is not dependent on the sort of cell the genes are in; all they need is a cell of a type which is not too different from the normal. If it is slightly different from what they are used to, they will change it. This dependence of the cell on its genes is most clearly seen when a gene changes, and continues to multiply in its new form. The cell promptly changes too.

The process by which genes change is called mutation. It is not at all fully understood. In fact, it is usually said that genes change at random, which merely means that they change for reasons which we do not understand and cannot control (though as we shall see later, we can now begin to control the change a little). The important point is that they do change. This is perhaps the most important fact in all biology, since on it depends the whole of evolution. If genes continued indefinitely to make new genes exactly like themselves, with no change, no new properties could ever appear in living things. If there were a certain number of different genes already in existence when the changes ceased, this number could be shuffled and re-sorted, by the processes we shall speak of in the next chapter, but there would soon be an end to the possibilities of that. There would be no progress and no advance, and the stream of life would be dammed up for ever.

Genes, then, are the fundamental units of life, as far as evolution is concerned. Any living thing which contains genes and allows them to mutate, and to multiply, is capable of evolving. But this mechanism is not a very efficient one for evolution. We find that it is only rather primitive animals which have done no better than this, and they

are primitive just because they have retained a very simple mechanism of reproduction which has slowed up their evolution. (Body cells do not need to have an efficient evolutionary mechanism, since they will in any case die after a short time, when the body of the animal dies.)

Protozoa, which normally reproduce by merely dividing in two in this way, are usually considered the lowliest type of the animal world. There are a few rather more complicated animals which also adopt this primitive system. In some worms reproduction takes place literally by cutting the body in two; after the worm has grown to a certain size, the back part gradually becomes nipped off from the head, and sets off as an independent worm on its own. So far as the

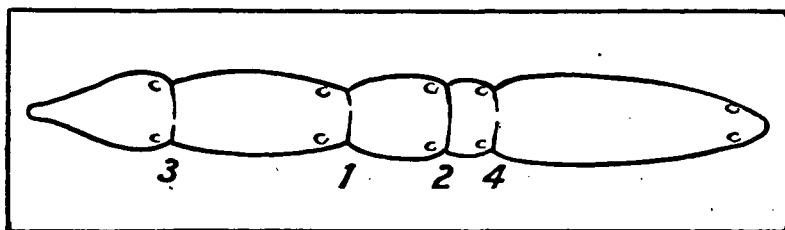


Fig. 4. NON-SEXUAL REPRODUCTION IN A WORM

The posterior end of the worm is being transformed into new individuals, which will eventually break loose and lead an independent life on their own. The figures give the order in which the dividing lines were formed.

genes are concerned, the only process involved is the halving of the chromosomes during the cell divisions by which the hind end of the body is built up. Similarly, very many plants reproduce by a similar process, when parts of the body form suckers, or bulbs or corms, which eventually develop into new plants. Reproduction in which a normal part of the body separates off from the rest, and becomes a new individual, is frequently called vegetative reproduction. The other type of reproduction, with which this is contrasted, is sexual reproduction. We must now see why nearly all the more highly evolved animals have adopted this latter type.

Sex is a method of shuffling. It is a device for giving every individual who is born the benefit of a New Deal, so that he holds his own particular hand of cards, which is unlike anyone else's. It is sex which enables each person to be different from every other. We must first look very briefly at the advantages of this from the evolutionary point of view, and then examine in more detail how it is done.

Non-sexual reproduction depends on the careful splitting lengthwise of the chromosomes in such a way that the two new cells obtain exactly the same genes as each other, and exactly the same ones as were in the parent cell when it originated. The whole process is well adapted to preserve the *status quo*. The only method by which change can happen is by the mutation of a gene into a new form. When this occurs, the new type of gene will make a new type of cell or protozoan, and this new type can then start living on its own. As Darwin pointed out, it will have to compete with the other types, and it will only survive if it can obtain sufficient nourishment to grow and multiply.

As animals became more highly evolved and more complex, they come to contain more genes. At the same time their conditions of life become more complicated, and the competition they have to meet is more various. It is easy to see that if we have an animal containing many genes and living a rich and varied life, it will be difficult to imagine the change of a single gene doing it much good; for instance, it would not benefit an ordinary man to have bigger bones unless he also obtained stronger muscles to move them. But if several genes changed at once, that might make the animal much more efficient.

Darwin's natural selection of animals by competition with one another would pick out, as types which were successful and able to multiply, animals with a good all-round efficiency to meet all the varied hazards of life. It would select, not particular genes, but whole sets of genes which together gave rise to animals with well-balanced powers.

No animal seems to have been able to discover a way of making its genes mutate in groups. Genes mutate, rather rarely, one at a time. If an animal which reproduces vegetatively (i.e., non-sexually) would be improved by gene A turning into A^1 , and gene B at the same time turning into B^1 , it has to wait for these two events to happen one after another. That will not often happen in a single lifetime; as a rule, if gene A mutates to A^1 first, it will be several generations later before, in the progeny of this cell, B mutates to B^1 . Meanwhile, the individuals with A^1 have to get along as best they can; and as the change of a single gene may give them no advantage at all over their fellows, and may even be harmful to them, they may die out before the change of B to B^1 happens.

In sexual reproduction the genes from two individuals are brought together. They are, as it were, shuffled, and half the combined lot is

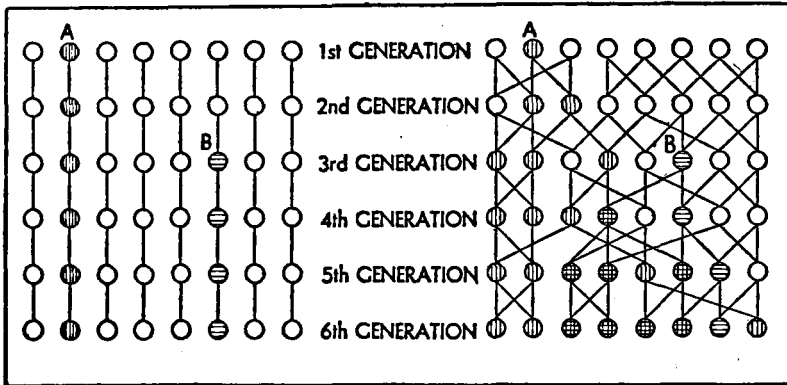


Fig. 5. THE IMPORTANCE OF SEXUAL REPRODUCTION.

The diagram at the left shows six generations of individuals reproducing without sex. Each one is exactly like its parent, except where a gene changes into a new form at B. But the two genes from the A and B lines never get a chance to meet. In the diagram at the right, with sexual reproduction, there is continually intercrossing, which enables the genes from A and B to come together. In the particular arrangement drawn here, which is only one of the many possibilities, there are already four of the AB types in the sixth generation.

dealt out to the new individual which is born. This makes it much easier for new combinations of genes to come together and be tried out in the world. Genes are mutating in all the innumerable individuals of a species, and being shuffled around in sexual reproduction. When A mutates to A' in one animal, it is unlikely that B mutates to B' in him also, but with sexual reproduction there is another chance to get A' and B' together; B may mutate to B' in his mate—or may have done so in her ancestors so that she already contains this variation.

As soon as success in evolution comes to depend on complexes of genes which fit together to make a harmonious combination, then some process of rearranging the genes, and trying out new combinations, speeds up the process enormously. Animals which adopt such a process will evolve rapidly, by being able to adapt themselves to new and complicated circumstances. This is the function of the sexual process, and this is why, once the process originated, the animals in which it occurred have evolved into all the vast number of kinds we now know in which sexual reproduction is found.

The process of sexual reproduction has, however, some disadvantages. It makes it easy for new combinations of genes to be formed; but at the same time it makes it easy for old combinations to break up. Animals which have evolved a successful method of life in a

certain set of circumstances sometimes seem to resign themselves to an unprogressive existence; they give up sexual reproduction, so that they have no danger of losing the particular collection of genes on which their adaptation depends. This means that they give up their main method of evolutionary advance; the best they can hope for is to be allowed to continue in peace as they are. Should conditions change rapidly they may not be able to produce offspring of the new types required, and the whole race may therefore be killed off. Renunciation of sex by a whole race of animals is acceptance of a sentence of death.

It is not easy to think of a mechanism which would shuffle the genes in a way which would be really efficient from the point of view of evolution. Such shuffling should be sufficient to give rise to a number of new combinations which can be tested out in different situations, but it should not be so complete that satisfactory collections of genes are always being broken up and cannot be kept together.

To begin with, the mechanism has to provide that any new animal which is born gets some of its genes from one individual and some from another. Actually the sexual process which is found in nature ensures that half the genes will come from the mother and half from the father. If the father and mother each had only one of each kind of gene, and passed on half of them to their offspring, it would often happen that the new individual would not get all the genes which are necessary; it might get two of some (one from each parent) and none of some others. The mechanism which nature has evolved is one which avoids all these difficulties.

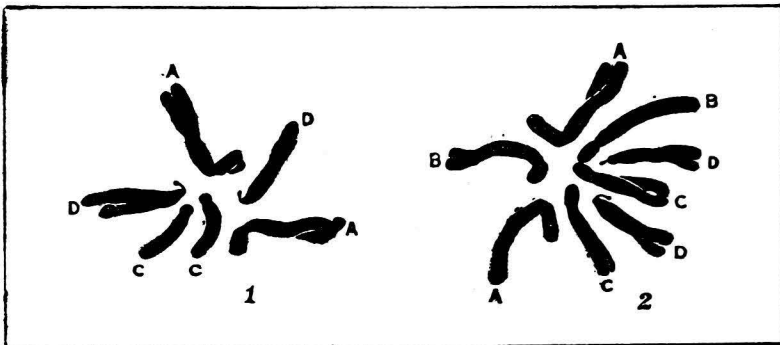


Fig. 6. PAIRS OF CHROMOSOMES.

The drawing shows the chromosomes from the body cells of two species of plants, to demonstrate that a cell always contains two of each kind of chromosome. The chromosomes are just splitting longitudinally preparatory to a division of the cell.

In animals and plants as they exist to-day the sexual process works as follows. Each animal contains, in every one of its cells, a series of pairs of chromosomes. That is to say, there are several different kinds of chromosomes, but there are always two of each kind. If we call the kinds, *A, B, C, D*, etc., an animal always has the pairs *AA, BB, CC, DD*, etc. In reproduction it passes on to the offspring one of each kind, *A, B, C, D*. Every new individual gets another such set from its other parent, which may have had chromosomes *A'A', B'B', C'C', D'D'*, etc.; then the offspring of these two parents will have *A, B, C, D* from one parent and *A', B', C', D'* from the other, and will thus again have pairs of chromosomes, in just the same number as its

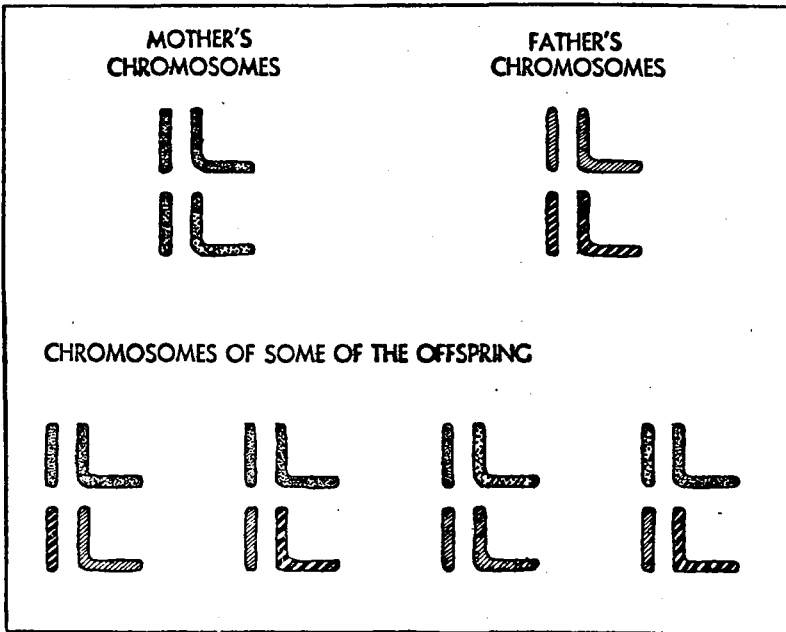


Fig. 7. SHUFFLING

In the figure the mother has a pair of I-shaped chromosomes and a pair of L-shaped ones, and so does the father. Each offspring gets one I and one L from its mother, and also one I and one L from its father. Four of the possible kinds of offspring are shown. (There are sixteen possible kinds altogether.)

parents did. But since the chromosomes of the two parents may differ slightly, as we have symbolised by calling one set *ABCD* and the other *A'B'C'D'*, the offspring will have a mixture of the two sorts.

Each chromosome, as was said earlier, contains a row of genes, and any two parents will usually only differ from each other in quite

a few of these, all the rest being the same in them both. In the mechanism as we have described it so far, the offspring gets a mixture of the chromosomes of its parents, and all the genes within a single chromosome stick together as a group. There is a further refinement, however; the sexual mechanism also provides a method by which pieces of chromosome can be interchanged with one another, so that even genes in the same chromosome can be occasionally shuffled around. This process, which is called crossing over, was actually the point where scientific research found its best clues in unravelling the whole mechanism of sexual reproduction. There is no need here to go into the complexities; the important points are these: (1) Every animal cell contains two of each kind of gene, which may be exactly the same or may differ slightly from each other; (2) in reproduction the animal passes on one of each kind to the offspring; and (3) the genes tend to stick together in groups belonging to the same chromosome, but these groups can sometimes be rearranged.

Now we must enquire how this is actually done. In the first place, the animal collects into a special cell the group of chromosomes which are to be passed on. This is attained by means of a special kind of division of the nucleus, in which the chromosomes are not split longitudinally, as usual, but are simply distributed into two groups, one chromosome of each kind going to each group. The division is known as the reduction division, because it reduces the number of chromosomes to half; and at the end of it half-nuclei are formed and it is one of these which is passed on to the offspring.

So far the process is exactly the same in all animals and plants which have a sexual method of reproduction. But from now on there are many different sequences of events according to the kind of organism involved. The simplest cases are in protozoa, in which the whole animal is only one cell. They can, and often do, reproduce directly in a way which does not involve any sexuality. But most of them can also take part in sexual reproduction. When they do so, the reduction division happens, and then two individuals come together and a half-nucleus is passed across from one animal to the other. Sometimes the exchange is reciprocal, and both animals both give and receive nuclei; sometimes only one gives and one accepts. There are many variations in the number of ordinary divisions which are undergone by the half-nuclei before they are exchanged or passed on.

In higher animals and plants the whole body consists of a large number of cells. The reduction division only happens in certain of

these cells, which are usually separated off in special organs of the body. These organs are the gonads, which in animals are called testes in the male and ovaries in the female. The cells which will eventually undergo the reduction division are known as the germ mother-cells. After the division has taken place, the half-nuclei form cells which gradually develop into the germ-cells or gametes. Instead of the nuclei from the whole body of one animal passing over into the other, as in the protozoa, it is only the germ-cells which come together in such a way that the two half-nuclei from the parents can join up and make

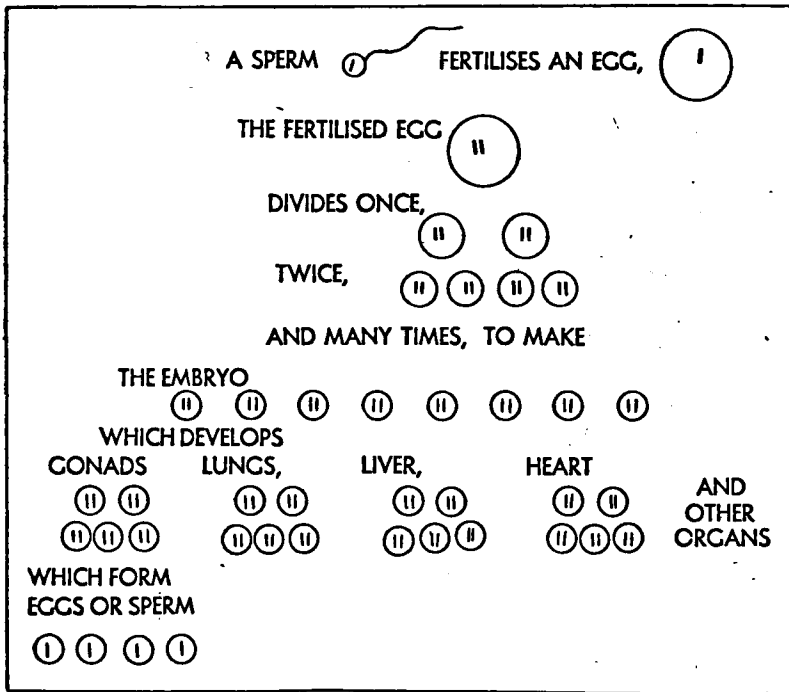


Fig. 8. FROM EGG TO EGG.

The diagram shows how the germ-cells have only one of each kind of chromosome, while all other kinds of cell have two.

the full nucleus of the new individual. This fusion of the two nuclei is called fertilisation; it marks the end of the fundamental sexual process, just as the reduction division marks the beginning.

In a few organisms, which are mostly low in the evolutionary scale, the male and female germ-cells are similar or even indistinguishable in appearance. More usually they are differentiated into two different

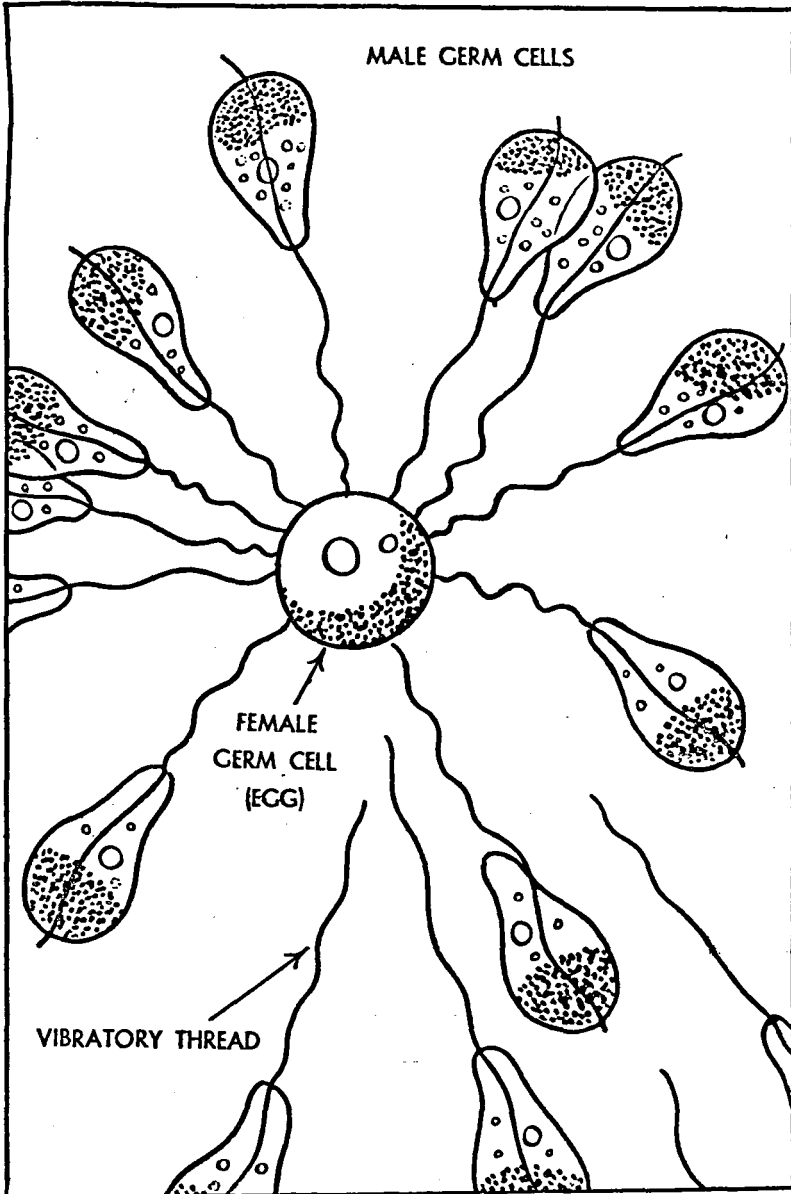


Fig. 9. SIMILAR EGGS AND SPERM

The drawing shows a number of male germ-cells, or sperm, of a seaweed, clustered round a female germ-cell or egg. The sperm are much the same size as the egg, but they have a vibratory thread which enables them to swim while the egg merely floats. (Magnified.)

kinds, corresponding to the two sexes. The simplest type of differentiation occurs when one kind of germ-cell is large and slow moving, the other kind smaller and more energetic. The more sluggish ones are considered as female, the more mobile as male. This type of difference is found throughout nearly the whole plant and animal kingdoms. Two general names are often used for these two kinds; macrogametes for the large (female), and microgametes for the small (male) ones.

It is only in very rare cases that, if we can discern any difference between the gametes, we are unable to place them satisfactorily into one or other of these categories. But there are some difficulties. For instance, in fungi (mushrooms and toadstools), there are sometimes two sorts of gametes, of which a gamete of one kind can fuse only with one of the other; but there is no obvious difference in size or rate of movement, and they have to be classed in a non-committal way as plus and minus. In fungi, also, we find the only examples of organisms that regularly occur in more than two sexes. Instead of being bisexual, like all other living things, some species are multi-sexual. The sexes, of course, cannot be classified as male or female, since there are too many of them. Usually they are referred to by letters. Thus we may have four sexes, *AB*, *Ab*, *aB*, and *ab*; and it is found that germ-cells of *AB* can fuse only with those of type *ab*, and *Ab* with *aB*.

Such peculiarities are very rare. In nearly all animals and plants there are only two sexual types, one with large sluggish gametes and one with small active ones. It is natural, perhaps, to call them female and male wherever they occur. And certainly a female dog or mouse is female in just the same way as a woman is. But is there really much similarity between a female flower and a female dog? Actually, only in the fact that their germ-cells are comparatively inactive; in all other respects they are completely unlike one another.

The sexual process, as a method of reproduction, is the same throughout the realm of living things, but the kinds of organisms which take part in it, men and women, stallions and mares, male and female flowers, plus and minus fungi, are very different; and the mere fact that it is convenient to call them all (except the fungi) male and female does not make them any more alike than they really are. We shall see later that the behaviour of some of these male and female animals, at least in the lower groups of animals, is nothing like that of male and female humans; but when we study animals such as rats or deer, which are not so very different from men in other

respects, we find that their sexual behaviour, too, is something approaching our own.

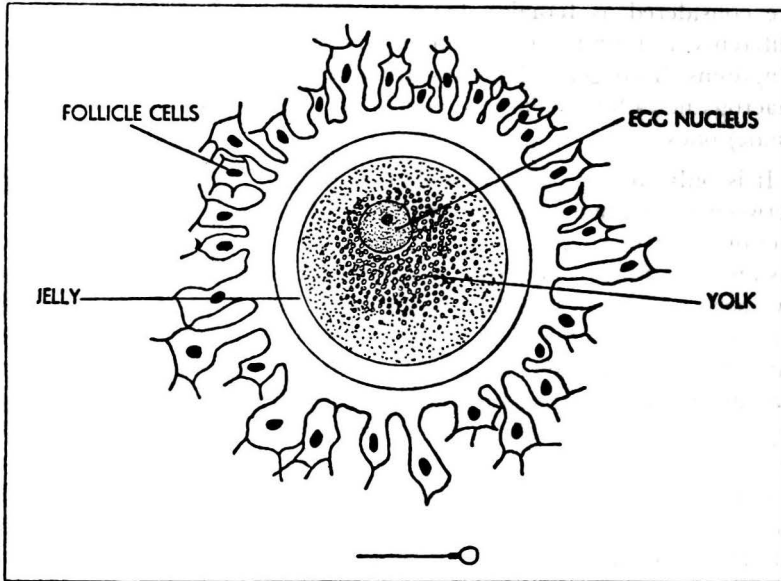


Fig. 10. THE HUMAN EGG AND SPERM

The human egg cell is about one hundredth of an inch across. It is shown here considerably enlarged. The egg has a large nucleus, and contains some granules and small droplets of yolk. It is surrounded by a transparent layer of jelly, and outside that are nurse cells which made up the follicle in which the egg developed. At the bottom is shown a sperm to about the same magnification. Its head is entirely filled by the nucleus, and behind that it has a centre piece and a thin tail.

In animals, the macro- and micro-gametes are more usually known as eggs and sperm, or, more scientifically, ova and spermatozoa. As we have said, they are single cells, each of which contains only a half-nucleus with half the normal number of chromosomes; and they come together and fuse in the process of fertilisation. The fact that eggs are big is well known to everyone. Ordinary body cells are somewhat below the size which can be seen with the naked eye, while hen's eggs, or, still more, ostrich eggs, are by comparison very large. As a matter of fact, the comparison is not entirely justified, since a hen's egg is really more than an ovum in the strict sense. The cell, which contains the half-nucleus and which fuses with the sperm, is only that part which we call the yolk. The white of the egg, and the shell, are extras added to aid the embryo in its development; the

shell protects it, and prevents it from drying up, while the white contains some of the nutriment and water which it will need while it is developing.

The hen's egg is a good example to illustrate that it is the female, through her ova, who takes the trouble to give the embryo a good start in life. The largeness of ova is caused by the fact that egg-cells always contain a large amount of nutriment ready for the embryo to absorb in the very first stages of its development. The necessity for the provision of this initial store of food brings about some very characteristic features in the formation of ova.

After the reduction division has occurred, the half-nuclei do not form germ-cells straight away, but undergo one more division. Thus from one reduction division one would expect two half-nuclei, which would divide again to give four nuclei which might form four egg-cells. Actually it does not happen like that; everything is done to prevent the future egg-cell being divided up and thus reduced in size. When the reduction division occurs, it happens near the surface of the cell, and one half-nucleus remains in the cell, while the other is pushed out with only a tiny piece of the cell body, so that the division gives rise to one fair-sized cell and one very small one. At the second division, the small cell divides again into two small ones; and the main egg repeats its performance of an unequal division, so that again its size is not much reduced. The small cells eventually die and cannot function as eggs;

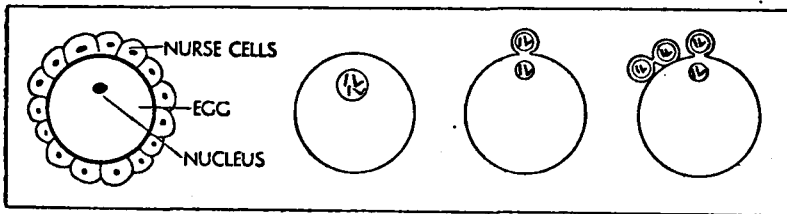


Fig. 11. THE FORMATION OF AN EGG.

from one reduction division there therefore results only one ovum, and this is quite big, since it has in effect missed out two divisions.

The size of the ovum is often still further increased because the interval between the divisions is abnormally long, and during this interval the egg-cell grows. Roughly speaking, we find that the more complex and highly evolved the animal, the more difficult the task the ovum has to face in developing into an adult, and the larger

the initial store of foodstuffs with which it is sent on its way. Fish, for example, have on the whole bigger eggs than invertebrates of the same size, reptiles bigger eggs than fish, and birds bigger still. When we go still higher, to mammals, the rule breaks down.

Mammalian eggs are very much smaller, by comparison with the size of the adults, than those of any other vertebrates. For instance, the human egg is only about a hundredth of an inch in diameter; that is to say it is just visible with the naked eye. The reason for this small size of mammal eggs is quite clear. The mother is not going to turn them adrift on the hard world as soon as, or even before, they are fertilised. On the contrary, she will retain them in her body for a long period, and will nourish them with substances from her blood. They therefore do not need a store of food sufficient to last them until they can fend for themselves; all that is necessary is to provide them with enough to keep them going until they have time to settle down in contact with the wall of the womb, from which they can be nourished.

An egg, of course, is not just a bag filled with food. It has in front of it one of the most bewildering jobs that can well be imagined; to develop into a living, breathing, moving adult animal. There is plenty of evidence that an egg-cell has to be very carefully prepared for this task. Even in mammals, where there is comparatively little food stored in it, the ovum is surrounded, while it is still being formed, by a whole set of nurse cells which aid in transporting the correct substances to it and laying them down in the right places.

The organ in which the eggs are formed is called an ovary, and lies inside the abdomen. In the ovary, each egg which is being formed is enclosed in a sphere of smaller cells which make a small lump spoken of as a follicle. At first the cells of the follicle are pressed quite tightly around the growing ovum, but as the egg-cell becomes nearly fully formed, fluid collects among the cells of the follicle and pushes them apart, so that eventually it is more or less full of fluid, with the egg, surrounded only by a thin layer of cells, projecting into the middle on a kind of stalk. Meanwhile a clear zone of jelly has appeared between the egg and its covering of follicle cells. Eventually, when the egg-cell is completely ready, the follicle bursts and the stalk breaks and allows the egg to escape from the ovary. There for the moment we shall leave it, to consider the other type of germ-cell, the sperm.

The formation of sperm-cells is considerably simpler than that of eggs. There is no need for a large number of nurse cells to bring up

and arrange the formative materials and nutriment of the future embryo. Instead, everything is sacrificed, in the more highly evolved animals, to obtaining lightness and mobility. Sperm are very small. In man they are only about one five-hundredth of an inch long. They are also formed in very great numbers, so that instead of wasting three of the four cells formed after a reductoin division, as is done in egg-formation, all four are transformed into complete sperm.

In this transformation, the body of the cell becomes drawn out into a long thin process, which makes up the greater part of the length of the complete spermatozoon. This is called the tail, and it joins on, by a small centrepiece, to the head of the sperm, which contains the nucleus. The whole sperm, in fact, is nothing but a swimming nucleus, the motive power of which is produced by the lashing of the tail. Considering its small size, it can swim quite fast. A human sperm can progress at the rate of about an inch in three minutes, though it never pursues a straight course for such a long time.

The shapes of sperm are very different in detail in different species of animals, but they are nearly all variations on the general pattern of a head with a long narrow tail. The head is sometimes pointed and sometimes blunt, and the tail may be a simple filament or it may have a wavy membrane attached along one side.

Nature is very prodigal. Even eggs are produced in very large numbers by some animals. A fat hard-roed herring contains about 30,000 ova; a sturgeon, of the kind from which we get caviare, produces about five million eggs a year, while a cod may have nine or ten million. These eggs are fairly large and complicated, and the numbers produced represent an enormous drain on the resources of the animals; but presumably the dangers of growing up in the sea are such that the effort has to be made if the race is to go on; moreover, in fish the mechanism for ensuring fertilisation is comparatively inefficient. In many other animals, however, eggs are produced at a more modest rate. A woman, for instance, does not form much more than 400 mature eggs during her whole reproductive life. It was at one time thought that these were all laid down, though not fully matured, at the time of birth and that no more new ones could be originated after that, but this is now regarded as very doubtful.

On the other hand, sperm are nearly always formed in quite astronomical numbers. In a single ejaculation, a man discharges about 200 million. Obviously only very small cells could be con-

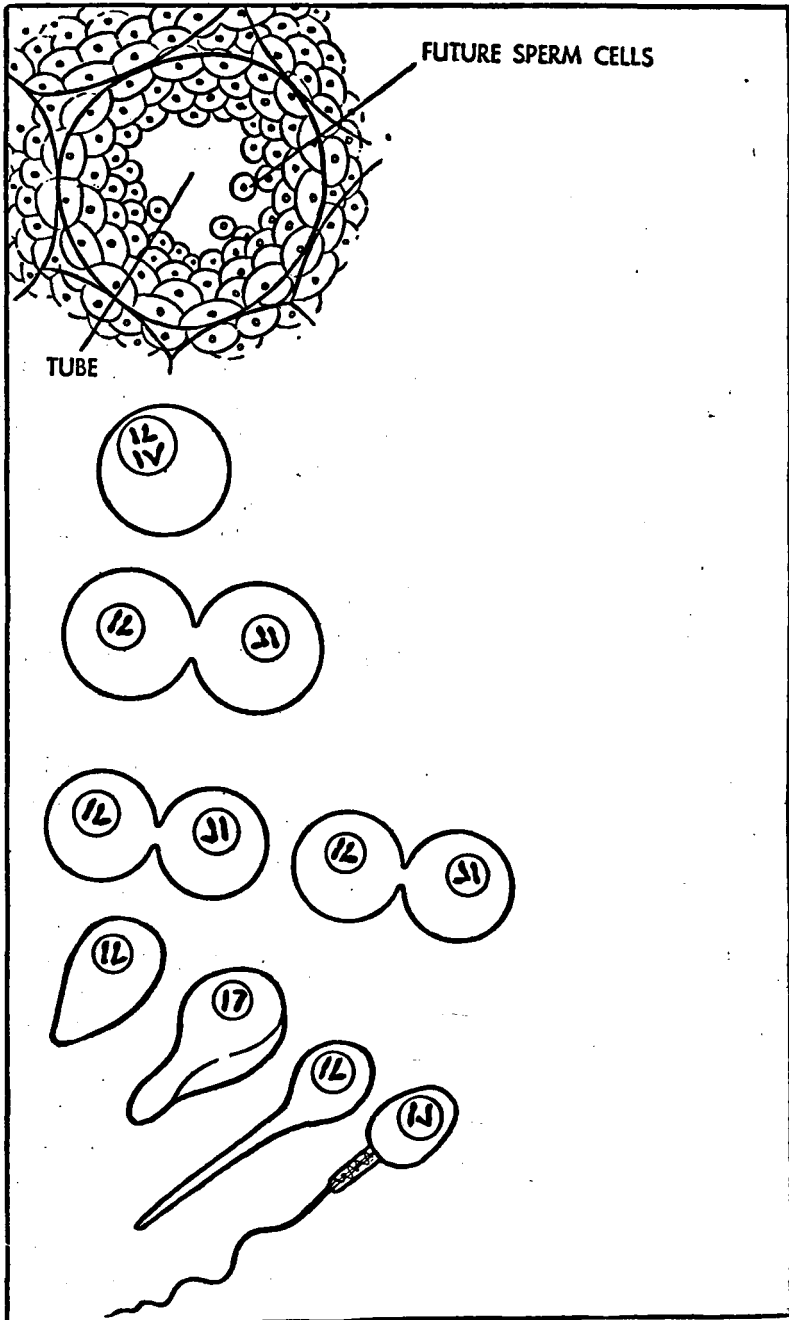


Fig. 12. THE FORMATION OF SPERM.

tinuously produced at this rate. There is no question here of the possibility that a man has only a certain definite store of spermatozoa at his disposal throughout life; they are used up so fast that there must be a continual formation of new supplies.

The mechanisms by which the sperm are brought near to the eggs are many and various. They depend on the particular kind of sex differentiation which is developed in different species, and will be discussed later.

The fusion of the egg and sperm constitutes fertilisation, which has in general two functions. It allows the half-nucleus from the father, contained in the sperm, to unite with that from the mother, which is in the egg, and in this way gives rise to the complete nucleus of the new individual; and it activates the egg.

There is not much to be said about the first function. The fusion of the two half-nuclei occurs soon after the sperm penetrates the egg. Usually after penetration the sperm-tail falls away from the head, and remains outside the egg, while the head sinks in. The sperm head, which is simply a nucleus, is attracted to the egg nucleus, and the two move towards one another; usually the sperm nucleus moves more actively. When they meet they both prepare for a cell division. The chromosomes appear in two separate groups which then mix with one another, so that it is no longer possible to distinguish the paternal and maternal ones. Each chromosome splits longitudinally, just as in a normal cell division; and the fertilised egg divides in two.

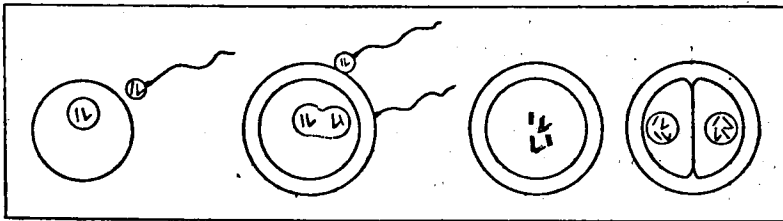


Fig. 13. FERTILISATION.

In the second figure one sperm-head has penetrated the egg, leaving its tail outside. The egg has formed a membrane, which prevents other sperm penetrating it.

In fact, it behaves just like any body-cell, and is indeed the first cell of a new body. It has started on its path towards adulthood, and nothing, except death, can any longer stop it.

The sperm also activates the egg. By this is meant that the initial stimulus for the egg-cell to divide and thus to start developing does

not depend on the fusion of the nuclei. It is brought about by the reaction of the sperm with the surface of the egg, before the head penetrates and reaches the egg-nucleus. It is still unknown exactly what the sperm does to the surface of the egg. Sometimes there is a visible reaction. When an egg is surrounded by a number of sperm, a thin filament may appear, reaching out from the surface of the egg and attached to a sperm, which seems to be drawn in towards the egg, as though the latter had caught it on a fishing-line. But this does not occur in many kinds of eggs. Again, in eggs of some animals a thin membrane separates from the surface of the egg immediately after fertilisation, and the space between it and the egg gradually becomes full of fluid, thus pushing the membrane outwards away from the egg surface.

These "fertilisation membranes," as they are called, do not occur in all species, but where they are found they are probably connected with a mechanism for preventing more than one sperm penetrating any one egg. Obviously, from what we have said about the fusion of the nuclei, each egg requires just one sperm, and things might well go wrong if more than one obtained entrance to it. Even where there are no visible fertilisation membranes formed, the first sperm to penetrate the egg probably changes the surface in some way which makes it unlikely that other sperms will do so. In very large eggs, full of non-living food reserves, such as birds' eggs, the mechanism is not always effective, and several sperm may penetrate each egg. But here the eggs are so large that most of the sperm are too far from the egg nucleus to stand a chance of fusing with it, and they seem to be used only to help in digesting the yolk in the earliest stages of development and then to disappear.

Apart from these fairly obvious changes in the cell surface, the sperm also does something else to it which causes the egg to begin to divide and develop. It is still unknown what this action is. But we can imitate it. It is possible, by various means, to persuade an egg to develop without having been fertilised by a sperm. This process is virgin birth; its scientific name is parthenogenesis. So far the methods of bringing it about are rather like cookery book recipes; certain treatments have been found to work, but no one quite knows why.

The most effective methods are different in different species. In eggs of sea urchins and other marine animals, for instance, changing the salt content or acidity of the sea water for a time will do it. In frogs' eggs the best method involves pricking with a fine needle,

preferably one which has been previously dipped in blood. In mammals it seems that development can be brought about by numerous treatments; for instance, slight heating or changes in the salt content of the solution in which the eggs are placed. This has mainly been tested on animals such as rabbits, but there is some evidence that it is true of human eggs also. In all mammals the conditions inside the body are so carefully regulated that it is extremely unlikely that changes sufficient to start the development of an egg can ever occur naturally.

Some animals have specialised in using parthenogenesis as a normal method of propagation. In bees and wasps, for instance, the queen lays eggs which may or may not be fertilised. Those that are fertilised develop into females, which become queens or workers according to the kind of food which is given them as grubs; those that remain unfertilised develop into the male drones. Thus drones have only a half-nucleus, with one set of chromosomes, and when they form sperm cells these do not have to go through a reduction division. In other animals again, such as greenfly, the female, as it were, prepares for parthenogenetic development of her eggs by omitting the reduction division during their formation, so that they have a complete nucleus even without fertilisation.

There are many varieties of such parthenogenetic methods of reproduction; all the methods, however, are examples of modifying the sex mechanism in such a way as to abolish its main advantage. In all of them, the shuffling of genes is suppressed. They can only be regarded, therefore, as degenerate forms of sexuality, in which animals have found it better to renounce the possibility of rapid evolutionary change in order to stabilise some particular constitution which has found a satisfactory niche in the world.

In mammals there is one further function which is performed by the sperm. When the eggs are liberated from the ovary by the bursting of the follicle, they are still covered with a layer of follicle cells. Before the sperm can really get at the eggs to fertilise them, these cells have to be removed. The sperm seem to do this for themselves. There is some substance contained in the ejaculate which dissolves the cells away so that the eggs are free.

II. HEREDITY AND SEX

You may be born, as the saying is, with a silver spoon in your mouth, but even if it were made of solid platinum and ornamented with diamonds, the real capital on which your life will depend are those infinitesimal specks of matter, the genes in your chromosomes. A happy home, good education and wealth cannot make a silk purse out of a sow's ear. You cannot develop beyond what your hereditary constitution allows. Equally, of course, the possibilities inherent in your genes can only be fully developed if the circumstances of your life are favourable enough to give them the finest chance. Your physique and character are the result of this interplay between your inherited endowment and your environment.

The difficulties of obtaining the opportunities for full development are terribly severe for many people. But they do not come within the scope of this section. Here attention must be confined to the other side of the picture, to the genes which you inherit, and which determine the limits of what you can make of your actual situation. How are they passed on, and which of your qualities are you likely to transmit to your children?

Most characteristics of people are very difficult to describe precisely, and it has therefore been easier to study genes which produce rather striking and peculiar conditions, which can easily be recognised in almost any circumstances. We shall return to the other, more important, ones later.

One of the best known of these genes with clear-cut effects is concerned with a property of the blood. The red colour of blood is due to millions of small round cells, called corpuscles, which contain a red pigment, and float in a yellowish liquid which is known as serum. It is found that when blood from two different people is mixed, as in blood transfusions, for instance, the serum of one blood sometimes causes the corpuscles of the other to agglutinate, or stick together in clumps. The gene we are speaking about controls this reaction. It occurs in three forms, known as *O*, *A* and *B*. Each person, as we have seen, has two of the gene, one in each of a pair of chromosomes. He may have two *A*'s, or two *B*'s, or an *A* and a *B*, or an *A* and an *O*, and so on in all the possible combinations.

The presence of a gene *A* causes the appearance of a substance in the blood corpuscles which causes them to be agglutinated by any blood which does not also contain *A*; similarly *B* bloods are agglutinated by anything not containing *B*, *AB* bloods by all which have

not got both *A* and *B*, while *O* bloods are not agglutinated by any kind. The reason for blood testing before transfusions is clear; if the transfusion is between unsuitable people, and the wrong kinds of blood are mixed, the corpuscles will be agglutinated, and may block up a blood vessel and kill the person into whom the transfusion has been made.

Now consider the inheritance of these blood groups. An egg gets one of the two genes belonging to the mother. If she is *AA*, it must get an *A*, if she is *BB*, it must get a *B*, but if she has two unlike genes, such as *A* and *B*, it is equally likely to get either. In fact, half her eggs will get *A* and the other half *B*. The same is true if she is *AO* or *BO*. And exactly the same is true of the genes in the sperm; each sperm gets one of the genes belonging to the father. When a sperm fertilises an egg, their two genes come together and determine the constitution of the blood of the new individual. For instance, if a woman with *AA* marries a man with *BB*, all the children must get an *A* from her and a *B* from him and be *AB*. But if, say, a woman *AA* marries a man *BO*, all the children will still get an *A* from her, but half will get *B* from him and the other half *O*. There is no way to tell which any particular child will get; it is pure chance which sperm happens to reach the egg first and fertilise it. But if there are enough children they will come out half and half *AB* and *AO*.

The rule is simple to apply even in the more complicated case when the mother has two different genes as well. Suppose she is *AB*, and her husband *BO*. Then half her eggs will have *A*, and when they are fertilised half of them will get *B* sperm and half *O*; thus a quarter of the fertilised eggs will give *AB* children and a quarter *AO*. Meanwhile the other half of her eggs are *B*, and will get *B* and *O* sperm with equal probability, so that there will be another quarter of the children *BB* and a further quarter *BO*.

These rules are already finding a practical use; they can sometimes be used to help in determining paternity in cases where it is in doubt. They are not yet recognised in English courts of law, although they are in some other countries, as for instance the United States. A legal committee has recently recommended that they should be accepted as evidence in Britain.

The way they work in this connection is as follows: Suppose a child is found to be of the blood type *AA*. It must have got an *A* from its mother and another from its father. A man who does not possess an *A* gene, for instance a man whose blood is *BB*, cannot possibly be the father. The evidence the tests provide is negative

only; a man who does possess an *A* gene is not necessarily the father; but he could be (and so the test would not help him).

There is also a minor set of blood groups, which have no effect in blood transfusions, dependent on a gene which can come in the two forms called *M* or *N*. The same sort of argument applies; all children of an *MM* and an *NN* must be *MN*. By using these as well, it is often possible to apply another check on whether a certain man could or could not be the father of a particular child.

The only way to get around the evidence of these blood groups is to suppose that, in the particular sperm concerned, one of the father's genes had changed into a different form. But mutations, though they are the source of the new types which can arise during evolution, happen so rarely (something like once in a million times) that it would be difficult to persuade any court of law to refuse a paternity order on such a slender chance.

The genes for the blood groups are particularly simple ones, because if you have two different kinds, *A* and *B*, you show the two corresponding characters, and your blood is agglutinated both by bloods which do not contain *A* and those which do not contain *B*. Often, if you have two different forms of a gene, you get some sort of a mixture of characters. For instance, a person with one gene for dark hair and one for fair has hair of some intermediate shade. Very often, however, only one of the two genes shows up clearly. Even with hair, the intermediate shade is much darker than would be expected. If you have one gene for dark eyes and one for blue, your eyes are likely to be so dark that they do not differ much from those of people with two dark eye genes. This behaviour, in which one gene, as it were, masks the effect of the other, is known as dominance. The gene whose effect comes through is the dominant, the other whose effect is hidden is the recessive.

The enormous importance of this for human beings should be obvious. One cannot tell, by looking at a person, what genes he may be carrying, because many of them may be masked by dominants. For instance, even if both husband and wife have dark eyes, they may each have only one dark-eye gene, with one blue-eye gene, and in their marriage a blue-eye egg may meet a blue-eye sperm, and a blue-eyed child result. This is probably the explanation of the fact that a child often resembles one of its grandparents or one of its uncles or aunts more than its own mother and father. The grandparent may have some peculiar feature which is due to a recessive gene, which we might call *a*, so that he must be *aa*. In his children,

a may be masked by its dominant form which we may call A ; the child may be Aa . But if this child in turn marries a wife who has the gene a , probably also masked by a dominant, in their children

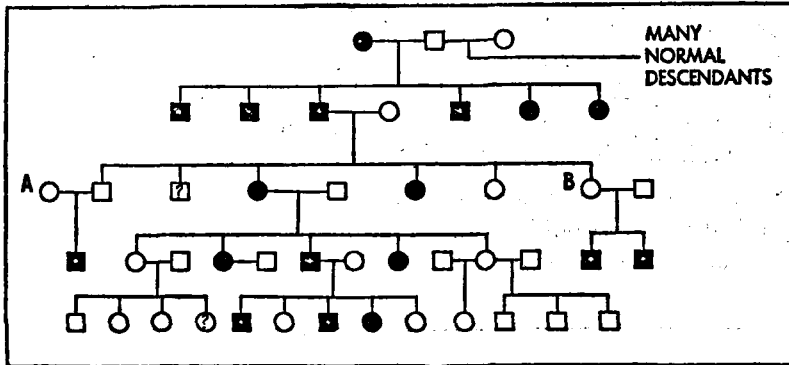


Fig. 14. DOMINANT INHERITANCE.

A pedigree showing how a dominant gene is inherited. Squares are men, circles women, and the black signs show the people who showed the effect of the gene, which in this case affects the eyes. Note that the gene is handed on only by people who themselves show the character. There are only two exceptions to this, at A and B, where someone has transmitted the gene without showing it. This proves that the gene is not completely dominant, but can sometimes be masked by the normal gene.

the two a 's may come together again, and we get a grandchild looking like his grandfather.

There are genes for all kinds of characters. In some animals which have been very fully studied, scientists have identified up to about two thousand. But it is probable that there are many more, which we cannot yet seize on because they only occur in one form and therefore are transmitted to every individual and cannot be noticed. It is difficult to know how many there are altogether. In a fruit fly, which has only four different pairs of chromosomes, it is calculated that there are something like ten thousand. Man has twenty-four different pairs of chromosomes, so he may have up to a hundred thousand genes or so. They affect every aspect of his being; not only the colour of his hair and eyes, but also the working of his digestive system and of his glands and of every organ, including his brain.

The difficulty with man is to identify the individual genes. Quite a number of very peculiar conditions can be studied easily enough. A gene is known, in one family from South America, which causes the arms and legs to be cut short just above the elbows and knees. There are many less radical, but nevertheless definite, abnormalities of which the inheritance can be followed. Very short fingers, deaf-

mutism, albinism, an incapacity to raise the eyelids, are some of them. There are many more which are actual diseases, which finally bring about the death of the individual which shows them. And there are a few minor things, such as the ability to taste the chemical thiophenylurea as either sweet or bitter. Readers who would like a list of them can be recommended to consult a book called "You and Heredity" by Amram Scheinfeld, which has recently appeared; it gives an exceptionally good, and very simple, account of human heredity, in much greater detail than we have space for here.

Some of these conditions, such as sensitivity to the taste of a rare chemical no one would dream of eating outside a laboratory, are of no great interest in general life. Others are only too important to

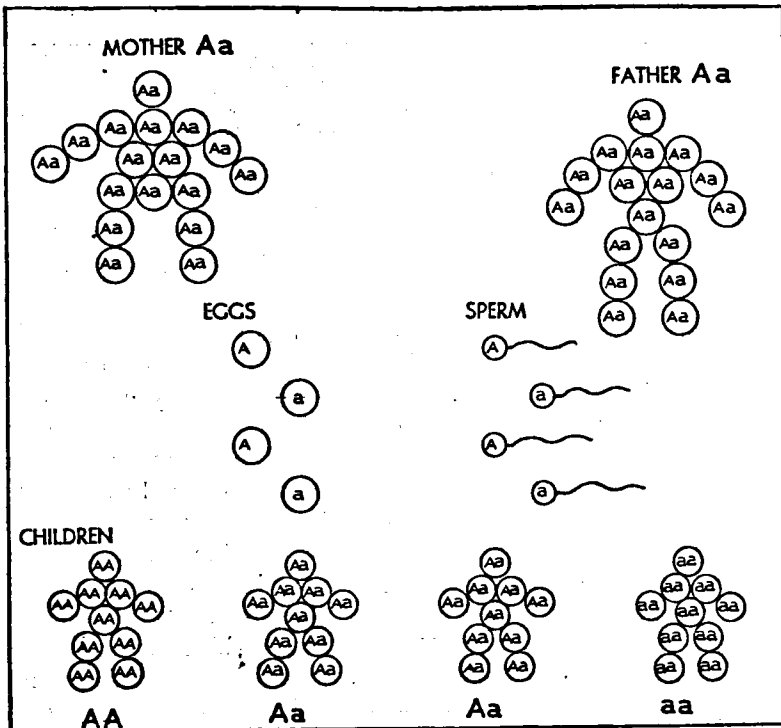


Fig. 15. EMERGENCE OF A HIDDEN CHARACTER.

Suppose that a gene exists in two forms, A, which is dominant, and a which is recessive. A man and woman may both be Aa, and neither of them will show the a effect. If they marry, there is one chance in four that an a sperm will fertilise an a egg, so one quarter of their children be aa and show the effect.

the people unlucky enough to be affected, but so rare that the normal man is inclined to dismiss them from mind. This is perhaps rather rash. A considerable number of the rare conditions are inherited by recessive genes. Anyone may contain one or more of these genes without anything to show for it, since it will be hidden by its dominant partner. In point of fact, most people probably do contain at least one or two hidden recessives for damaging characters. But if there are some 100,000 genes to choose from, the chance that both you and your wife will have the damaging form of the same gene is remote; and as two of the same kind are required to produce defective offspring, most people are reasonably safe from the possibility of this misfortune.

In this connection the question of consanguineous marriages, that is, marriages between blood relations, arises. Apart from any question of morals or taste, what would happen if brothers married sisters? Suppose that one of their parents contained a recessive gene a hidden by its dominant partner A . It is quite likely that a would be passed on to both daughter and son; and if these two married, two a 's might come together, and the recessive character appear. If the recessive caused a defect of some kind, a damaged and unhealthy

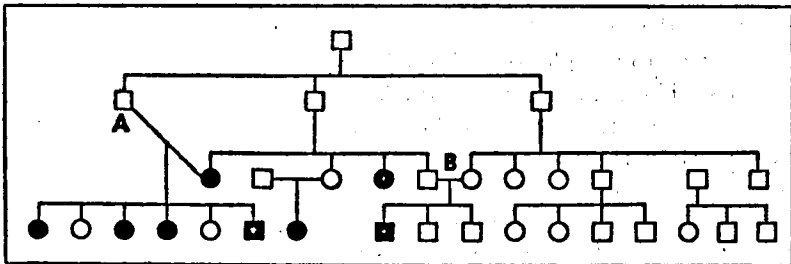


Fig. 16. RECESSIVE INHERITANCE.

A pedigree showing how a recessive gene (that for albinism) is inherited. Note that two people, neither of whom shows the character, may have children who do, as at B. Notice also how much close marrying of near relatives there is in this pedigree; between cousins at B, and between an uncle and his albino niece at A (the pedigree comes from the Near East).

child would result; but of course it is also possible that the gene would be one which produces some very good effects and in that case the brother and sister marriage would be biologically all to the good.

On the whole most good genes will be selected by natural selection and will spread through the whole population till everyone has them; rare genes are in general likely to be bad ones which are gradually

being weeded out, so that close marriages are perhaps more likely to produce bad effects than good ones. The same arguments apply, only less strongly, if the marriage is between cousins instead of brothers and sisters. But it is important to remember that this is only the usual average effect. There are many cases known where superlatively fine families have been produced by the marriage of two cousins. Charles Darwin married a cousin, and of his six sons four became Fellows of the Royal Society.

There is a special class of genes which should be mentioned in connection with this question of the marriage of blood relatives, because otherwise its existence and effect tend to be overlooked. There are many genes known which produce such radical upsets of early development that death occurs at a very early stage. They are known as lethal genes. It is unknown how common they are in man, or how many stillbirths or miscarriages can be attributed to them, but in other animals they are rather more common than any other genes with easily noticed effects, though probably considerably less common than genes with small effects which are difficult to notice. Probably the same is true in man, and in that case they are not to be neglected. Most of them are recessives and are therefore, as we have just seen, more likely to show in cousin marriages than in marriages between unrelated people.

To return to the identification of genes affecting important human qualities. There are many obstacles in the way. Scientists cannot breed men experimentally as they can dogs and hens and flies. Then the important things about a man are fairly subtle and complex, and that usually means that they are affected by many genes. For instance, height; one cannot classify people simply as tall and short, and expect to find a gene for tallness with another form which causes shortness. There must be many genes which have an effect on the growing body and determine how large it shall become. Even if there are only four or five major genes with important effects in this connection there will be so many possible combinations of them that one cannot identify them separately and determine which genes any man contains. We could at best hope to get some knowledge about stature genes in general. For instance, it has been suggested that genes for tallness are often recessive, and may be contained, masked, in short people, so that two short parents may have a tall child; but this is regarded by most students as rather doubtful.

Even if we can find general rules of this kind, we must remember that the different genes are independent of one another, and that they

can be recombined in many new ways by the process of forming sperm and eggs and fertilising them. For example, suppose a woman has genes Aa , Bb , cc and dd , where the genes symbolised by the capital letters produce large growth and those represented by small letters little growth; and suppose she marries a man with aa , bb , Cc and Dd . If the A , B , C and D genes are dominant over a , b , c and d ,

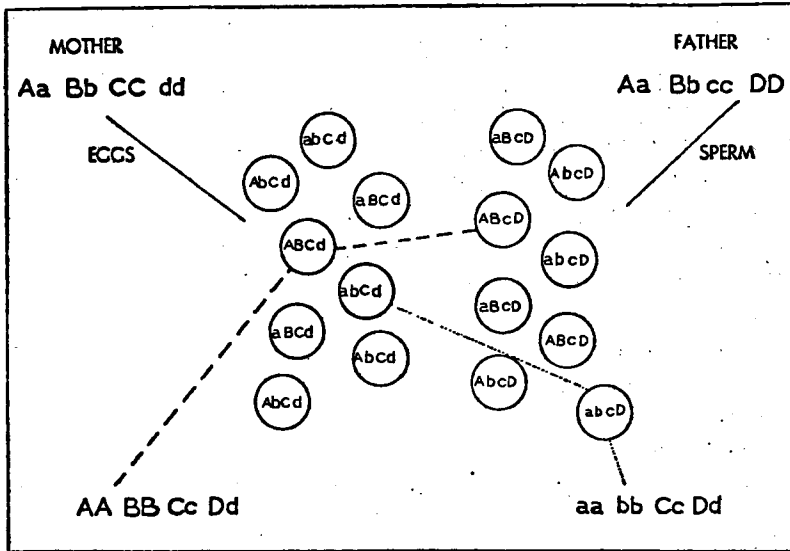


Fig. 17. RECOMBINATION

Suppose that A , B , C and D are genes affecting growth, the forms symbolised by the capitals causing large growth and those with small letters stunted growth. The mother $AaBbCCdd$ and the father $AaBbccDD$ will both be fairly tall, but some of their children, such as $AABBCCdd$, may be taller than either of them, and others such as $aabbCcDd$ may be shorter than either.

they will cause considerable growth and both partners to the marriage will be moderately tall, since they have both got two "growth" genes. Now the woman will form some eggs with A , B , c , d , and one of these may be fertilised by a sperm with a , b , C , D . The child will be Aa , Bb , Cc , Dd ; he will have four dominant "growth" genes, all of which will affect his development, provided his nurture is satisfactory. Children therefore need not be intermediate between their parents. To take another example. Two quite stupid people may each contain some genes for high intelligence, and if these come together in the random process of fertilisation, they may produce an offspring who is a genius.

The other great difficulty in studying human inheritance is that a person's height, for instance, is not fixed when he is conceived, when his particular selection is made from his parents' genes; it depends very much on the amount of food and exercise he gets during the period of growth. The genes can only determine how he reacts to the environment in which he is brought up.

This is an absolutely general fact about all hereditary characteristics. Sometimes the effect of the environment is an "all or nothing" one. The gene either shows full strength or does not show at all. For instance, childhood rheumatism and diabetes are two diseases which are probably inherited by means of recessive genes. But if an individual contains two diabetes genes, he does not necessarily get the disease. He is liable to it, or predisposed to it, but he will only get it if he lives in a particular way, eating too much sugar or getting too fat. The same is true of childhood rheumatism; children with the two genes are much more likely to develop the illness if they are unlucky enough to be born in a poor family and have to grow up in a slum. (In scientific terms, the environment affects the frequency with which the gene "penetrates" so that it produces a visible effect.) It is sometimes possible to deduce that a brother or sister of a diabetic, for instance, is likely to be carrying two diabetic genes (which have not penetrated), and to advise that person how to live so as to reduce the chance that he will actually suffer from the illness.

Usually the influence of the environment on the expression of a gene is less complete. It is a question of how much effect the gene produces rather than whether it produces any at all. If a gene produces a slight weakening of some part of the system, this may be quite unimportant in good conditions, but may lead to grave ill-effects if the individual is subjected to great strain by unfavourable conditions. Of course some characters are more affected than others by the different environments which are actually found in civilized society. Height can easily be altered by upbringing, but before conditions became so peculiar that they would alter the effect of an eyecolour gene, they would probably have affected something else in the body so much that the baby would die. This does not make much difference to the importance of the principle, because nearly all the qualities which play a large part in life are ones which, at any rate at first sight, look as though they would be very much affected by the environment. Can we suppose that exercise has nothing to do

with strength? Or practice with skill? Or education with intellectual ability and insight?

Science of course cannot accept anyone's guess of whether a quality is affected by upbringing or not; it has to test it as fully as possible. With human beings that is very difficult. If a child is brought up in one way, one cannot start again and bring him up in another to see if it makes any difference. It seems that the sensible thing to do would be to find two children with exactly the same heredity, brought up in different ways, and then compare them.

But how is one to find two children with the same heredity? It is practically impossible. Every person is individual, unlike any other. This can easily be seen if you consider the number of possible combinations of genes there are. Even if every chromosome you got from your mother differs from the partner one which came from your father in only one gene, you will be able to form over sixteen million different kinds of eggs or sperm. One egg, out of all these kinds, will meet one sperm out of an equally large selection; there will be about three hundred million million different kinds of individual which your marriage can produce. If there is more than one difference per chromosome, the number of combinations becomes even vaster. The chance of getting two identical people is infinitesimal. But there is a way out; that offered by the occurrence of twin births.

One usually considers twins as an exclusively human production, though people sometimes speak of twin lambs, since sheep, like human beings, normally have their young one at a time. Twins, then, are young animals, usually human babies, born two at a time instead of singly. There are two ways in which the normal course of events can be disturbed so that twins result. A woman may produce two ova at a time, instead of one, and both of these may become fertilised and develop into babies. Such twins are in just the same relation to each other as are two puppies in a litter. The only way in which they differ from ordinary brothers and sisters is that they were born at the same time. Otherwise they are completely distinct individuals, and may be no more alike than any other pair of children in the family. One may be a boy, the other a girl; or one may have fair hair or blue eyes, and the other dark. Since they are related just like brothers and sisters, they are known as fraternal twins.

The other kind of twins are formed from a single egg. After an egg has been fertilised and begun to develop, it may separate into two halves, and each half can then form a complete and separate embryo. In human beings this is rather a rare occurrence, but there

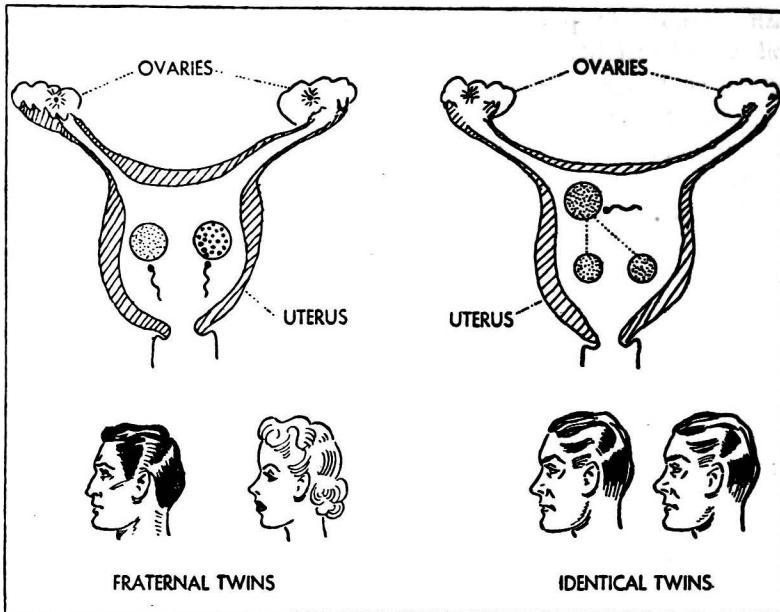


Fig. 18. TWINS.

Fraternal twins come from two separate eggs fertilised by two different sperm; they will probably be no more alike than any two brothers and sisters. Identical twins come from one egg, fertilised by one sperm, which splits into two at some later stage. They must be of the same sex, and be alike in all their hereditary characters.

are some animals in which it happens regularly; for instance, in nine-banded armadillos four identical quadruplets are always produced, and in some kinds of parasitic wasps each egg splits up into scores of separate parts which develop into complete individuals.

Twins produced in this way are known as identical twins. The important thing about them is that, since they derive from a single fertilised egg, they both contain exactly the same chromosomes and genes. If one is a boy with dark hair and brown eyes, so is the other. In fact, as is well known, they often resemble one another so closely that only their best friends can tell them apart; they have the same facial expression, the same mannerisms of movement, the same finger-prints.

Twins occur with a frequency of about once in ninety births. More rarely, higher numbers of children are born together. Triplets occur about once in 8,000 births, quadruplets only about once in 700,000. Still rarer are quintuplets; and few of these higher numbers are

healthy and strong enough to survive. Triplets may be all three fraternal; or two of them may be identical with each other, that is, derived from the same egg, while the other came from a different egg; or all three may be identicals from the same egg. Similarly, there are several possible types of relationships between quadruplets and quintuplets. Perhaps the rarest and most interesting of all the possible relationships is found in the famous Dionne quintuplets, which were born in Canada a few years ago, and have become one of the most famous "sights" of the American continent. They are all identical girls, derived from a single egg. There are two theories as to how they were formed; according to one, the egg split into two, then each half split again giving four parts, and one of these divided again, giving five; according to the other, after the first split, one half went on undisturbed to give one individual, while the other half split again twice.

However they were formed, the 'quins are one of the most interesting natural phenomena that have ever occurred. Never before, so far as is known, have five identical children been born and survived. Here are five children, each with exactly the same hereditary endowment, nourished in the same womb, and born into the same circumstances, and brought up with every care and sympathy that can be provided. What sort of people will they turn out? In particular, how much alike will they be? Is it possible, in any circumstances, to produce absolutely undistinguishable people?

The answer seems to be: No. Even when the 'quins were only two or three years old, they began to show some differences between each other, particularly in temperament and character. Yvonne developed as the "mother" of the group, Annette the most aggressive, Emilie the most self-sufficient, Cecile the most temperamental, Marie the baby of them all. Presumably these differences must go back to slight inequalities between the children when they were born, and those again must have been due to variations in their conditions of nourishment in their mother's womb. Similarly, ordinary pairs of identical twins, however much alike they may appear to their acquaintances, are never so absolutely alike that nobody can tell them apart. A human being is so sensitive to external factors during development that it seems to be impossible ever to produce two people who are completely the same, even when one starts with two individuals who have exactly the same hereditary constitutions.

The sort of differences there is likely to be between two twins in their mother's womb will be much the same whether the twins are

identical or fraternal; and the same thing applies, rather more roughly, to the conditions of education and upbringing of twins of the same sex. The fact that two identical twins are more like one another than two fraternal twins of the same sex must be because the identicals have the same hereditary constitution and the fraternal different ones. This sounds rather obvious, but it is very important, because we might hope to measure how important heredity is for a certain characteristic and how important the environment, by seeing to what extent identical twins are more alike in that respect than fraternal. Again, on the average the hereditary difference between two fraternal twins will be just the same as between ordinary brothers and sisters; but because twins have more similar conditions of development than brothers and sisters who differ in age, they may be expected to be more alike, and the amount by which they are more alike gives some measure of how effective their environment has been in making them resemble each other.

Here, then, is the way we were looking for of finding out how far a person's character can be affected by the kind of upbringing he receives. But the results of this method are so far very inadequate and can only be put forward rather uncertainly, so far as the most important qualities are concerned. There is always evidence, if we study some character such as intelligence or temperament, that both heredity and environment affect it.

The difficulty is to find out precisely what proportion of effect each of these two factors has. Probably for a long time yet we shall have to be content with fairly rough estimates. One can ask, for instance, if the different conditions of life which are met with in civilised countries can, when they act on the same hereditary material, produce people as different as the ordinary run of one's normal friends. In order to answer this we should study identical twins who have been brought up in different homes in different circumstances. Naturally it is not very easy to find such people, but when one very thorough enquiry was made by carefully searching the records of adoption societies, and advertising, about twenty cases were found and investigated.

Several of the twins had been adopted at a very early age and had no idea that they had a twin; they describe a very peculiar sensation when they first entered a room and found a duplicate of themselves being introduced to them. But the answer to our question remained still indefinite. Some of the twins were very different; and the more different their homes had been, the more different they were, on

the average. But some were still remarkably alike. It is clear that both heredity and environment had had a hand in forming their characters, and that these two are so intimately connected that it is almost impossible to separate them and give more value to one than the other.

Sex itself is inherited by genes, like any other character. But since it is such a pervasive characteristic of an animal, affecting every part and phase of its life, it is dependent on many genes, and not on a single one. In this respect it is like the other complicated characteristics such as height and intelligence which we discussed earlier.

We saw that in the inheritance of height there are numerous genes which can be recombined in various ways in different individuals, so that all kinds of intermediate heights are possible. Obviously sex is not inherited in this way, and obviously no such scheme could be workable. There must be two sexes, clearly distinct from one another, and we must now see what the mechanism is which has been evolved to produce this result.

Of the genes which have an influence on sex, some tend in a male direction and some in a female, so that the final result in an animal is a balance between the two. All animals, however definite their sex, in a sense have the potentialities of the other sex included in them.

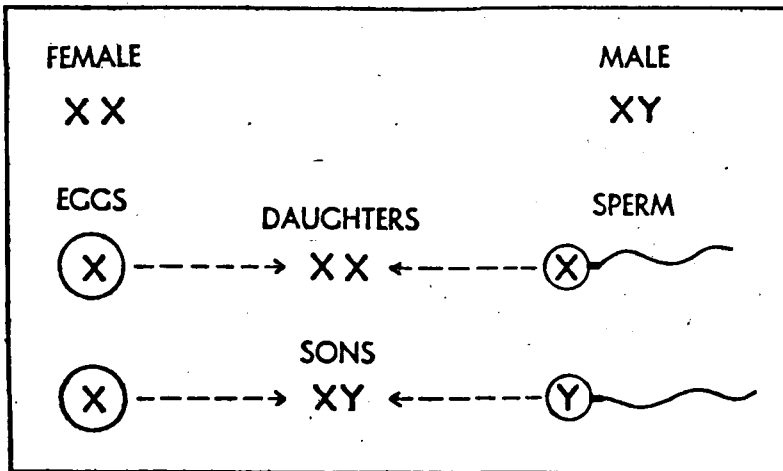


Fig. 19. SEX DETERMINATION

One sex, usually the female as is the case in man, possesses two similar chromosomes, the X chromosomes. Every egg contains one of them. The male, on the other hand, has one X and one different chromosome called the Y. The sperm are therefore of two sorts, X-containing and Y-containing. If an egg is fertilised by an X sperm, it gives an XX individual, that is, a female; if the fertilisation is with a Y sperm, the individual is XY and therefore male.

Their obvious sex is only the one which happens to be on top; the other one is there, in their genes.

The mechanism of the inheritance of sex works by ensuring that the balance shall always be decisively tipped one way or the other. The most common method of doing this, and the method found in man and all other mammals, is to have one special chromosome of which the genes taken together have a very strong effect tending to produce one of the two sexes, and then to see that one sex gets two of the chromosomes, while the other gets only one. This special chromosome is known as the X chromosome, and in humans its effect is towards femaleness. We find that women have two X chromosomes, while men have only one X which has as its partner a small "dummy" chromosome, known as the Y chromosome, which contains only very few genes. Thus the balance in the woman is decisively turned to femaleness, by the effect of the genes in the two X's, while in a man the female effect of the one X is not enough to overbalance the other chromosomes, of which effect is towards maleness.

It is easy to see that once the mechanism has been set up and started, it will perpetuate itself. Every egg formed by a woman will contain, in its half-nucleus, one X chromosome. But the sperm formed by a man are of two kinds; half will contain, in their half-nucleus, an X, while the other half will contain a Y. If an egg is fertilised by sperm containing an X, it will then have two X's and become a girl,

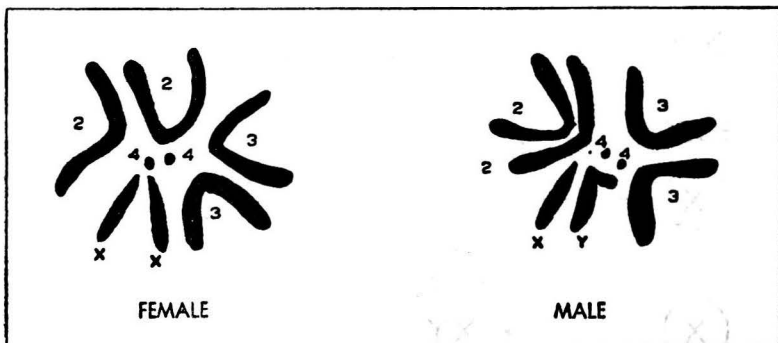


Fig. 20. X AND Y CHROMOSOMES.

The chromosomes from body cells of a fruit fly. Note the two X chromosomes in the female, and the X and larger Y chromosomes in the male.

while if the sperm contains a Y the fertilised egg will be XY and a boy. Thus the mechanism carries on, producing equal numbers of boys and girls.

As a matter of fact, no animal does seem to produce exactly the same number of males and females. The argument that it should do so depends on the assumption that sperm carrying X and those carrying Y are equally likely to fertilise an egg. Actually, the two types of sperm are produced in equal numbers, but it appears that the Y bearing sperm are more likely to fertilise than X bearing ones. Therefore more boys are conceived than girls. On the other hand, more boys also die before birth. Even so, at birth in most populations there is still an excess of boys, perhaps about 105 boys for every hundred girls. In the first few years after birth, boys are still weaker than girls, and the ratio between them gradually evens out.

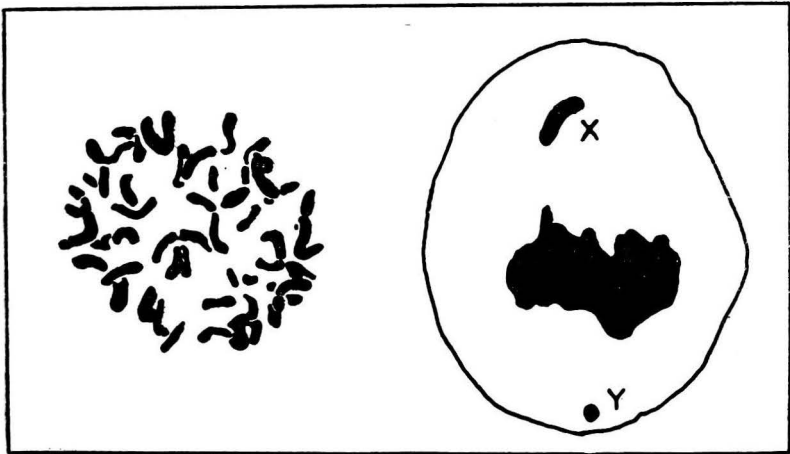


Fig. 21. CHROMOSOMES OF MAN

At the left are the chromosomes of man, 48, or twenty-four pairs. At the right the cell is just dividing in the first division of sperm formation. Most of the chromosomes are tightly bunched together in the middle of the cell, and are about to separate into two groups, one going to the top and the other to the bottom of the cell. The X and Y chromosomes have already moved to the two ends, and the difference between them can be clearly seen. Here the Y chromosome is smaller than the X.

The mechanism of sex determination is very simple. But it is very difficult to get at in any way. It depends on the chance of which sperm fertilises the egg. No drugs or magical formulas are known which affect that. From time to time claims are put forward that a certain treatment will tend to immobilise one kind of sperm and allow the other to have an advantage, but the general opinion among scientists is that so far none of them has really proved itself in experiments with animals, and that therefore none of them can be

relied upon to work in man. Many of them are certainly fraudulent. But there is no reason why some treatment should not be found; in fact, it seems merely a matter of time and further research before the problem is solved, provided people really want it solved.

If we had a method of having boys or girls, as we chose, that would be a further step in man's conscious control over his own destiny and that of his descendants. All such increases in power bring with them enormous increases in responsibility. Perhaps it would be cowardly to draw back from such a possibility; but how many of us are confident that they could face the choice wisely and with the welfare of future generations at heart? It is a problem for the future, but one which it is salutary to face now.

A question which many people have asked is whether a tendency to have many sons or many daughters can be inherited. One seems to come across families all of girls or all of boys more commonly than would be expected on a basis of pure chance. But when this is looked into it appears that the idea arises mainly because most people

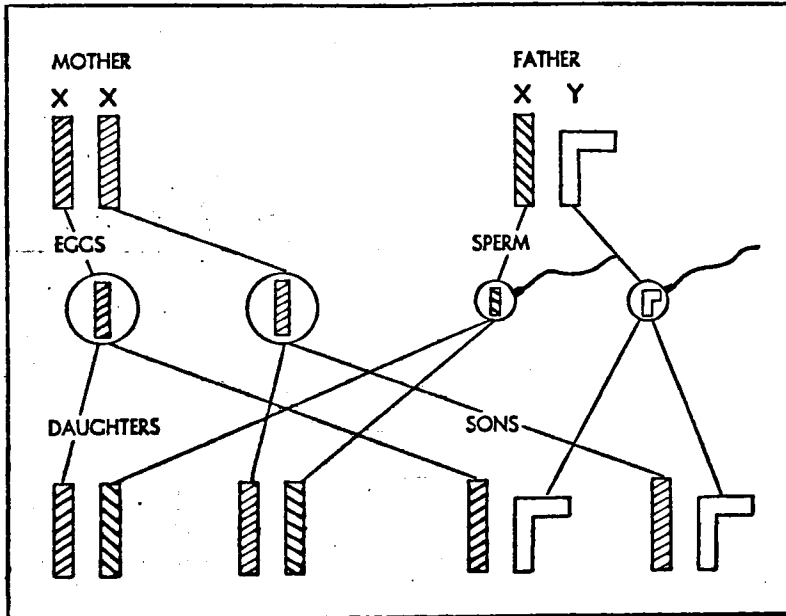


Fig. 22. SEX LINKED INHERITANCE.

The diagram shows how the X chromosomes of a woman pass into her sons, where they have for a partner only the Y from the father, so that any recessive genes which they contain can be shown.

are not experts in the theory of gambling. All-male, or all-female, families are actually very little more frequent than the theory of chance predicts; they come out almost as frequently as runs on a certain number in dice. But there may be a very slight excess, which would indicate some degree of hereditary influence.

The X chromosome is somewhat peculiar; and this gives certain special characteristics to inheritance of genes in the X chromosome. The main feature is that, since a male has only one X chromosome, all genes in that chromosome will show in their full effect, even recessive ones, since there is no partner gene to mask them. The importance of this is that genes which were hidden in a woman may emerge in her sons. For instance, one of the most famous of these genes is one which causes a failure of the blood to clot, so that the unfortunate sufferer may bleed to death from quite a small injury; the condition is called haemophilia. A woman may have a haemophilia gene in one of her X chromosomes but she is almost certain to have the normal partner in the other X, and since this is dominant it masks the haemophilia gene and she is none the worse for it. But half her sons must get the X with the haemophilia, and they will get only a Y from their father's sperm, and that being a "dummy" cannot mask anything; so they will suffer from and probably die of the disease. The woman, who is quite normal herself, is a carrier for a dangerous hereditary disease.

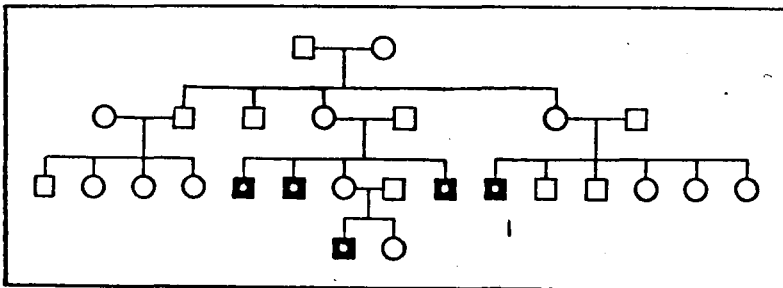


Fig. 23. SEX LINKED INHERITANCE.

A pedigree of the inheritance of a sex-linked character (red-green colour blindness in man. Note how the character shows mainly in males (squares), where there is no second X chromosome to mask it, while it may be transmitted by a female (e.g. middle of next-to-bottom row) who does not herself show it since she has another normal X chromosome.

Perhaps the best known example of this behaviour has occurred in European royal families. Queen Victoria was a carrier of a gene

for haemophilia. From her it passed on to some of her descendants. Fortunately not to our own royal family, but to the Russian and the Spanish. The great hold which the monk Rasputin had over the Tsar's family just before the Russian Revolution was largely due to his claim to be able to cure the haemophilia of the Crown Prince; and most people think that Rasputin played a big part in bringing about the downfall of the Tsar. And who knows what effect this gene has had on the fortunes of the royal house of Spain?

Sexual reproduction needs normal sexes. A mechanism for determining sex must be reliable, must give rise to animals which are distinctly male or female, otherwise it will be superseded by some more efficient process. But there is an alternative; an animal may be both male and female at the same time.

Animals of this kind are known as hermaphrodites, after the Greek god who was supposed to be born of the marriage of Hermes, the messenger of Heaven, and Aphrodite, the goddess of love. There are many such animals, mostly towards the lower end of the evolutionary scale, in the backboneless types known as invertebrates. Very often they are creatures which are fixed in one place, such as sea anemones, which cannot wander in search of a mate. But some mobile animals, such as worms and snails, are also hermaphrodites.

Hermaphrodites which can fertilise themselves lose the evolutionary benefits of shuffling genes with a mate, and gain, as we have seen, a certain amount of stability. Often even hermaphrodites equipped with all the organs of both sexes, cannot alone produce live offspring, either because the organs are so placed that fertilisation cannot be achieved, or because there is some genetic mechanism which causes the offspring to die; and even when self-fertilisation is possible, the animals often show a preference for crossing with some other individual. So hermaphroditism does not always mean that the animal has given up the advantages of gene shuffling. It is rather that instead of their balance of maleness and femaleness being always distinctly on one side or the other, it is equally poised so that both sexes are developed in the same body. Probably this is a step backwards in evolution from a condition in which the sexes were separate.

In the higher animals hermaphroditism is hardly found. There are, however, conditions which are something near it. For instance, all male toads have an organ, attached to their male sex-glands or testes, which is really an incompletely developed female gland or ovary. If the testes part is cut away, the incomplete ovary may become fully formed; the "male" toad, which was really always more or less

hermaphrodite, becomes female. The same kind of thing is true in frogs. Many of the young "males" are really bisexual, since they have some ovarian tissue as well as testes, but as time goes on this gradually disappears, so that they become pure males. Similar occurrences have been found in some fish.

The change in sex in frogs and toads must be due to an alteration in balance as the genes react with one another as the animal grows older. A similar change happens in some animals in which the balance is at first definite enough. A case has been described of a hen which in later life suffered from a tumour which destroyed her ovary. After she recovered from this, the cells of her body grew again into a sex-gland; but this time it was a testis, and gradually the whole bird became transformed into a cock. In some way the balance between the sexual tendencies seems to have shifted in old age. To a much lesser extent this may be true in humans; for instance, as a woman grows old she may develop some of the characters, such as the growth of a beard or moustache, which are normally only found in men.

In these toads and frogs, we must suppose that the sex-balance is not quite definitely on one side or the other. It is important to find that when the balance is, as it were, wobbling like this, some external conditions can affect it. Frogs which develop in very cold water tend to become females, those living in very warm water males. Again, if frogs' eggs are not fertilised very soon after they are ready, the development of their sexuality is affected. This may be true in man also, but there is as yet no definite evidence one way or the other.

In man and other mammals, hermaphroditism does occur, but only extremely seldom and then owing to a failure of the normal mechanism of sex determination. The kinds of failure which may occur have been studied most fully in insects, where the necessary experiments can be conducted.

The first kind of failure happens during the early development of an animal. Suppose that an egg has two X chromosomes and is developing as a female. The first thing it will do is to divide up into smaller cells. In the course of these divisions something may go wrong and one of the X chromosomes get lost from one cell and thus from all its descendants. That cell, and the parts it gives rise to, will therefore only contain one X and will be male. Usually when such an accident happens, it is at the very first division when the egg divides in two, so that half the new individual is female and the other half male.

Beasts of this kind are known as gynanders, from two Greek words for man and woman. They are very striking in butterflies, where the patterns of the male and female wings are often quite different. In insects the two different parts do not affect each other; one part is pure male and the other pure female. Even their behaviour is

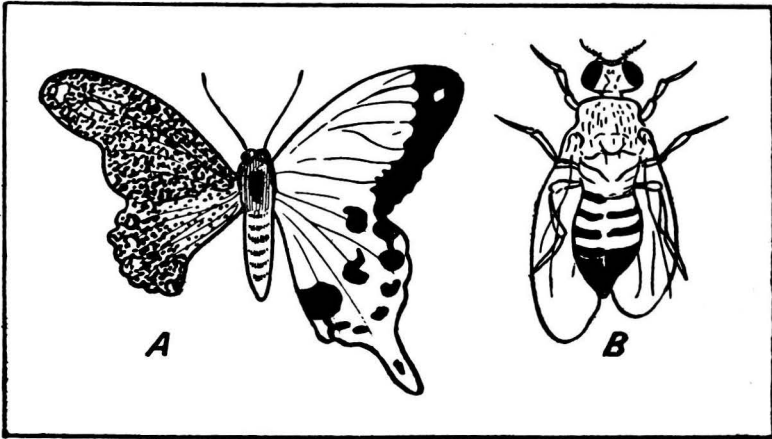


Fig. 24. GYNANDERS.

A shows a gynander in a butterfly, B one in a fruit fly. In both of these the left side of the body is female and the right side is male.

said to go entirely by their local constitution; gynander wasps with male head and female body try to mate with other wasps as males although this is completely impossible owing to the femaleness of their sex organs.

Not much is known about gynanders in the higher animals. One or two cases have been described in hens, and there is one doubtful case known in man which may be a gynander. We should expect that in birds and mammals the autonomy of the regions would not be so complete as in insects, since the sex hormones would spread from one part to the other.

Gynanders are perhaps the most spectacular sex abnormalities. The main other kind is a sex-intermediate, or, as it is usually called, an intersex. It is caused by something which happens before the fertilisation of the egg and brings it about that the whole sex-balance is upset. Two main types of upset are known in animals. In one, the number of chromosomes is abnormal, owing to accidents in the cell divisions by which the eggs and sperm are formed. For instance, fertilised eggs may be produced which have two X's like a female,

but have three of each of the other chromosomes instead of two of each. This gives a sex balance, intermediate between the one X to two of each of the others, found in males, and two X's to two of each of the others, found in females; the result is an animal which is sexually intermediate.

Types of insects have also been found with more extreme balances than usual; for instance, three X's to two of each other chromosome, and one X to three of each other. The first is a more female balance than in females, and the latter more male than in males. The animals

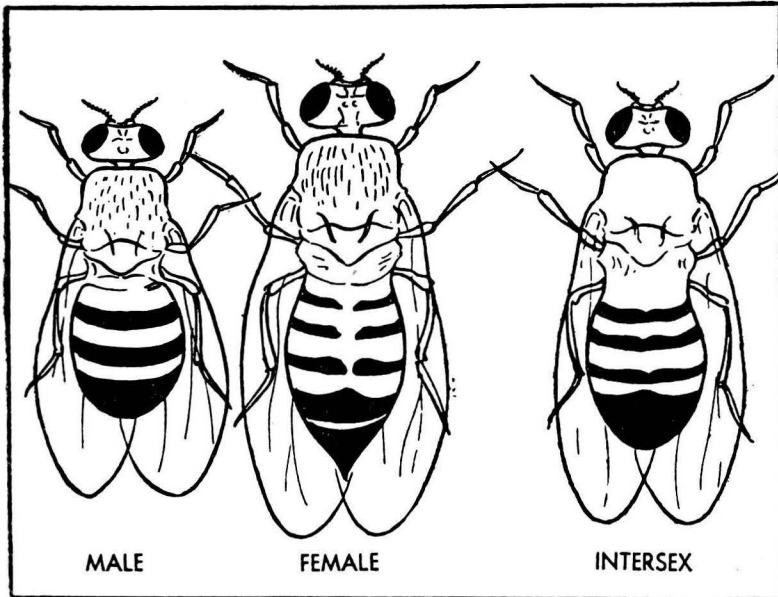


Fig. 25 INTERSEXES.

The picture shows an intersexual fly, compared with a normal male and female. The cause of the intersexuality in this case is an abnormality of the number of chromosomes. The intersex has two X chromosomes, but three of each of the other kinds instead of only two.

have been called superfemales and supermales, but these are hardly good names, since both types are sterile and rather unhealthy.

The other way in which the sex balance is upset is if abnormally strong genes are involved. For instance, the gypsy moth is found all over northern Europe and Asia, and in the different localities there are races which have different sex genes. If a moth with "strong" female genes is crossed with one with weak "male" genes, the balance in the male offspring will be upset and they will become partially feminised.

Intersexes, of the same general type as those which we have just discussed in insects, occur in mammals and in man. We do not in these cases know exactly what genetic mishap has happened to cause the lack of balance between maleness and femaleness. But the result is clear enough, an intermediate development.

Further, in these higher animals there is still another way in which intermediate types can be formed. The gonads or sex glands produce substances called hormones, which pass into the blood stream and affect the development of the other sexual characters of the body. If for some reason the testes in a male embryo does not produce enough of the male hormone, the development of that embryo may be faulty and abnormal. Again, in cattle it is sometimes found that a pair of fraternal twins becomes joined up so that their blood-systems are connected; if they are of different sexes, the hormone from the female may partly suppress the proper development of the male. This is the origin of the so-called freemartin, which is a sexually intermediate animal.

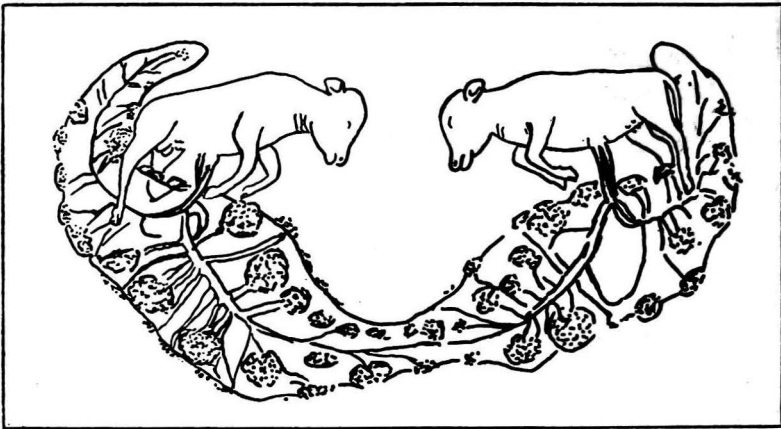


Fig. 26. FREEMARTIN CALVES.

The drawing shows how the foetal membranes of twin calves may become joined, so that blood can pass from one animal to the other. Substances (hormones) in the blood of the male shift the development of an attached female in a male direction, and thus cause it to become an intersex.

There is no evidence that anything like freemartins are ever formed in human twins, but we do find some intersexes, presumably due to the genetic mechanisms described earlier. It is worth looking a little more closely at the development of the sexual organs in man, so as to see how they come from a stage which is common to both sexes, but which is swung over one way or the other.

The sexual organs of men and women are both developed from a common condition which is at first the same in both sexes. We have seen that the potentialities for both sexes are present in every individual. In the very earliest stages they both begin to be realised, and only later is the balance definitely tipped one way or the other.

We must consider the internal organs first. In both sexes, the internal sexual organs consist essentially of the glands where the germ-cells are formed—the gonads—and channels or ducts, which convey the germ-cells to the exterior. In woman, part of the channel is enlarged and specialised to receive the fertilised egg and nourish it during the long period of embryonic development which it makes during its journey from the gonad to the outside world.

In the earliest stage of development, the two gonads (one on each side), lie in the cavity of the abdomen. They are still indifferent, neither egg-forming ovaries nor sperm-forming testes. Leading from each gonad to the exterior are two ducts, known from the names of their discoverers as the Wolffian and Müllerian ducts. As the embryo develops, the gonads become either ovaries or testes, and at the same time the system of ducts alters. In males, the Müllerian duct disappears almost completely, and the Wolffian duct becomes the channel along which the sperm leaves the testes. In females it is the Wolffian duct which becomes less important, while the Müllerian duct develops; its upper part remains fairly narrow, and is called the Fallopian tube, while lower down the ducts from the two sides join together to make a single large tube, which forms the uterus and vagina. Later on, towards the end of foetal life, the gonads in both sexes move downwards from their original position, the female ovaries not very far, but the male testes right down outside the abdominal cavity into the scrotum, which develops from the external genital organs.

At about the seventh week after conception the human embryo has still a short tail, which will soon begin to become less and less important and will finally end up as the little set of bones known as the coccyx at the base of the spine. Just above the tail the embryo's external genitals are in an indifferent condition, neither definitely male or female. They consist of two outer folds, one on each side, which curve round and nearly enclose a central ridge. Up the middle of this ridge is a slit-like opening, which leads inwards both to the bladder and urinary apparatus and to the Wolffian and Müllerian ducts, and thus to the gonads. At the end of the ridge, on the side nearest the abdomen, is a slight knob.

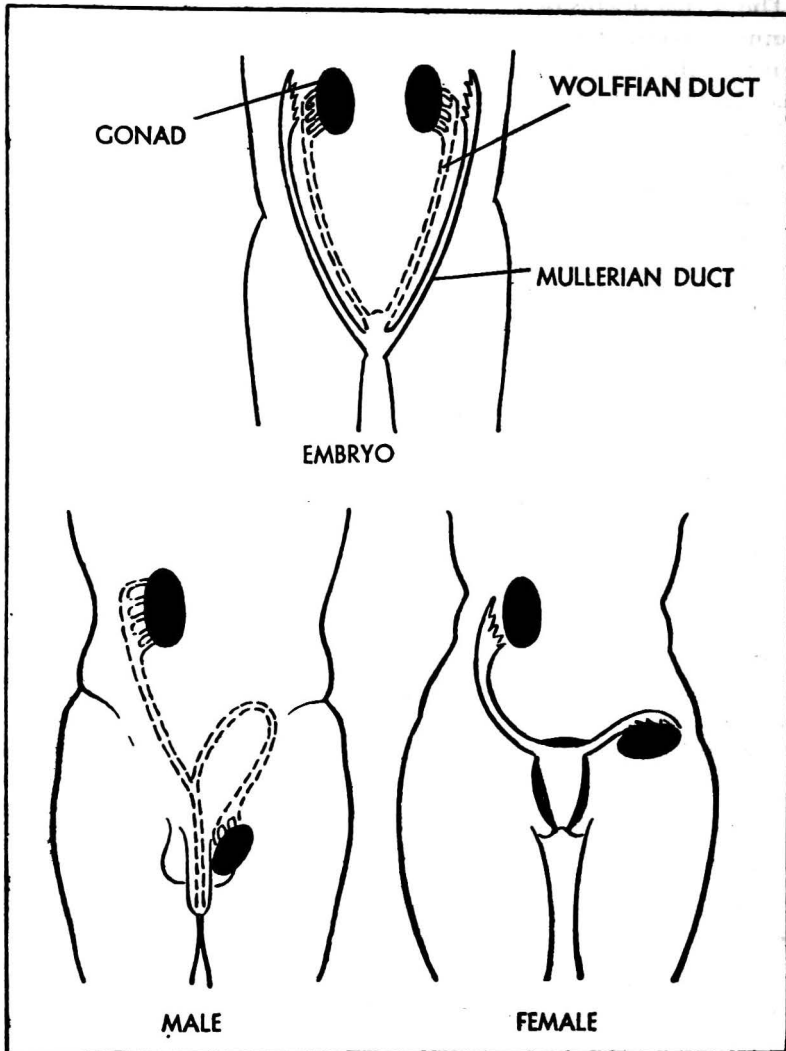


Fig. 27. DEVELOPMENT OF THE INTERNAL GENITAL STRUCTURES.

In the very early human embryo, the internal sexual structures are the same in both sexes; a pair of gonads, each with two ducts. In males the Mullerian duct disappears, while in females the Wolffian duct atrophies. Later in development the gonads move downwards in both sexes, as is shown to the right in the figures; the movement is much greater in males, where the testis come right outside the abdomen into the scrotum.

From this time onwards the development of these structures proceeds differently in the two sexes. The changes are less, perhaps, in the female. The central slit grows deeper, and becomes the entrance to the vagina; the ridge, which makes the sides of the slit, becomes the inner lips or *labiae minores*, while the outer folds grow over so as more or less to cover the rest, and become the outer lips or *labiae*

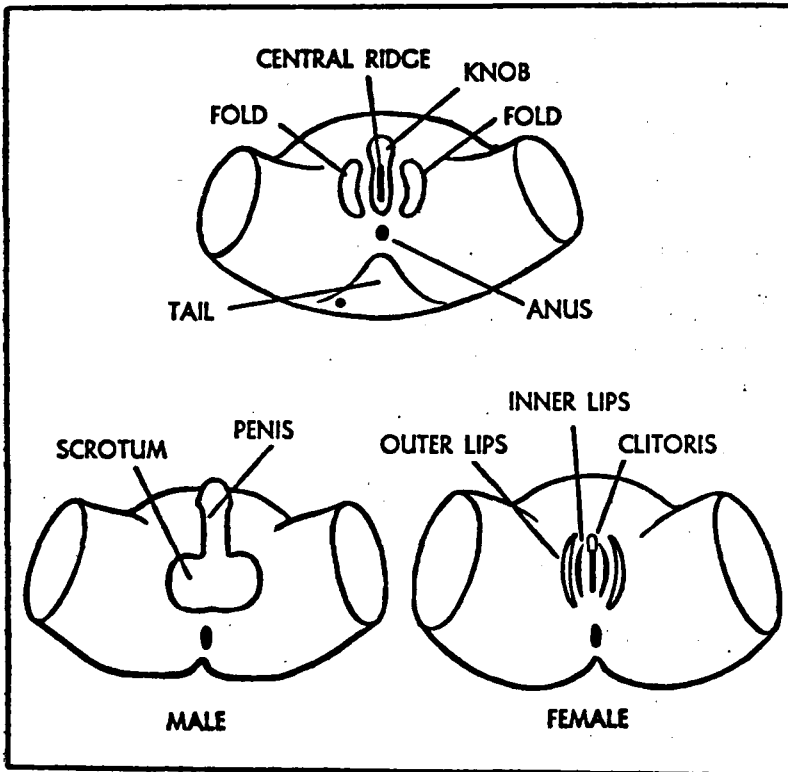


Fig. 28. THE DEVELOPMENT OF THE EXTERNAL GENITAL STRUCTURES.

The diagrams show the indifferent embryonic condition and the modifications of it which produce the male and female structures.

majores. The knob at the end of the ridge persists as a small, highly sensitive elevation, the clitoris. In the male embryo the whole central ridge rolls together to make a tube, which grows out from the surface to make the penis; the knob forms the glans penis, a new opening is formed there, so that the common duct of the urinary and genital organs is brought right to the tip. Meanwhile the outer folds expand

and fuse together beneath the growing penis to form the scrotal sac, into which the testes gradually descend.

There are of course innumerable minor differences between men and women besides these main ones; for instance, the greater development of the breasts in women, the different distribution of fat and hair, and differences in the shape of bones. All these minor characteristics are developed in dependence on the fundamental difference in the type of gonad. They become apparent late in embryonic life or at puberty, and are caused by the hormones produced by the gonad and poured out into the blood stream. In fact, the primary difference between the sexes is in the type of gonad. All the other differences, including differences in the sex ducts and external genitalia, are sometimes known as secondary sexual characters.

Occasionally these forms of development are only imperfectly performed. Sometimes in men the internal ridge fails to roll up completely, so that the opening of the ducts is not at the tip of the penis, but somewhere along its lower surface or even beneath it. The testes may fail to descend to the scrotum, and remain hidden inside the abdomen, a condition known as cryptorchism. These two abnormalities sometimes occur together, and then the external genitals may have a somewhat feminine appearance, although the individual is undoubtedly a male, since the sex-glands are definitely testes and not ovaries. He is not a true hermaphrodite, in which the sex-glands themselves are intermediate, or in which both types of sex-glands are present; but only a pseudo-hermaphrodite. Many such people have lives as unfortunate as if they were fully hermaphrodite. Fortunately surgery is now far enough advanced to be able to remodel their external genitals into the form that nature has failed to produce.

Female development cannot be so easily inhibited, because less happens in it. But it sometimes swings rather in the male direction. For instance, the terminal knob of the central ridge, which should form only a small clitoris, may become somewhat enlarged. The clitoris is, structurally, very similar to a minute penis, and if it is unduly large may be very like that of an undeveloped boy.

Sometimes these abnormalities of development are due merely to chance circumstances, but sometimes they are probably due to the genetic sex balance of the individual being intermediate. In that case they represent true intersexual conditions. More extreme forms of intersexuality are known fairly commonly in some animals, such as pigs and goats, and are found, very rarely, in human beings.

There are about twenty cases on record which are accepted as true human hermaphrodites. There are rather more in which the external genitalia were quite intermediate, but the internal glands were not examined. A few of these have even been able to function in copulation both as male and as female; but most of such people are profoundly to be pitied, for they are denied one of the most fundamental bonds of human companionship.

The forms of human intersexuality we have mentioned are the most definite and unequivocal, since they are expressed in terms of actual structures. They are, fortunately, very rare; and it is far more important that we should find out something about the causes of the much slighter sexual variations which have only psychological effects. Unfortunately we know very little as yet about these. The development of sexuality in humans is certainly a very complex process, and different parts of the process may be affected by many different things. After the primary differentiation of the sex glands as male or female, the hormones which these glands produce are known to affect the other bodily structures. It is certain that many of the manly-looking women and womanly-looking men owe their appearance to disturbances in the orderly production of these hormones; and it is very likely that these disturbances often have a genetic basis. But almost nothing is known about their inheritance.

Again, the question of homosexuality is one upon which much more biological work is required. There is no reason to doubt that genetic factors can influence mentality, at least by making people more likely to be affected in certain ways by their experience. It has been claimed that if one of a pair of identical twins is homosexual, the other is also likely to be so, whereas this is not the case with fraternal twins. If this be so, we must suppose that heredity plays some part in developing this mental condition. But it is almost certainly true that heredity is not the only factor involved. The particular kind of experience met with by an individual helps to determine the direction in which he develops. The hereditary background can at best make him more or less sensitive to some kinds of influences. We must hope eventually to find out what kinds of experience, and what kinds of psychological tendencies, act together to produce aberrant types of personality.

But what, after all, do we mean by normal and abnormal sexual feelings? Before we can investigate the matter scientifically, or even discuss it sensibly, in anything but a vague way, we need some standards by which to judge people.

It does not take long to realise that it will be extremely difficult to find satisfactory standards of masculinity and femininity. How often does further knowledge show that we have been mistaken, even in our acquaintances?

In order to discover what are the essential biological features of maleness and femaleness, we shall have to attack the problem in another way. We must look at the behaviour of male and female animals, find out what are the elements which come into the picture, and then see how these elements are expressed in human beings.

III. THE SEXUAL LIFE OF ANIMALS

So far we have dealt with the biology of functions and processes which lie somewhat in the background of one's normal life. The shuffling of genes, and the processes of heredity and the determination of sex are the fundamental aspects of the matter from the point of view of the whole biological species, but they do not impinge directly to the consciousness of the individual. We must now consider the biology of those acts and functions which make up the sex life of individuals, both animal and human.

The basic sex act of an individual is the liberation of the gametes (ova or spermatozoa). The simplest form of this is found in marine animals which are fixed to the floor of the ocean. Usually they pour their germ-cells out into the surrounding water, and that is all the sex act involves; there is no sign of excitement, and, since they are fixed to one place, there can be no coming together of the sexes. The liberation of sperm and ova is a routine affair, and appears to play no greater part in their lives than the taking in of nourishment or the excretion of waste products.

This behaviour makes no special provision that the sperm shall actually reach the eggs and have a chance to fertilise them; it leaves that essential part of the process purely to the chance drifting of currents in the sea. In a general way we can say that nearly all the more complex types of sex act are more efficient in this respect, and it is probably because it is advantageous to increase the chances of fertilisation that they have been evolved.

The first stage in increasing the efficiency of the sex act is to arrange that the eggs and sperm are liberated near each other. We can see an example of this in some fish, in which the sex act consists in a male and female pouring out their germ-cells while swimming together. Fish also exhibit the next stage of development, in which the animals come in contact with one another so that the germ-cells

mingle immediately they are ejected from the body. In dog-fishes, for instance, the male curves itself sharply round the body of the female, and thus holds its sexual orifice near that of the female.

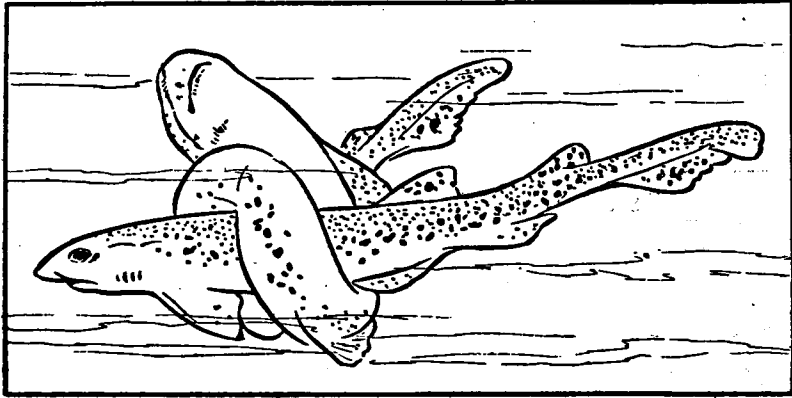


Fig. 29. MATING DOGFISH

The male is curling his body around the female, so as to bring their genital openings near together.

It is in animals in which the sex act involves bringing the sexual orifices close together that we find the first evidence of the development of special structures which aid the sexual approach of the two individuals. This is the first sign of true copulation or coupling. In some dog-fishes there is a roughening along the ventral surface of the male, which enables him to hold the female firmly when he is curled round her. In frogs the coupling consists in the male mounting the back of the female and holding on tightly so that his sperm and her eggs are shed together; and the male frog in many species develops special pads on his arms which aid him in holding his position, with his genital aperture near that of the female.

In these types of sexual congress, the actual fertilisation of the eggs takes place outside the body, after they have been shed. This process is one which can go on only in water or in very moist situations; on dry land the eggs and sperm would probably dry up before fertilisation was effected. Nearly all land animals have therefore had to evolve a process of fertilising the eggs before they have left their mother's body. This method obviously increases the probability of fertilisation, and lessens the wastage of eggs and sperm, and has therefore also been adopted by many marine animals.

Perhaps the simplest form of such a mode of sexual contact is found in the newt. The male and female perform a rather elaborate

preliminary love-play, which involves the female following immediately behind the male. After a time the male, with a slight muscular shudder, pauses and deposits a tiny mushroom-shaped lump of jelly, the top of which is capped with sperm. He then proceeds on his way and the female, following him, walks above the jelly, which comes in contact with her sexual orifice, and is sucked up into it; thus the sperm arrive inside her body and there meet the eggs and fertilise them.

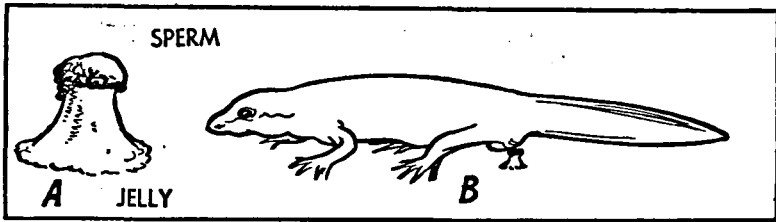


Fig. 30. MATING IN NEWTS

A shows the spermatophore, or little lump of jelly capped with sperm which is deposited by the male. B shows the female picking this up in her genital opening.

In most animals with internal fertilisation, however, special organs are produced for transferring the sperm to the female; there is, I think, no case in which the eggs are transferred to the body of the male. The organs for sperm transference are many and varied, and they are not always directly connected with the opening of the sex ducts on the surface of the body. In some male spiders, for instance, one of the appendages on the head has at the tip a small swollen segment like a bottle, equipped with an apparatus which can be used as a syringe. The male fills this syringe with semen from his sexual orifice, and then sets out in search of a female. (His courtship is, incidentally, a dangerous affair, since he is quite likely to be eaten by the female.) The act of sexual congress consists in his injecting the female, through her sexual orifice, with sperm from the syringe.

Even stranger is the arrangement in octopuses. In the male one of the arms is specially developed as an organ for transferring sperm. In some species the male, after picking up his sperm on this arm, thrusts it into the deep fold of the female's body where her genital aperture is situated; in others the loaded sexual arm may separate from the rest of the male's body, and move off on its own to seek and fertilise a female. When the older naturalists first discovered females with these isolated arms attached to them, they could not decide

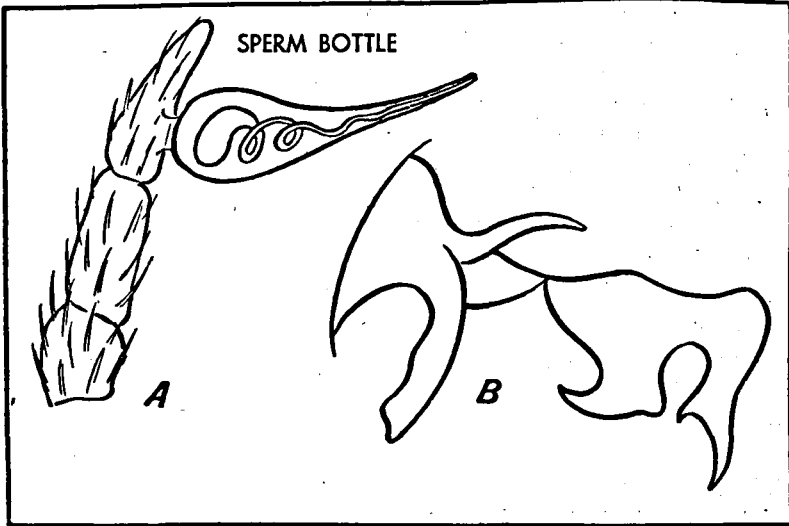


Fig. 31. MALE ORGANS.

A shows the "sperm-bottle" attached to the head of a spider. B is the penis of a species of beetle, to illustrate the complicated shape which this organ assumes in some insects.

what type of animal the arm was; they thought it was a complete organism, and gave it the same Hectocotylus. It was only later that it was discovered to be a part of the body of a normal male, sent off on a sexual pilgrimage by itself.

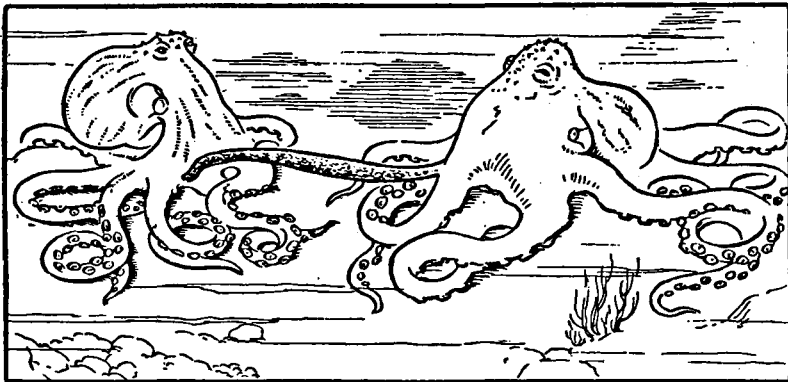


Fig. 32. MATING IN OCTOPUSES.

The male, on the right, is reaching out one arm, which is specially modified for the purpose, and depositing a packet of sperm in a pocket in the female's body.

Such cases are somewhat exceptional. More usually, the structures developed in connection with copulation are modifications of the orifices through which the sex ducts open on the surface of the body. Typically, this opening is in the male produced into some sort of a tube projecting from the body, the penis, while in the female the opening is enlarged into a cavity, the vagina, into which the penis of the male can fit. Yet the world of nature is so diverse that cases which are the exact opposite of this are to be found; in some flies it is the female which has the projecting process, and the male which has a cavity which receives it. But such cases are in a minority. It may be worth mentioning that the penis may not always be used in conjunction with a vagina; in some worms it is forced directly through the wall of the body, and the sperms may be liberated some distance away from the eggs, to which they have to make their way through the body spaces.

The forms which may be assumed by the penis and vagina are very variable. Particularly in animals which have a hard outer covering, such as insects, these organs may be extremely complex. In insects the form of the penis is often one of the best ways of recognising the species to which the animal belongs. It used to be thought that these complicated sexual organs were like a lock and key, and that only if the two animals belonged to the same species would they fit together well enough to enable copulation to take place. Actually this is very doubtful. In some flies it is known that animals of quite different sizes can copulate perfectly well, which suggests that it does not much matter whether their organs fit accurately or not. Probably the complexity of the organs is an example of the sexual decorations which are so common, and which we shall discuss later.

In the higher animals, the penis is usually a fairly simple-looking rod-shaped organ, with rather complicated internal arrangements. In nearly all animals it is normally in a flaccid condition, but for sexual congress it must be rendered stiff enough to be inserted into the vagina of the female. This is normally brought about by a mechanism which is set going by the stimulus of the sexual excitement of the male. A large part of the tissue of the penis is spongy in texture, and, on the male becoming excited, this becomes distended with blood, which is trapped in the tissues by an arrangement of valves, so that the whole organ becomes distended and turgid. In some animals, such as the dog, there is a small slip of bone embedded in the penis, which still further strengthens that organ. Moreover, in the dog the spongy tissue is in two masses, one towards the end

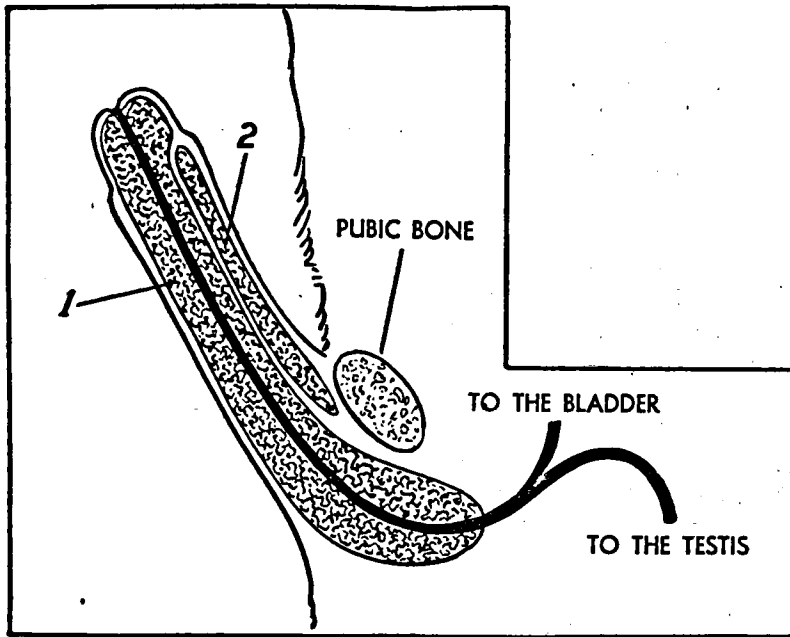


Fig. 33. THE STRUCTURE OF THE PENIS.

A diagram of a section along the penis of a mammal, to show the spongy tissue. There are two main tracts of the tissue, that labelled 1 which surrounds the passage, and expands to form the tip, and that labelled 2 which spreads down on each side. When these become filled with blood, the organ is erected.

of the penis and one near its root; the swelling of the latter fits into the shape of the bitch's vagina so that the two animals, once they have begun to couple, are locked together until the dog's excitement has died down, and his penis is no longer erect.

As well as this mechanism for erection, the penis in some animals is furnished with an apparatus for increasing its stimulating effect on the female. In the guinea pig, for example, it is tipped by fairly hard spines. More important than this, however, is the fact that the penis is itself an extremely sensitive organ and has an elaborate supply of nerves to conduct the stimulation to the central nervous system, where it produces the response which leads to the ejaculation of sperm.

The structure of the vagina, in higher animals, is usually very simple. It is a tube lined with soft tissue plentifully supplied with blood vessels. It does not itself have any mechanism of erection, like the male penis; but it is capable of considerable stretching to accom-

moderate the penis, and is provided with glands which secrete a mucous material which acts as a lubricant. The clitoris, situated at the anterior end of the vagina, is a centre of nervous sensibility. Like the penis it undergoes erection in conditions of sexual stimulation; this increases its sensitiveness and thus leads to a still further degree of excitement.

Clearly the structures of the male and female genitalia are arranged to do something more than perform the purely mechanical function of carrying the sperm over into the body of the female. They are highly nervous structures, so that the transference of sperm cannot be a casual and indifferent matter, but is accompanied by powerful sensations and excitement. From the biological standpoint this is to be regarded as increasing the efficiency of the process by ensuring that the sperm are only transferred at a time when there are eggs ready for them to fertilise. But the nervous sensitivity of the sexual organs is only one feature of the whole apparatus evolved to cope with this problem.

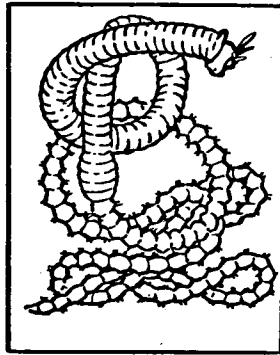


Fig. 34. THE PALOLO WORM

The thick anterior end contains all the ordinary organs, while the thin posterior is entirely filled with germ cells.

Every year, on the two days before the last quarter of the moon in October and November as dawn breaks upon the coasts of Samoa and Fiji, the sea becomes of about the consistency of a macaroni pudding. If an oar is thrust into it vertically, it stays upright for some time before toppling over sideways. The "macaroni" really consists of the sexual segments of the bodies of countless millions of worms of the genus *Eunice*, otherwise known as the palolo worm. This creature lives in clefts of the coral reefs. Its body is in two parts; the anterior contains the intestine, and all the organs which are

required for life, while the posterior section, which is much longer and thinner, is made up of a series of segments, each of which is simply a bag filled with germ-cells, eggs or sperm as the case may be. At the appropriate time each year the posterior ends break off and proceed, in the enormous numbers which have been described, to the surface of the sea near the shore, where the gametes are liberated and fertilisation takes place.

The swarming of the palolo worm is one of the most famous and striking examples of a phenomenon which is very widespread among animals. Sexual activity is usually a periodic phenomenon, only happening from time to time, with intervals of quiescence between. There are many marine animals which show exactly the same kind of sudden swarming for reproduction as the palolo, though not in such enormous numbers and with such accurate timing over such large areas. But for most animals the succession of sexual and non-sexual phases is one of the most important influences on their lives. Salmon, for instance, migrate every year from the sea up to the head waters of rivers, where the eggs are laid and fertilised and the young hatched out. Deer, in preparation for the rutting season in the autumn, grow antlers, and change the whole organisation of their herds so long as the mating lasts. In many birds there is an annual migration to a region where the breeding takes place.

In most of the higher animals, such as birds and mammals, this periodicity in breeding affects the actual sexual organs themselves, so that breeding is impossible during the quiescent interval. In males the testes may shrivel up to only a small fraction of the size they have during the mating time, and in mammals they may ascend again into the abdominal cavity where they were formed, only to come down again into the scrotum when the next breeding season arrives. The female reproductive organs may also become quiescent, though usually they do not undergo such marked reduction in size.

The underlying mechanism of these cycles is very little understood. In some animals and birds it has been possible to bring a quiescent animal artificially into the breeding condition by increasing the amount of light falling on it; most animals breed in the spring, as the days grow longer, and if they are kept in artificial light for a few hours after sunset during winter they may come into the breeding state too early. As mentioned by Prof. Marshall, pp. 96, 114, it is some external cause which brings them into this condition as suggested by the fact that if sheep, for instance, are taken from England to New Zealand, they soon start to breed at the same season of the

year, which, of course, in that country south of the equator, is a quite a different month than it is in England. But whether light is the only factor involved is not yet clear; probably not, since the same kind of cycles are found in animals which live mainly in the dark. The function of the cycles, of course, is to ensure that when sperm are transferred to the female there will be an egg ready to be fertilised. It would be possible to make certain of this by arranging that the female always had eggs available, but in general that plan is not adopted, presumably because it would lead to a great wastage of eggs.

In mammals it would not be sufficient merely to arrange that when copulation occurred there was an egg ready to be fertilised; since the egg is going to develop inside the mother, her internal organs must also be in a suitable condition to receive it. We find that in fact quite a complicated mechanism has been evolved which deals very satisfactorily with this. When a female sheep, for instance, comes to the breeding season in autumn, her sexual activities undergo a series of periodic fluctuations, each taking a very much shorter time than the annual period we have spoken of up till now. Each of the shorter periods concerns the maturing of one egg or batch of eggs, and consists of two halves. During the first half the vagina becomes ready for copulation and the uterus becomes prepared to receive and nourish a fertilised egg. At the height of this period the egg is released from the ovary, and the female is willing to mate. This is the time spoken of as the oestrus, when the female is on heat; it only lasts a few

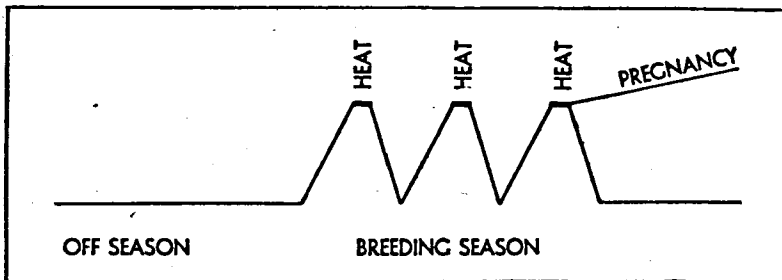


Fig. 35. BREEDING SEASONS.

The diagram shows a typical breeding cycle of a mammalian female; there is a non-breeding season, and a breeding season in which there occurs a series of heat periods. Mating only takes place at times of heat, and the succession of heat periods ends when pregnancy occurs, or after a certain time even if pregnancy does not happen. There are many modifications of this cycle in different species of animals. Some, for instance, only have one heat period in each breeding season, others have a continuous succession of heat periods with no non-breeding seasons.

hours or days, according to the species of animal. After it is over, there is a further building up of the uterus to receive an ovum, and this occurs whether the egg has in fact been fertilised or not. If fertilisation has occurred, the egg becomes attached to the side of the uterus, and pregnancy begins; if it has not, the cycle comes to an end, the uterus becomes smaller again, and everything starts anew for a new set of eggs.

These short cycles are known as oestrous cycles. The mechanism by which they are determined is fairly well known; they depend on substances, known as hormones, produced by various glands in the body. This mechanism is discussed fully in the section of this book dealing with the physiology of sex. The length of each cycle, the importance of the different phases within the cycle, are different in the various species of mammal. The particular modification of the cycle which occurs in women and causes the monthly period or menstruation, is discussed in the section on physiology.

The development of breeding cycles is only a rough method of bringing eggs and sperm together at the right time. Most types of eggs only remain fertilisable for a few hours at best, and sperm, after they have been given out by the male, do not live very long. For the best efficiency there should be some more accurate timing than can be achieved by a cycle in which the breeding periods succeed one another at intervals of a month or a year; if the male and female are only a few hours out of step with one another it might ruin the whole process.

It is probably the necessity for accurately timing the act of copulation in relation to the liberation of eggs which is the reason why sexual congress is always accompanied by a great deal of excitement. The male and female usually mutually stimulate each other, and only when they have both reached a state of the greatest excitement does the actual transference of sperm take place; and meanwhile it has been arranged that an egg is ready to receive the sperm, either because the same excitement causes the female to release an egg from the ovary, or because the female does not cause the full sexual excitement of the male except when an egg has recently been made ready.

Thus in most animals, what may appear to be mere preliminaries of the sex act, performed, one might think, simply as play and to increase the pleasure of intercourse, are actually an essential part of it. The only animals for which this is not true are those in which the females are provided with special receptacles in which sperm can be stored for fairly long periods, and let out in small quantities as the

eggs become matured. In these there is no need for copulation to occur at the same time as the maturation of an egg, and we find that in fact the female of this kind frequently shows no signs of interest in the male who is mating with her. But this is the exception. In animals in which mating involves the introduction of the penis into the female vagina, the active co-operation of the female is usually essential, since unless she adopts the correct posture, the male is helpless. Rape, which is the mating of a male with an unwilling female, is in most animals an impossibility. It seems to be known only in man and the albino mouse.

There is no space here to describe the amazing variety of different kinds of love play and sexual stimulation which has been evolved by different groups of animals. We can only say, in general terms, that there are two kinds of stimuli to be considered. On the one hand, there are what might be called the long range stimuli, the function of which is to enable the two sexes to find one another, and then to recognise that the other is in mating condition. In this category come such items as the sexual perfumes produced by so many animals from butterflies to muskdeer and bitches. Secondly, there are the stimuli and playful behaviour which increase the sexual interest of the animals when they have come together.

Perhaps it would not be far wrong to say that it is usually the females which provide the long-range stimulation, and the males which carry on the process after the animals have met. In both, the more active part falls to the male. It is he, as a rule, who seeks out the female, and usually he who indulges in the more active love play. He may posture or dance; and the most elaborate sets of preliminary mating activities have been evolved even in comparatively lowly animals, such as spiders. In higher animals, such as birds, there are many descriptions of the long course of courting which must be gone through before the male and female finally perform the sexual act which is the cause of their coming together.

Connected with this is the fact that it is usually the male who is the more brightly coloured of the sexes. He may indeed assume a special and more vivid coat for the mating season, and as part of his courtship he may parade up and down displaying his bright and gorgeous colouring. Darwin described many examples of this, and pointed out that the most brightly coloured and beautiful males would be more often successful in their courtship of the females, so that they would tend to leave behind them a greater number of offspring. Thus he accounted for the evolution of bright colours and

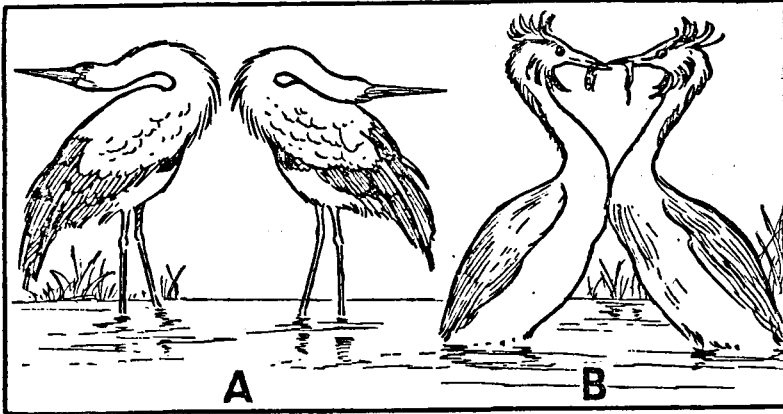


Fig. 36. LOVE-MAKING IN BIRDS

The pictures show sexual performances preparatory to mating in storks (at A) and grebes (at B).

other special accompaniments of sexual behaviour by a process of sexual selection.

It is clear nowadays that the matter is not so simple as it appeared to Darwin. In some cases, it is true, we find males whose decorations appear to be directed simply to stimulating the opposite sex. This is most striking in birds, although remarkable examples are also found in fish and insects. These are animals which have actually been proved to be able to see colours. Coloured decorations are rare in mammals, in which the eyes, except in monkeys, apes and man, are incapable of distinguishing colours. In many cases, however, the decorations do not seem to have anything to do with obtaining mates. In some fish, for instance, in which the males have a special "mating dress" of bright colours, the actual mating occurs at night, when the colours are invisible. In birds, the pairs may sort themselves out and form more or less stable marriages, at least for that season, before the male begins his courtship dances and song. Again, it has been supposed that in animals such as deer the males fight for possession of the females, the winner being able to mate while the loser is driven off. Actually, it is found that while two mature and powerful stags are fighting, young and comparatively weak males may find their only opportunity to approach the does whose would-be mates are busy elsewhere.

These few examples are enough to show that the special decorations and special types of behaviour assumed during the mating season can play a much greater part in the lives of animals than

mere showing off to the females. They may in fact sometimes be directed more towards animals of the same sex than to those of the opposite one. In many birds, the bright colours of the male, and his songs and posturing, are really warnings to other males to keep out. In many species, each pair of birds has a certain territory round the nest, which is, as it were, their property, on to which no other individual of their species is allowed to trespass; and the conspicuous behaviour of the male is to let marauders know that the occupants are in residence. Again, the belling of stags is probably more to warn other males off, or at least to let them know that a rival is approaching, than to attract the females. Only a careful study of the lives of different animals can show what the sexual decorations are really used for.

This does not mean that the mating decorations are never employed as stimulations in sexual congress. Even if we must be on our guard against assuming this on too little evidence, there are still many examples where it is certainly true. Among birds whose habits have been carefully studied, there are some which have what might be called mating parties. Blackcock, for example, will go in large groups to special places, where they perform elaborate dances and posturings, and finally mate. Others, again, such as storks or grebes, which may live in isolated pairs, have a particular ritual form of behaviour which is carried out just before mating, and is clearly directed at the sexual partner and not at any possible intruder.

In the lives of many animals the performance of copulation is only one of the actions which are involved in reproduction, although it is often the most important. As we have seen, there may be preliminary activities, of the kind which can be called courtship in a broad sense, leading up to it. Rather less closely associated with the primary sexual difference, there may be another set of actions which have to do with the care of the young. These involve such matters as the building of nests, the incubation of eggs, and the feeding of the young.

Traces of behaviour of this kind can be found fairly low down in the evolutionary scale. Some female beetles, for instance, collect a dead body of a small animal and push it into a hole before laying their eggs on it, so that when the larvae hatch out they find a store of suitable nourishment ready for them. In bees and ants the whole life of the community of a hive is centred round the care of the young, which are born in special cells, and carefully fed with honey, pollen or other substances collected by the workers.

In many fish, as we saw, the copulation is very rudimentary, eggs and sperm being poured out separately into the water by the two animals. Even so, the eggs are not always left entirely to the tender mercies of chance. Many such fish make a special nest for them, usually by scraping a shallow depression in the sand or gravel at the bottom. Sometimes, as in sticklebacks, it is the male, and not the female, who is more active in making the nest, and who takes on the duty of watching over it until the eggs hatch out. In the fighting fish *Betta splendens* the male makes a floating nest of bubbles, which he will not permit the female to approach until it is finished. Then the copulation occurs and the eggs and sperm are liberated. The eggs being lighter than water, they float up to the nest and stick to it; and the male collects any stragglers in his mouth and adds them to the bunch. When the female has exhausted her supply of eggs, she swims off, leaving the family in charge of the male, who keeps guard over them until they hatch out and grow old enough to fend for themselves.

In most cases, however, it is the female who cares for the young. This is usually so in birds, although there are one or two species, such as the Phalaropes, in which it is the male who broods the eggs and hatches them out. Among Phalaropes the usual rôle of the sexes is reversed in another way; it is the females who are more brightly coloured than the males.

The care which a female animal takes of her eggs may go to great lengths, though one can hardly explain it as a result of conscious forethought. For instance, one of the great problems which had to be solved during the evolution of land animals is how to provide water for their embryos. The ancestors of these animals were fish, living in water, where the problem does not arise. Amphibia, such as frogs, have not solved the problem, but must return to water or damp places to breed. Reptiles have begun to be able to deal with the matter by forming large eggs with a hard shell which keeps in the precious store of fluid. In some turtles, however, this step has not been fully taken, and the egg-shell is not quite impervious, so that there is some danger of the egg drying up. When the female lays her eggs, in a hole in the sand, she does her best to avert such a catastrophe by urinating over them before covering them up. This piece of maternal care is of the greatest importance for the well-being of the young, but one can hardly suppose that the female turtle understands the need for supplies of water in the biochemical processes of growth which will go on in her eggs. Her performance

must be considered in other terms, as an irrational or instinctive form of behaviour, which has become hereditarily fixed because it is so valuable to the well-being of the race.

This example should put us on our guard against interpreting animal behaviour in connection with young in terms of human ideas. This caution is necessary even for animals as high on the evolutionary scale, and so near to man, as the rat. Female rats prepare for the birth of their young by getting together some sort of a nest; and after the young are born they look after them. If a young rat is removed from the nest and put down somewhere not far away, the mother retrieves it and brings it back. This looks very intelligent behaviour; but in fact a mother rat will retrieve the young of almost any species; young mice, rabbits, kittens and even chickens will be accepted instead of her own rats.

The mental process is much simpler than it appears. Such maternal behaviour can be shown to be directly dependent, not on the higher thought-processes of the brain, but on the hormones produced in the body by the glands of internal secretion, and it can actually be called into being by injecting a rat which has not had young with the appropriate substances. Of course there is no knowing what, if anything, the rat feels or thinks about the young she retrieves. But it is clear that whatever she feels her behaviour is actually directly dependent on the hormones in her blood. It should not be too closely compared with human behaviour, which has a much more complex background.

Among mammals the hormones of the blood, by affecting the sexual cycles, influence the whole social life of animal groups. As an example of this we may consider the life of red deer in the Scottish highlands. For most of the year the animals of both sexes are in a non-sexual condition, and during this time they live in separate herds. The males form rather loosely-knit groups, which range over certain areas of country, while the females are in more closely-organised groups which contain not only the mature females, many of which are pregnant or suckling, according to the time of year, but also the yearlings and two-year-olds. These female groups are controlled by an old female, who takes the main responsibility of watching out for enemies, and normally leads the herd away when danger threatens.

In the autumn, when the rutting season approaches, the male herds break up, and the stags move off to find females. Each stag sets up a harem, which contains all the females he can control,

together with their young hangers-on. The male guards these females jealously, and challenges any other male who approaches; sometimes a warning is sufficient, sometimes a real fight develops, and some of the females may be captured by the newcomer. The males are sexually extremely active, and not only mate frequently with the females which are on heat but also masturbate. They often seem to wear themselves out several times during the period of the rut; then they retire to the tops of the hills for a time before returning again to find new mates. Throughout the whole period, however, it is still a female who is the leader of the herd in everything except sexual matters; it is she who keeps watch and leads the herd from place to place. The pugnacious male is more or less an intruder into the serious business of life, which goes on just as before when the rut is over and the males slink away exhausted to their own parts of the country.

It is clear that the fundamental basis of this system of life is the occurrence of a rutting season, which is, as has been said, dependent on hormones. With such an alternation between sexual and non-sexual phases, and with a sexual phase which is so intense while it lasts, it would be quite impossible to imagine a stable social system in which the animals could live all the year round.

Monkeys and apes come much nearer to man in that respect. The males are sexually active all the year round, while the females, although they have a well-marked cycle of sexual activities, will also receive the male at any time. Their social system has been most fully studied in baboons, a large colony of which was at one time living, under conditions very like the natural ones, on Monkey Hill at the London Zoo.

In baboons the social system continues permanently, with no sharp breaks at the beginning and end of a sexual phase. It is, however, still the sexual instinct which keeps the animals together. The mature males, if they are strong enough, attach one or more females to themselves, forming a polygamous family party. The young males, and the weaker mature ones, are unmated, and usually join up with one of the family parties as bachelor hangers-on. The link between them and the family seems to be their attraction to the females, to whom they sometimes succeed in making sexual approaches when the master's back is turned.

The dominant male of each family only keeps his position, and only retains the possession of his wives, by intimidating or fighting off the possible rivals; the females have no "faithfulness," and will

go with any male strong enough to keep them. Thus there is continually a certain amount of change within the group as different males succeed in capturing females. Within the family, also, there are changes in the relative positions of the females, according as they come into the full condition of heat or oestrus. When in this condition the fact is advertised by the swelling of the skin surrounding their genitalia, and they are at that time more than usually ready to respond to the advances of the male. The female which is on heat at a particular time is for the moment the favourite wife; she follows the dominant male more closely than the others and receives more attention from him.

Probably all monkeys and apes live in similar groups. Reports have sometimes been made that some of the larger and more man-like apes are monogamous, but there is no definite evidence of this. On the other hand one finds solitary males but never solitary females, which looks as though some of the stronger males were taking more than their fair share of the available mates. Observers who are used to monkeys think that they see something like affection between a male and his females, but it seems that this feeling is not strong enough, at the sub-human stage of evolution, to restrain the tendencies of aggression and possessiveness which cause the ape to mate with all the females he can capture. This social pattern is clearly much more like that of human beings than is that of the deer. The resemblance is probably due very largely to the fact that the sexual condition is more or less continuous in the monkeys, as in man, and not intermittent as in deer. But even in monkeys we find a considerable variation in the sexual activity of the females during the course of their sexual cycles. The monkey cycles are extremely similar to those of women; baboons menstruate at about monthly intervals, at the end of the time when the uterus has been prepared for one egg, and just before the ripening of the next egg begins. The period of the greatest sexual activity in the monkeys is about the middle of the period, midway between two menstruations.

This may also be true, to a slight extent, in women. Probably different women react rather differently in this respect, but in healthy and normal women the variation in sexual activity during different phases of the cycle is certainly much less than it is in female monkeys and apes, and is often hardly apparent; in fact, there is still some debate whether it can be detected at all. The purely physiological events, which in other animals play such a large part in determining the way in which the social system is organised, are

therefore much less important in human beings, since their behaviour has a steady, continuous character, instead of being subject to periodic changes. This sets man free to organise his life in almost any way he chooses. His sexual instinct is always present, tending to draw him towards his fellows; it does not either disappear, and leave him as a self-sufficient individual, or become so intense that he is willing to fight any other male in sight. By comparison with other animals, he has in fact a wonderful chance to build up stable and friendly societies.

We have seen how animal societies are built up largely on a basis of sexual behaviour. A biologist would expect that fundamentally the same would be true of man. But human beings are very much more complex than any other animals, and can transform the primary sexual bond of sympathy in so many ways that it becomes impossible to recognise it at first sight. It is therefore futile to try to analyse human societies in terms of simple sexual ideas. Before we can understand how the sexual motive becomes transformed into the driving force behind man's highest and noblest aspirations, we must understand something of the psychological processes by which human beings can rise above their original animal nature. Man has a conscience and a moral sense which we do not find among animals, and for this reason he cannot be considered just as a rather cleverer monkey. The biologist must admit that in these respects human beings fall outside his sphere of study, and he must retire from the scene in favour of the physiologist and psychologist.

CHAPTER TWO
PHYSIOLOGY OF REPRODUCTION

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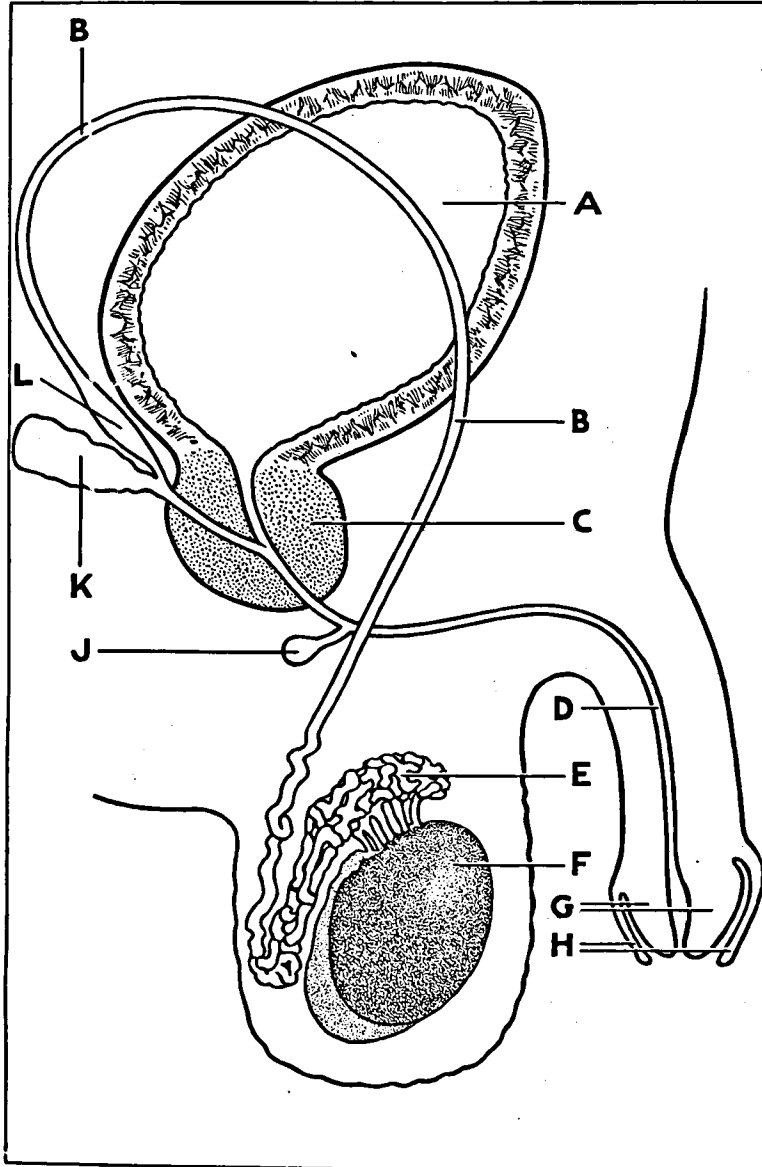
I. THE ORGANS OF REPRODUCTION

PHYSIOLOGY is the branch of science which is concerned with the functions performed by living things. It is a department of biology, which embraces the whole science of life. But since physiology deals with function rather than form it is the science which teaches us more particularly the way in which both the body as a whole and its separate parts work, and the laws which govern its various activities. In so doing it may help us to regulate these activities, and by teaching us about the normal working of the body it may show us how any of its parts may be adjusted when they get out of order.

Physiology must always be studied in close relation to anatomy, the department of biology which deals with the form and structure of organisms and their parts, since it is impossible to acquire an insight into functional activity without first possessing some knowledge of the composition and structural relations of the parts of which the organism is composed. Consequently, before attempting to describe the physiology of the organs of reproduction and the successive phases which they undergo in order to fulfil their functions, it is desirable to possess some knowledge of the anatomy of these organs. In supplying this, however, it will be convenient to mention the more obvious functions which the organs are known to discharge.

It will be realised that the genital organs cannot discharge their proper functions without the due co-operation of the other essential organs of the body. In common with all the other parts of the body they depend upon the alimentary system which supplies the body with nourishment, the respiratory system which enables it to breathe, the excretory system which gets rid of waste matter, the circulatory system which carries the blood throughout the body, and the muscular and nervous systems which coordinate the activities of the living organism. Without them the genital organs could not receive the necessary nutriment, oxygen, or other essential substances, or be maintained in conditions in which they habitually operate.

The reproductive system, though essential for the continuity of



SIDE VIEW (DIAGRAMMATIC) OF THE MALE GENITAL ORGANS

- | | |
|------------------|-------------------------|
| A = Bladder. | F = Testes |
| B = Vas Deferans | G = Glans Penis |
| C = Prostate | H = Prepuce or Foreskin |
| D = Urethra | J = Cowpers Gland |
| E = Epididymis | K = Seminal Vesicle |
| L = Ampulla | |

the life of the species, is—unlike the other systems—not essential for the maintenance of the life of the individual. This must not be taken to imply that the reproductive organs do not influence bodily health; as we shall see, certain substances (the internal secretions) which the sex glands discharge into the blood are necessary for the full development of body and mind, and to some extent for the maintenance of vigour. It is, however, possible to remove all the reproductive organs without destroying life, and, provided those supplying internal secretions are retained, to prevent them from discharging their reproductive functions without seriously affecting health.

Male Reproductive Organs

The human male reproductive organs consist externally of the testes (or testicles) and the penis. The testes lie in the scrotum, which is a skin pouch suspended between the penis and the anus, or rectal opening. It contains two cavities, separated from each other by a membrane. Each cavity carries one testis, or testicle, and is connected with the main cavity of the abdomen through a canal, called the inguinal canal.

This canal is not empty, nor are the testes isolated organs. They are connected with the rest of the body through the spermatic cord, which passes through the inguinal canal. The spermatic cord is a band of tissue in which are embedded the blood vessels and nerves that supply the testes. A tube or duct, called the *vas deferens*, which originates at the testes, also passes through each inguinal canal. The *vas deferens* has the most important function of providing a passage for the semen, the fluid containing the spermatozoa, as the male reproductive elements are called. More will be said of it later.

The testes descend from the abdominal cavity into the scrotum in late embryonic life by traversing the inguinal canal. They may fail to complete this descent from their original position, remaining either in the abdominal cavity, or, more frequently, may traverse part only of the distance to the scrotum. Thus the testes may reach the groin without passing through the inguinal canal; in this position they may give rise to much discomfort or pain. This condition of incomplete descent is known as cryptorchism, and nearly always causes sterility. It is capable of remedy by surgical treatment.

The testis proper consists of a large number of fine threadlike canals, or tubules. Each canal is lined by cells which produce the spermatozoa, or sperms. It is one of the two main tasks of the testes to produce vast numbers of spermatozoa, which, as it were, bud off

the inside wall of the tubules, and are shed into the fluid secreted by certain of the lining cells. They are produced in enormous numbers, and it has been estimated that a single emission contains normally as many as 240 million spermatozoa.

Prior to ejaculation the spermatozoa have to be removed from the testis, and transported to the epididymis, which is the main storehouse of spermatozoa. Their transport is effected by a system of ducts called the *vasa efferentia*. There are twelve on each side, and they open into the corresponding epididymis, which is a long single coiled duct whose coils are so tightly bound that, like the testis, it appears to be a solid organ. The two epididymides are closely associated with the testes; they stretch along their sides, and can be felt by applying the fingers to the front and back of the scrotum.

The wall of the duct that forms the epididymis contains muscle fibres. When these contract, the lumen, as the inner hollow of the duct is called, narrows and the spermatozoa are impelled forward into the vas deferens, which is continuous with the epididymis. Such contraction probably only takes place, normally, during the sex act. In this way the semen is conveyed from each epididymis, by a vas deferens, through the inguinal canal to the urethra, or common urogenital passage. The walls of the vasa deferentia also possess muscle fibres which enable them to contract and thus to send on their contents.

The urethra, or urogenital passage, so-called because it receives both the product of the genital organs and the urine from the bladder, penetrates the penis and thus makes possible the final discharge of the spermatozoa after their long passage. This discharge takes place, as a rule, during the sex act, and is commonly called ejaculation. The fluid containing the spermatozoa is added to in its progress from the testes to the exterior. What leaves the opening of the penis during ejaculation is a composite fluid called semen, or seminal fluid, in which the original fluid with the spermatozoa is the most important but not the most voluminous constituent. Semen consists mainly of various liquid secretions produced by a number of glands and mingling during (or sometimes after) ejaculation.

The glands which contribute to the seminal fluid—in addition to the testes, which actually produce the spermatozoa—are the seminal vesicles and the prostate. The two seminal vesicles are situated one on either side, at the ends of the vasa deferentia near their junction with the urethra. The vesicles open into the urethra. The prostate is a tubular gland surrounding the urethra at the base of the bladder. It discharges its liquid secretion through ducts opening into the

urethra. This gland can give rise to serious trouble in middle-aged or old men. Among other changes, it may increase in size and compress the urethra, which passes through it, thereby impeding the flow of urine and necessitating the surgical removal of the gland. The function of the viscid secretion of the prostate gland is not certainly known. It is suggested that it excites movement in the spermatozoa, and also that it cleanses the urethra prior to ejaculation.

Other organs which contribute to the seminal fluid are the small glands of Cowper and Littré—both named after distinguished anatomists. The former are situated near the exterior of the urethra, into which they open through two fine ducts; the glands of Littré, which are very small, are situated in the lining of the urethra. The wall of the vas deferens itself contributes a small quantity of liquid to the bulk of the semen.

The seminal fluid serves primarily as a carrier of spermatozoa. There is, however, some reason to believe that it is something more than a neutral medium in which spermatozoa can be passed from the body of the male to that of the female. It would seem, for instance, that, as already said, the prostatic secretion stimulates the movement of the spermatozoa (a most important feature of their subsequent behaviour) or even that the very fact of the movement taking place depends on the stimulating action of the secretion.

The most complex organ among the highly involved structures of the male reproductive organs is the penis. Its complexity is related to its twofold function of conducting the urine to the exterior through the urethral channel, and conveying the semen into the genital passages of the female. For the most part, it serves simply as the protective wall of the urogenital passage through which the urine is discharged; and while it is fulfilling this function or is entirely at rest is a flaccid, flexible organ. But in order that the urogenital passage may assume its other rôle, that of transporting semen, the penis hardens and lengthens—undergoes erection, as it is called—so that it may be able to penetrate the female genital passage.

Erection and hardening are brought about by an internal machinery extremely simple as to its nature but extremely complex in its details. Erection is essentially a hydraulic process; just as water, distending a hosepipe, will render the latter resistant to pressure, so blood is used to harden the penis. The wall of the penis contains three cavities, the two *corpora cavernosa*, which are placed one on each side, and are united in the middle line, and the *corpus spongiosum*, which is situated internally and surrounds the urethra. These cavities are normally supplied with blood at all times; and,

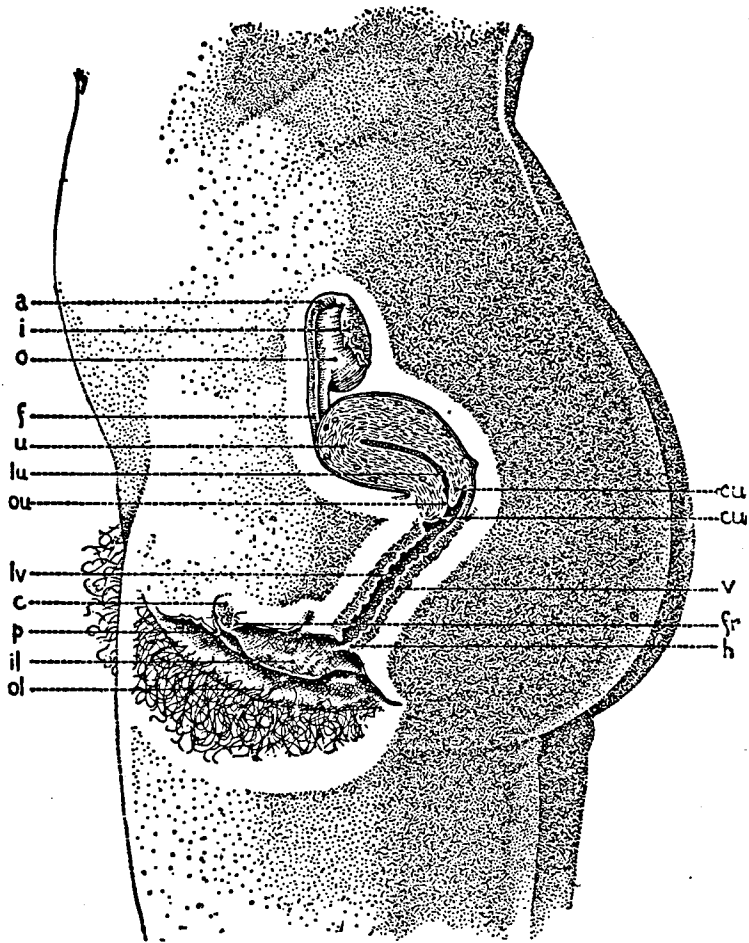
as is the case with other organs and tissues, the blood flows through them, entering by one and leaving through another set of vessels. Erection takes place when, under the influence of sexual excitement, the local blood supply is increased, and the nerves concerned shut the gate through which the incoming blood can escape. Thus the cavities of the penis retain the full pressure of the blood which enters and the whole penis stiffens.

Female Reproductive Organs

The female organs of reproduction, unlike those of the male, are almost entirely within the body. The chief are the ovaries, the Fallopian tubes, the uterus or womb, and the vagina. The ovaries are a pair of organs lying in the lower part of the cavity of the abdomen which is called the pelvis. A band of tissue called the broad ligament stretches across the pelvis and to it the ovaries, the Fallopian tubes and the uterus are attached. Each ovary, as shown in microscopic sections, is formed of a ground substance or connective tissue, which contains a large number of round structures of varying size known as the Graafian follicles. The smallest of these—the primordial follicles—have no cavity, but consist each of an egg or ovum, surrounded by a row of round cells; these lie just below the surface of the ovary.

The ova in nearly all mammals are microscopic in size. Throughout reproductive life there is a constant activity going on in the ovary, especially in the follicles. The follicles increase in size and pass inwards to the centre of the ovary, the follicular cells multiply and a space is formed between those immediately surrounding the ova and the outer cells which line the wall of the follicle just inside the connective tissue. This space becomes filled with a nutrient fluid called the *liquor folliculi*. Each follicle usually contains one ovum (rarely two or more). The largest follicles occupy a considerable part of a section through the ovary, and as they reach maturity come to protrude visibly from the surface.

In animals which produce large litters the ovaries may assume the appearance somewhat of a bunch of small grapes, each grape representing a follicle. In women, however, only one follicle and ovum usually ripen at a time (occasionally two ova, rarely three or more). It has been calculated that during her reproductive life, which on average extends approximately between the ages of fifteen and forty-five, not more than 400 mature eggs are produced by a woman, an incomparably smaller number than that of the spermatozoa produced by a man. When the ovum is ripe the follicle ruptures and the ovum



Side view of the female reproductive organs. The parts are shown in partial section and are isolated from neighbouring structures in order to indicate their extent in comparison with the body as a whole, the last being represented as transparent near the organs. a, ampulla of Fallopian tube, c, clitoris; cu, cervix of uterus. f, Fallopian tube; fr, frenulum of the clitoris; h, hymen. i, infundibulum; il, inner lip (labium minor); lu, lumen of uterus. lv, lumen of vagina; o, ovary; ol, outer lip (labium major) ou, external os of uterus; p, prepuce; u, uterus (fundus). v, vagina.

escapes into the cavity of the pelvis. The ovaries during reproductive life contain yellow pigmented bodies known as the *corpora lutea*, which are produced by an active growth in the follicle after the ovum has escaped.

The Fallopian tubes, or oviducts, the function of which is to convey the ova to the interior of the uterus, open internally into the pelvic cavity close to each ovary. The discharged ova enter the open ends of the tubes, which are expanded in a trumpet-like manner and which are believed to become still more open and to become erect so as to receive the ova as they are released. The tubes in the human female are about four inches long.

The uterus lies behind the urinary bladder. It is the organ in which the child develops during pregnancy. In the human female it is a single hollow organ and the Fallopian tubes open into its upper corners. The virgin uterus in the human female is about three inches long, but it subsequently enlarges greatly, especially during pregnancy. The lower part is called the cervix, or neck. It is separated from the corpus or body by a constriction, the communication being called the internal os or mouth. The lower end of the cervix projects somewhat into the vagina, in which it opens by the external os or mouth. A section across the uterus shows a central cavity lined by a smooth membrane, the mucous membrane. This contains a number of glands. Outside the mucous membrane are the muscle layers, and on the outside of all is the smooth external lining of the organ.

The vagina, into which the penis penetrates during copulation, extends from the uterus to the exterior opening. Its walls contain muscle fibres, and internally it is lined by a mucous membrane. It opens to the exterior between the *nymphae*, the two lips which on each side close the aperture, and which lie inside the larger lips called the *labia majora*.

The female sex organs which are visible from the exterior are known collectively as the vulva, both the *labia majora* and the *nymphae* being included under this term. The *labia majora* on the outside are covered with hair. On separating the internal lips or *nymphae* the vaginal opening becomes visible, and, in front of this, the opening of the urethra through which the urine is ejaculated. The vaginal opening is surrounded by a membrane called the hymen. In the virgin the vaginal opening is usually small. At copulation the hymen is ruptured, and this results in a permanent increase in the size of the vaginal opening. At the upper (anterior) end of the vulva is the clitoris, which is a solid rod-like organ corresponding to the penis of the male, but not perforated by a channel. The clitoris is

a sensitive erectile organ, covered by a prepuce or foreskin like the penis, but considerably smaller than that organ. From it erectile tissue extends around the vaginal opening and beneath the skin of the nymphae. These tissues become much congested during sexual intercourse and the process of congestion forms part of what is called the female orgasm. The perineum lies between the vulva and the anus in the same position as in the male.

The Reproductive Elements

The gonads, that is, the testes in the male and the ovaries in the female, are the essential organs of reproduction, since they give rise to the reproductive elements, the spermatozoa and the ova. These organs, as has been mentioned, also produce chemical substances which are secreted into the circulating blood, and are responsible for the distinctive characters of each sex as well as for the series of changes that occur in the reproductive and correlated organs and structures in the successive phases of the sexual cycle. The accessory organs of reproduction, of which in the female the uterus is the most important, are also dependent for their growth, development, and cyclical activity upon the internal secretions of the gonads.

In sexual intercourse the spermatozoa first enter the vagina and thence pass, partly by their own power of activity and partly perhaps through the agency of the muscles of the uterus and the cilia lining the cavity of that organ, upwards throughout the entire length of the uterus, and into the oviducts or Fallopian tubes. Here they normally meet with the eggs which have recently been discharged from one or both of the ovaries, and fertilisation is effected by the union of a male with a female cell (spermatozoon with ovum).

The fertilised egg then passes down the tube into the cavity of the uterus, in the meantime commencing to undergo the process of cellular division which marks the development of the new individual. After a short interval the developing ovum enters into an intimate relation with the mother by becoming connected with the wall of the uterus. It develops round it a nourishing membrane—the chorion—which puts out an immense number of minute rootlets by which it is attached during the period of pregnancy. These chorionic rootlets enter into a very close relation with the maternal tissue and the blood vessels of the uterus, from which they draw the nutriment for the growing ovum. The organ which is formed by the chorion and its rootlets on the one hand, and the maternal tissues on the other, is called the placenta. Throughout pregnancy it is for the developing child an organ of nutrition, excretion and respiration. The child

during its intrauterine development is enclosed within a bag filled with fluid and is connected with the placenta by the umbilical cord, which is severed immediately after birth.

II. PERIODIC CHANGES

Menstruation

In most animals the organs of reproduction undergo regular alternations of rest and activity correlated with non-breeding and breeding seasons. That is to say, there is generally an internal rhythm of reproduction.

In the human male the spermatozoa are produced in the testes continuously throughout the whole year, and fertile coition can take place at any time, though there may be variation in sexual potency or in the number of spermatozoa which are formed and ejaculated. In the female, however, there is typically a menstrual cycle of about one lunar month. This cycle depends upon an inherent rhythm and recurs in correlation with sexual changes in all the organs of reproduction.

The uterine changes which mark the menstrual cycle consist of four chief stages:—(1) A constructive stage in which the organs undergo growth (about twelve days); (2) a destructive stage of very variable intensity, in which some of the blood vessels give way and bleeding takes place through the vagina to the exterior, accompanied by some destruction of tissue which also comes away forming with the blood the "menstrual clot" (four days); (3) a stage of repair or regeneration during which the bleeding organ heals up and becomes restored (seven days); and (4) a stage of quiescence (five days).

The constructive stage during which the uterus undergoes considerable growth resembles in many respects the changes which occur at the beginning of pregnancy, and the destructive stage which supervenes may be regarded as the removal of the tissue which is so prepared if no fertilised ovum is present.

Just as there is a variation in the length of the menstrual cycle, so also there may be a considerable difference in the severity of the menstrual process within the limits of the normal. It may be characteristic of particular individuals to discharge a considerable quantity of blood and tissue in the composition of the menstrual clot, whereas other individuals may only experience a slight discharge. The complete absence of menstruation, in any but a pregnant woman or one who is nursing her child, must be regarded as abnormal. During the nursing period, menstruation occurs in about forty per cent. of cases; it is nearly always resumed shortly after the cessation of

nursing, or within two months of the birth of the child, if the infant is not breast fed. Menstruation, or a bleeding which resembles it, may continue during pregnancy without interfering with the development of the embryo; but if this state is found medical advice should be sought.

While the above processes are going on in the uterus a series of changes is likewise taking place in the ovaries. The ovarian follicles, as we have seen, undergo a gradual development throughout the whole of reproductive life. This development is so timed that each month one, or rarely, more than one, becomes ripe. Where more than one ovum is shed twins, triplets, or quadruplets may occur.

The rupture of the follicle and discharge of the ovum is called ovulation. This process is believed to occur typically about the fourteenth day of the cycle, that is, fourteen days after the beginning of the menstrual discharge. According to one view, however, it would be more correct to state that ovulation occurs fourteen days before the end of the cycle, and this irrespective of the length of the cycle, which, as we have seen, although typically twenty-eight days, may be rather less or more.

It would appear, then, that the greatest chance of conception is in the middle of the cycle, or, to be more precise, just before the middle. This view is only correct, however, on the assumption that the ova and spermatozoa are capable of maintaining themselves alive and fertile for a short time only after their release from the gonads. This assumption is justified by all experimental data. For instance, it is known that in the rabbit the spermatozoa lose their capacity for fertilisation about thirty hours after release, and the ova after about six hours.

It would seem likely that there are prolonged periods during the cycle when coition will prove sterile. Nevertheless, such so-called "safe periods" cannot be relied on, because of the uncertainty in particular individuals as to when ovulation occurs. In order to obtain knowledge of the periods of fertility in a particular individual it is first necessary to ascertain the normal duration of that individual's cycle.

After ovulation the discharged ovarian follicle becomes converted into a so-called "yellow body," or *corpus luteum*. The conversion is effected very rapidly. The cells which previously lined the wall increase in size and other cells multiply so that an ingrowth of tissues into the former cavity takes place; and this ingrowth continues until nearly the whole of the cavity is filled by a vast number of yellow cells forming the yellow body. If conception occurs, the corpus luteum

persists throughout a considerable part of the period of pregnancy, but if the ovum fails to become fertilised the uterus begins to regress after about a fortnight, and at the end of the month is reduced to little more than a scar. During the period of this activity the corpus luteum contains a yellow pigment (lutein), but in a later stage this disappears, and the final form of the corpus luteum may be a structureless body with degenerate cells (the *corpus albicans*).

Pregnancy

The ovum is usually fertilised in the upper part of the oviduct. A single spermatozoon effects the act of fertilisation, and the remainder of the spermatozoa die somewhere in the female passages. The enormous development of the uterus during pregnancy has been already alluded to; apart from the developing young (the foetus) and its membranes the previously virgin uterus increases in size during the first pregnancy about thirty times. It is only after the third month of pregnancy that the dimensions of the uterus have been increased to such an extent that the organ rises from the pelvic cavity so as to reach the cavity of the abdomen. By the end of the sixth month the uterus is extended as far as the umbilicus or navel. By the end of pregnancy the uterus has reached the ribs and the pit of the stomach. The alimentary canal and other organs are pushed to one side in the process of enlargement, and this change sometimes produces constipation, while in the later stages of pregnancy pressure on the bladder may cause frequent passing of urine. The general distension often causes a kind of cracking of the skin in the abdominal region.

The non-occurrence of menstruation is one of the signs of pregnancy. Other well-known indications are the sensations of nausea sometimes followed by vomiting (the "morning sickness") which commonly occur from the second to the third or fourth month but not afterwards. The vulva may be congested and slight pigmentation may occur on the forehead and cheeks, as well as round the nipples. There is sometimes an enlargement of the thyroid gland in the neck. (A similar enlargement may occur at menstruation.) Apart from the enlargement of the abdomen the most characteristic visible change in pregnancy is the development of the mammary glands. The breasts begin to swell early in pregnancy, but true milk is not secreted until the second to the fifth day after birth. A diagnostic test of great value is the presence in the urine within a few weeks of the onset of pregnancy of certain chemical substances.

The period of pregnancy does not necessarily involve discomfort; in fact many women have a sense of increased well-being, and their number would be much greater if nutritive and other environmental circumstances were always favourable. Pregnancy does not necessitate change in the general mode of living, and in particular does not demand interruption of normal sexual intercourse except toward the end.

The average duration of pregnancy is estimated at 280 days or ten lunar months. It is reckoned from conception, or, where this is not known, from the cessation of menstruation. Prolongation of pregnancy sometimes occurs, but premature birth is far commoner. Expulsion of the child before the seventh month (miscarriage or abortion) rarely results in a living child, but premature birth after the beginning of the seventh month is frequently successful.

The Development of the Embryo

As soon as the ovum is fertilized by a spermatozoon it begins a series of cell divisions. This is the first stage of the development of all types of ova, and is known as the period of cleavage. While the first cleavages are occurring, the ovum continues its journey towards the uterus. When this is at length reached, the segmented ovum attaches itself to the uterine wall, and as it were burrows into it, actually digesting and absorbing some of the tissues of the mother. This process is absolutely necessary for the survival of the new individual, since the human ovum is provided with very little reserve nourishment in the form of yolk; it can only support its own life for the short period of cleavage, and must then become dependent on the mother for the essential food materials. The menstrual cycle, with its accompanying changes in the internal organs of the female, is so timed that, after each ovulation, the uterus is built up into a condition suitable to receive and nourish the ovum if fertilisation occurs.

The earliest stages in the development of the ovum, after it has become attached to the uterine wall, are still not all fully understood. We know, however, that as the cleavage stage of the fertilised egg proceeds further and further, the mass of cells forms a ball of which the surface is rather furry, as the cells penetrate among those of the uterine wall in which the embryo lies, while the interior has a spongy texture. In the middle of the spongy mass two cavities, filled with fluid, appear lying quite near one another with a solid plate of cells between them. It is in this plate that the body of the new individual appears, and for that reason the plate is spoken of as

the embryonic area, while all the rest of the cells derived from the fertilised ovum belong to the extra-embryonic region. These latter take no part in the formation of the child's body, but develop into structures which aid the embryo in obtaining its nourishment from the mother.

At first the embryo is a very simple affair, not very like a human being. At the very earliest time when it can be recognised among the surrounding spongy tissues, it consists of three flat layers of cells piled one above the other. The topmost of these is known as ectoderm, and will form the skin and nerves; the middle one is the mesoderm, and will form the muscles and heart, while the third and lowest is the endoderm, which will give rise to the stomach, intestines, lungs, liver, and other internal organs.

These three layers can be recognised as a first stage in the development of nearly all animals. Very soon the young human lays down the ground plan of its body; part of the ectoderm folds in along a line which corresponds to the middle of the back, and thus forms the beginning of the brain and spinal cord, while on each side of this the mesoderm aggregates into a row of lumps which are the fore-runners of the vertebrae of the backbone, and the endoderm underneath begins to fold up into a tube which represents the gut.

All these changes are over in about a month, by which time the embryo has its fundamental structures laid down in outline. But the outline is still only very rough and schematic; there are innumerable details to be filled in before the individual is ready to be born. It is still extremely small—only about a quarter of an inch long. The events of its growth, and the gradual addition of more organs and the developing complexity of those which are already present make too long a story to be told here. There is one further incident, however, which may be mentioned, since it is one which many people have heard something of, and which also provides a good example of a very interesting general principle about the process of development.

During the second month the embryonic head and body are fairly well formed, although the limbs are only just beginning to appear, and the whole embryo has a rather worm-like shape. Behind the head, in the neck region, a series of folds appears on each side, and these bend in until they may actually break through from the outside into the throat. This is just the place where gill-slits appear in fish, and a careful study of the folds in human embryos shows that they do in fact correspond to fish gill-slits. This is a somewhat surprising fact, since human embryos never need to use gills as a respiratory

apparatus. Actually, these slits eventually become quite different things, such as glands, and a very short examination of the human "gill-slits" is sufficient to show that they could not possibly function as gills; they are not built like the slits of adult fish, but only like those of embryo fish in which the development is just beginning.

The only satisfactory theory of why they should be formed in the human embryo is provided by the theory of evolution. If we suppose that man, like other mammals, is evolved from a fish-like ancestor, it seems reasonable that as evolution proceeded and new types of animal appeared, the development of these new types should not be completely different from that of their ancestors but merely modifications of it. The fish embryo must develop gill-slits, because the adult will need gills; and the descendants of fish start, as it were, with the possibility of developing gill-slits, and will continue to do so provided the embryonic slits are eventually transformed into something which is useful in the new circumstances. The embryos of more highly evolved animals therefore tend to resemble the embryos of their evolutionary ancestors.

We must turn now to the development of the extra-embryonic portions of the fertilised egg. As is well known, the human embryo, like that of all mammals, is kept alive by its contact with the mother. The maternal organism must provide for the foetus within her uterus in several different ways. Food substances and oxygen must be passed to it, but it is almost equally important that the waste products formed in the embryo by the normal processes of life should be removed. This exchange of substances does not utilise any of the normal openings of the embryonic body, which is not fed through its mouth and does not excrete through the urinary and anal openings. The exchange takes place directly between the maternal and embryonic bloods. This does not mean that blood actually passes from the mother into the embryo and back again. What happens is that a special organ is formed in which the mother's blood is brought very close to that of the embryo, so that the two fluids are only separated by a thin film of cells, through which it is fairly easy for food substances and oxygen to diffuse towards the embryo while waste products diffuse away from it.

This organ, as we have previously seen, is called the placenta. It is really made up of two parts. One of these is the maternal part, which is formed from the tissue of the wall of the uterus. The other part is the embryonic component, and this is formed from the extra-embryonic tissues evolved in the developing ovum. In its first stages this extra-embryonic tissue forms a hollow bag, in which the actual

embryo is suspended by a short stalk. As time goes on, the stalk lengthens, and becomes the umbilical cord; blood vessels run through it, and in the region where the stalk joins the surface of the bag, the walls of the bag thicken, to become the embryonic part of the placenta.

In the first two months the embryo acquires a length of about one and one-fifth inches. After this time it is usually called a foetus.

Parturition or the Process of Birth

During the later stages of pregnancy, and more particularly in the final week or two, the uterus shows an increasing irritability, which displays itself in contractions which do not give rise to pain. With the approach of actual labour the contractions become more intense and painful, and the foetal membranes, distended with fluid, are forced into the neck of the uterus (*cervix uteri*), which becomes dilated, a few small vessels being torn, and some blood discharged. Next, the longitudinal muscles of the uterus contract and cause the mouth (*os uteri*) to open.

The contraction of these muscles marks the first stage in parturition, or the act of giving birth. The body of the uterus, the neck and the opening then form a continuous passage. The foetal membranes commonly rupture at this time, but occasionally remain intact until after birth, the child then being born inside its "caul."

In the second stage of labour all the uterine muscles contract forcibly and the child is expelled from the uterus to the vagina and thence to the exterior. This is effected by the contraction of the muscles of the abdomen and the diaphragm, which contract simultaneously with those of the uterus. The vagina is very yielding and the passage of the child is facilitated by the secretion of mucus.

The birth of the child marks the end of the second stage of labour. The uterine contractions then cease, but are renewed after an interval, with the result that the placenta or after-birth is separated from the interior of the uterus and passed out to the exterior. Further contractions of the uterus help to close the torn blood vessels. The foetal membranes are passed out with the placenta and the remains of the umbilical cord.

In a normal parturition, the three stages of labour last respectively about eleven hours, one hour, and a quarter of an hour; the birth of the first born takes longer, the three stages taking about sixteen hours, two hours, and a quarter of an hour. At the beginning of labour the pains occur at intervals of about fifteen to thirty minutes; they gradually become much more frequent until they are taking

place every two or three minutes. Each contraction lasts from thirty to ninety seconds, but the actual sensation conveyed continues longer. The pressure exerted at each contraction is considerable.

In a typical parturition the head is expelled first, but this is not always so. When twins are born the second child is usually expelled about half an hour after the first, though there may be a considerably longer interval. Usually there is a discharge of blood and mucus from the uterus for about two weeks after parturition, and this varies in amount and duration in different individuals.

Puberty and the Climacteric

The first occurrence of menstruation marks the age of puberty. This normally occurs in girls at from twelve to fifteen, or about a year earlier than puberty in boys, though it may be earlier or later in both sexes.

At puberty ripe ova and spermatozoa are produced for the first time and the sex organs undergo some degree of enlargement. In connection with this change the secondary sexual characters (that is, bodily characters correlated with sex but not directly associated with reproduction) became developed or accentuated. The most important of these are an acceleration of growth; in the boy there is a growth of hair in the pubic region and, later, on the face and other parts of the body. There is an enlargement of the larynx with consequent deepening of the voice, a process which is not completed until about the twenty-fifth year. In the girl the pelvis widens at puberty, and the subcutaneous layer of fat, which assists so largely in giving the body its graceful contour, is deposited. In both sexes there are correlated psychological changes.

The menstrual cycle comes to an end at the menopause or climacteric, at an average age of forty-five. Atrophic changes then take place in the ovaries, uterus, and mammary glands, and ovulation no longer occurs. Sexual desire usually abates, though it may be very marked during the change, and may persist for many years afterwards. The changes associated with the climacteric may continue for three to five years, menstruation being at first irregular and then finally ceasing. The organic functions tend to be irregular during the post-cessation stage. Palpitation, dyspepsia, sweating, and frequent flushing of the skin are common, and in a few cases there may be hysteria, neurasthenic symptoms, and, rarely, mental instability. After the change is completed the metabolism or general condition of physiological activity settles down on a new level and the various

organs become once more adjusted so as to permit of a normal existence, uninfluenced by sexual or other bodily disturbances.

In the male there is no specific climacteric, sexual capacity usually declining gradually. It is known, however, that spermatozoa may continue to be produced in small numbers even in extreme old age, and that insemination may still be successfully performed, though the chances of a union being sterile are undoubtedly increased. Speaking generally, sexual and reproductive activity in the male is definitely reduced by the age of fifty, but the decline may begin earlier, or it may be postponed till considerably later in particularly virile individuals. This period may be associated with psychological changes, and some derangement of anatomical structure and of physiological function, such as enlargement of the prostate, but the process of sexual decline is often so gradual as to be almost unnoticeable.

III. MAN COMPARED WITH THE LOWER ANIMALS

It has been stated that with man there is no season of the year to which sexual activity is restricted, though there is evidence that in temperate climates there is a maximum of conceptions in May, and further, that there is some correlation between temperature (and probably other environmental factors) and the incidence of conception. With man, as with the males of the domestic animals, sperm production proceeds throughout the whole year, there being no period of rut as in so many wild species. In the human female on the other hand, although there is no sexual season of the year, there are, as we have seen, recurrent periods at which the ova are discharged from the ovary. We have seen also that there is evidence that ovulation tends to take place periodically in women with a normal cycle at about the fourteenth day after the beginning of the menstrual flow.

In the domestic animals, as with the vast majority of wild mammalian species, ovulation occurs in association with definite periods of sexual desire known as the periods of heat, or *oestrus*, to which coition is generally restricted. In some species ovulation may take place just after oestrus; in nearly all it is closely associated with it. In women sexual desire is not so restricted, but it is averred that there is a tendency for desire for coition to be greater at about the ovulation periods than at other times. The matter has, however, been obscured by personal, psychological and social influences and possibly also by nutrition, especially under conditions of civilisation, and coition occurs quite frequently during pregnancy when it can have

no physiological significance. An interesting parallel is to be found in the domestic rabbit, which will also frequently copulate during pregnancy.

The human female is also similar to the females of some of the domestic animals in having a succession of cycles going on throughout the whole year, the menstrual cycle of woman and monkeys corresponding to the short oestrous cycles of the lower mammals. In each case, so far as the ovaries are concerned, the cycle (in the absence of pregnancy) is divisible into two main phases, one, in which certain of the ovarian follicles are large and protruding—a phase which ends at ovulation—and a second phase in which the follicles have given place to the corpora lutea that are formed from them. The second phase corresponds approximately to the uterine stage of growth already referred to, and the first phase to the other three uterine stages.

These comparisons bring us to the consideration of the testis and ovary as organs elaborating internal secretions passed into the circulating blood and controlling the desire and capacity for sexual intercourse and the phases of the sexual cycle.

IV. THE INTERNAL SECRETIONS

A number of organs of the body are known to elaborate chemical substances, now commonly called hormones, some of which are essential for the maintenance of life, and others of lesser importance though performing functions which play a normal part in the economy of the organism. Such endocrine organs, as they are called, include the suprarenal, pituitary, and thyroid glands. The suprarenal produces an important hormone that acts on muscle, and particularly on the muscles of the heart and blood vessels, causing them to contract; it also produces other hormones of uncertain significance. The thyroid elaborates a hormone which is normally essential for life and in particular for growth. When the thyroid enlarges it gives rise to goitre. The functions of the pituitary are discussed below. There are other glands which secrete both through a duct (external secretion) and also into the blood (internal secretion). The pancreas discharges a digestive juice by a duct into the upper gut, but it also produces insulin, this internal secretion being liberated by the pancreatic cells directly into the blood. Without insulin, carbohydrate food material (starch, sugar) cannot be utilized and stored; in fact, it is lost to the organism by being excreted through the kidneys in the form of sugar. Such excretion of sugar in the urine occurs in the disease known as diabetes mellitus.

Most endocrine organs have no particular or special relation to the reproductive system, though they all combine in influencing general bodily activities which in turn affect and condition the sexual and generative processes.

The gonads resemble the pancreas in being endocrine organs that are also provided with ducts; these carry the discharged generative products (ova and spermatozoa) away from the gonad, as we have seen above. That the testes and ovaries are veritably endocrine organs has been recognised in a vague sort of way ever since man carried out the practice of castration, for it has been known from earliest times that the removal of the gonads (or at any rate the testes) exercised a profound effect upon the bodily form and also upon its functional activities.

Castration was practised on animals for economic reasons, when it was desired to utilise them for other purposes than breeding, and it was recognised that besides arresting the development of the typical male characters it promoted fattening, and in the case of animals used for work rendered them more tractable. It was also practised on men or boys when it was desired to de-sex them that they might be employed as eunuchs. On boys it was also done when it was desired that they should retain their treble or soprano voice as choristers.

The effects of testicular removal in man were well known, and it was long ago realized that if the operation were done before puberty it prevented the enlargement of the larynx and the growth of hair on the body and in a general way maintained the juvenile characters, resulting in a type which in many respects resembled the female but which was in reality rather neutral or asexual. Similarly with the female, though ovariectomy (removal of the ovaries) was not practised nearly so widely as castration of the male, it was known in early days that the operation on animals resulted in the cessation of the oestrous cycle.

The progress of scientific research in the present century made it possible to demonstrate that the egg- and sperm-producing functions of the gonads were something apart from or additional to their endocrine activities, and that the capacity for producing the reproductive cells could be destroyed without interfering with the gonads as endocrine organs. In recent years the results of investigation have gone much further, and substances have been extracted from the gonads which could be injected and to a large extent replace the naturally secreted hormones. The chemical constitution of these substances has been ascertained, and in some cases they have been

manufactured in the laboratory. Lastly, there have been prepared synthetic compounds which, although exhibiting some chemical difference from the sex hormones formed in the gonads, yet possess identical or similar effects when administered to the living individual.

All the sex hormones, as well as these artificially produced substances which resemble the sex hormones in their activities, are composed of the three common chemical elements, carbon, hydrogen, and oxygen, and their chemical structure is also, generally speaking, similar, especially in the case of the natural hormones.

Substances having the properties normally ascribed to the male hormones have been isolated from male urine. These are called androsterone and dehydroandrosterone. It is not known where they are produced in the body, but there is a presumption that they are derived from compounds formed in the testes. Substances having the physiological properties of sex hormones have also been obtained from the suprarenal organs. Androsterone and dehydroandrosterone are definitely of the nature of sex hormones, since if injected into castrated animals they stimulate the development of the accessory male glands such as the seminal vesicles, or cause the growth of the secondary sexual characters such as the combs of fowls, it being possible to stimulate the under-developed comb of the capon to grow into a comb like that of a cock.

Another hormone having the same physiological properties as the two just mentioned but with a slightly different chemical constitution has been prepared from the testis itself. This is called testosterone. It is far more potent than androsterone or dehydroandrosterone, and it is presumably the natural testicular product which is normally responsible for the growth and development of the accessory male organs (prostatic gland and others) and all the characters and qualities which we are accustomed to associate with maleness, besides being an excitant of sexual desire and regulating all the processes and functions of the male reproductive system.

It is to be noted that whereas the injection into the circulating blood of these substances in recently castrated animals, or animals in a state of sexual rest, will promote the development of the sexual organs and processes and the characteristically male qualities, the taking of them by the mouth is usually ineffective, the hormones being destroyed or acted upon chemically in the alimentary canal before they can be absorbed into the system.

There is one other matter of great importance which may be mentioned here. From what has already been said it is clear that whereas the injection of male hormones can take the place of those

produced naturally in the body, so that as long as the injections are maintained the individual can be sexually potent and have normal sexual relations and experience coition, the accessory sexual organs and secondary sexual characters being fully retained, there is nevertheless a condition of complete sterility since there are no organs or structures from which spermatozoa can be produced.

A comparable condition may be brought about in another way. Without castration or the removal of the testes, the spermatozoa and sperm-producing tissue may be completely destroyed, while the hormone-producing tissue or interstitial tissue between the spermatogenic tubules is left uninjured. This may be effected by radium or X-ray treatment, or the same result may be secured by the simple operation of cutting through the vasa deferentia or spermatic ducts so that spermatozoa can no longer be discharged. Such individuals are rendered completely sterile, but they are not castrated or de-sexed. They have the normal physical characteristics and instincts of entire individuals.

It has even been claimed that destruction of the sperm-producing tissue, by providing more nourishment or scope for development for the interstitial cells, may actually increase sexual potency (although of course the individual is sterile) and result in some rejuvenation in old age; but there is little real evidence for such a view. The suggestion that rejuvenation may be effected by the grafting of testicular interstitial tissue derived from monkeys or some other animals (the theory of the so-called "monkey-gland" as a rejuvenator) is also without much practical basis, if only because attempted grafts are known to survive, at best, for but a short time in the bodies of their hosts.

Just as there is a number of male hormonal substances known to exist naturally and many more which have been prepared, so also there are female hormonal substances, known collectively as oestrins. These include both natural and artificial substances, of varying degrees of potency. As in the case of the male hormones, oestrins are found to be excreted in the urine, presumably in conditions where these substances are waste products and of no use to the organism. The oestrins are in a general way substances which when injected into a female animal which has been castrated or into individuals in a state of sexual rest will produce symptoms of oestrus or heat, so that sexual intercourse may be experienced.

They also promote the development of the typically female characteristics, and tend to change neutral individuals such as female castrates into those with the normal female characteristics of the

species. Thus, whereas the removal of the ovaries causes the menstrual or oestrous cycles to cease, or if done prior to puberty prevents the onset of the cycle, the injection and absorption of oestrin may cause the normal manifestations of the cycle. Menstruation and the complete series of cyclical processes have been induced in women whose ovaries had been removed, by successive injections of the appropriate sex hormones.

As in the case of the male, the most potent sex hormones are believed to be produced by the gonad, and there is one called oestradiol, which has been isolated from the ovary and has been thought to represent the true ovarian oestrogenic hormone. It is of far greater potency than any of the sex hormones found elsewhere in the system of the female.

It has been recorded above that the ovarian follicles, after they have discharged their ova, become converted into pigmented yellow bodies known as corpora lutea. These bodies have been shown to discharge important functions, being special ovarian organs of internal secretion and of great importance to the female individual during pregnancy. Indeed, in the absence of a corpus luteum pregnancy cannot take place, and if in women the yellow body is destroyed during the earlier part of pregnancy, the process cannot continue. This is because the corpus luteum is essential for that building up of the uterus which admits of the development and nutrition of the young within that organ. Not only is the corpus luteum necessary for the growth of the uterus but it is also—at any rate normally—essential for the development of the mammary glands which provide nourishment for the infant.

The functional activity of the corpus luteum is now known to be due to the action of a specific hormone, called progesterone. This substance has not only been extracted in a pure form from the corpus luteum but it has also been made artificially from the soya bean. In the absence of the corpus luteum or of the entire ovary (that is, if these be removed some time after the beginning of pregnancy) the injection of progesterone at frequent intervals during pregnancy will maintain the condition and the young may be delivered at the end of the natural term if the injections of the hormone are at that stage discontinued.

If pregnancy in a woman does not take place after ovulation owing to the ovum not being fertilised, the corpus luteum persists only for about three weeks, but it is believed to play a part during this period in building up the uterus preparatory to the next menstrual discharge. In fact the process of menstruation may be regarded as the

removal or abortion of something prepared for a fertilised ovum which is not there.

Progesterone is produced by a special part of the ovary, the corpus luteum; oestradiol, on the other hand, is believed to be manufactured by the ovarian follicles or by the ground substance of the ovary. These two ovarian hormones, oestradiol (or at any rate some form of oestrin or female sex hormone) and progesterone are in part at least normally responsible for the two main phases of the menstrual cycle already described. Moreover, this natural two-phase variation can be imitated in women deprived of their ovaries by appropriate injections of oestradiol and progesterone.

In animals which do not have a menstrual cycle and which enter into a state of sexual rest for a part of the year (the non-breeding season) the female sex hormone is believed to be produced in much reduced quantities at such times of non-activity.

The pituitary body is a small gland lying just beneath the brain, with which it is connected by a stalk. It consists of two lobes, anterior and posterior, and both of these are organs of internal secretion. Some of the hormones they produce have a direct functional connection with the reproductive organs.

The posterior lobe of the pituitary manufactures a substance called pituitrin which has been extracted from it. What its precise functions are in the living animal is not clearly known, but under experimental conditions it can be shown to act powerfully upon the muscles of the uterus. Thus, pituitrin can have a valuable medical application in expediting parturition and the delivery of the child, for when injected in small quantities and with due precautions into the blood of a woman or female animal at the time when pregnancy should terminate, it helps the uterine muscles to contract and so assists in the expulsion of the young. Pituitrin may be used in difficult cases where the unassisted power of contraction on the part of the womb is inadequate for bringing about birth.

The anterior lobe of the pituitary, although contiguous with the posterior lobe, is a separate ductless gland. Minute as it is (it is only about as big as a pea) it apparently produces several hormones which act upon the other organs of internal secretion. It is an important factor in growth and in this respect seems to act somewhat similarly to the thyroid. It is now known also to produce one and probably two hormones which act directly upon the gonads, both in the male and in the female.

That there was a functional correlation between the anterior pituitary and the sex organs had long been known to clinical workers,

and sterility and various abnormal conditions and aberrations on the part of these organs have been found to be associated with abnormally high or low pituitary secretion. A condition of adiposity associated with delay in the development of the sexual organs and characters is a result of anterior pituitary deficiency. Such a condition is seen in "fat boys" like the one described by Dickens in the "Pickwick Papers." There may be all gradations of pituitary deficiency or excess, and the "fat boy" condition is often transient, being succeeded later by normality.

The functional correlation between the anterior pituitary and the sexual organs has been established experimentally. The injections of particular substances obtained from the anterior pituitary have been shown in animals to promote sexual development, to increase the number of eggs produced, and so to promote fertility; and in general to control and be a necessary factor in the sexual cycle. Another substance extracted from the pituitary can be made to stimulate the growth of the luteal tissue of the ovaries.

It is supposed, therefore, that there are two anterior pituitary hormones acting on the sex organs, one of which promotes the development of the gametes (ova and spermatozoa) and the tissues in which they develop, and another which is functional only in the female, stimulating the growth of the corpora lutea and regulating the luteal phase of the cycle. Moreover, further substances have been extracted from the anterior pituitary which stimulate the growth of the mammary glands or cause them to secrete milk. Lastly, it is definitely established that in the absence of the anterior pituitary the gonads of the young fail to develop and in the adult undergo atrophy.

A substance similar to but probably not identical with this anterior pituitary hormone has been extracted from the blood, the placenta and the urine of pregnant women; and its presence in the urine is regarded as a diagnostic sign of pregnancy. It has been thought to be produced in the placenta. The chemical composition has not been determined for any of the anterior pituitary-like principles.

The anterior pituitary in its relation to the genital organs has, further, an important function of a more special kind in so far as it serves as a regulator, bringing the reproductive processes into general harmony with surrounding conditions and in particular with seasonal ones and those depending on the relations of the sexes and those between the mother and her offspring. The evidence shows very clearly that it is through the anterior pituitary that nervous messages of very varied kinds are transmitted to the gonads. These

nervous messages may arise in any of the organs of sight, hearing, smell or the different kinds of organs of feeling. The stimuli received in any of these ways are conducted along the correlated nerves to the brain, which transmits them to the pituitary. The latter, in response to stimuli, secretes hormones which in turn act upon the gonads—testes or ovaries, as the case may be.

This, stated in summarised form, is the chief way in which the reproductive organs are believed to be brought into relation with external events, and in which the individual human being or animal is sexually affected by outside change whether induced by the physical environment, or by the contiguity of other individuals and more particularly those of the opposite sex. It must, however, always be borne in mind that the genital system, like the other systems of the body, is necessarily conditioned by the environment and that it could not function without being supplied with the necessary food, oxygen and other constituents which are essential for the proper working of the whole body.

The anterior pituitary gland, then, is a regulator of sexual function. It receives nervous messages through the brain from the environment without and transmits them by means of hormones secreted into the circulating blood to the reproductive organs within. The stimuli received and transmitted in this way are known technically as being "exteroceptive." We may now consider some of the more important of these exteroceptive factors which control the incidence of the sexual season in animals and the activities of the reproductive functions.

V. EXTEROCEPTIVE FACTORS IN SEXUAL CHANGE

It has been shown experimentally with many of the lower mammals as well as with birds, amphibians and fish that light may be an important exteroceptive factor in inducing reproductive activity. This result is in agreement with the generally observed fact that most wild animals have their breeding seasons in the spring and early summer when the daylight is increasing. There is the further fact that when animals are transferred to the southern hemisphere they rapidly adjust themselves to the local conditions, which in the matter of light are in actual time the reverse of what they are in the north. Thus, in many animals, both species and individuals, the time for the breeding may be reversed after the crossing of the equator. In a similar way in a particular species of animal or bird reproductive activity can be induced experimentally in what is normally the non-breeding season by having recourse to the use of

artificial light during part of the night. Furthermore, it has been shown experimentally that light has no influence upon the sexual cycle or the activity of the breeding organs if the pituitary be removed, and there is every evidence that the light stimulus is transmitted through the intermediation of that particular endocrine organ. As to whether sexual activity in man is influenced by the exteroceptive action of light there is no direct evidence, but there is a presumption that such may be the case.

We may now consider those exteroceptive stimuli which, arising from the relations of the sexes, may be a factor in the onset of breeding and modify the phases of the sexual cycle. A very clear example of this kind of phenomenon is shown by some of the lower mammals, such as the rabbit and the ferret, which normally only discharge the eggs from the ovaries as a result of sexual intercourse. This is a special device to induce a proper synchronisation in the presence of both kinds of gametes (spermatozoa and ova) in the female reproductive tract so as to increase the chances of successful fertilization, and consequently of pregnancy. If owing to some mischance, such as the fertilised ova not becoming attached, the ovaries and other genital organs enter into a condition of "pseudo-pregnancy," the discharged follicles of the ovaries are transformed into corpora lutea just as they are during true pregnancy. The mammary glands also undergo growth and eventually secrete milk in spite of the fact that the rabbit or other animal has not become pregnant.

This condition of pseudo-pregnancy in the rabbit, ferret, and some other animals can be induced under certain circumstances notwithstanding that actual sexual intercourse may not have occurred. Moreover, it can be brought about experimentally as a result of ovulation either by injection of a hormone obtained from the anterior pituitary or by electrical stimulation of the brain or spinal cord. It is thus shown that the incidence of the sexual periods can be modified by nervous stimuli of various kinds and that they act through the intermediation of the brain and the anterior pituitary gland. In the absence of this latter organ the results are not brought about.

In birds more than in mammals the discharge of the eggs from the ovary occurs as a result of a stimulus derived from the male, though this is not the case with the domestic fowl, the pheasant and similar birds. With most species of birds, unmated females will not usually lay eggs, but with both birds and some species of mammals the presence of another female may sometimes provoke sufficient

stimulus to cause the discharge of the eggs, which in the case of the birds pass out fully formed to the exterior in the process of laying.

The evidence shows very clearly that the anterior pituitary gland is an organ which has, as one of its most important functions, the effective synchronisation of the male and female sexual processes, which are so co-ordinated as to admit of the fertilisation of the ova of the female by the spermatozoa of the male. We are thus brought to an understanding of the physiological use and meaning of the sexual display presented by most birds and a large number of other animals, as well as of all courtship phenomena shown by so many of the higher forms of life, including man. The anterior pituitary serves as an intermediary for mutual stimulation and thereby provides a means by which the two sexes are brought simultaneously into a condition for successful procreation.

Not only sexual posturing or bodily adornment but any kind of stimulus arising from the presence of the opposite sex acts exteroceptively upon the brain and thence upon the pituitary of the individual stimulated, and the pituitary in turn sends out hormones or chemical messengers to the genital organs. It follows that mutual pituitary stimulation due to the contiguity of the male and female individuals promotes the growth and functional activity of testes and ovaries alike and is consequently a matter of great importance for the fertility of the race.

VI. FERTILITY AND STERILITY

It is fitting to conclude this short account of the physiology of reproduction with a few remarks on the causes of fertility and sterility. The latter condition may of course be due to disease or to some malformation or abnormal state of one or other of the genital organs. Such abnormal or pathological causes are outside the scope of the present work. But, apart from sterility due to disease, a reduction in fertility may be the consequence of physiological factors the effects of which may often be prevented from operating or whose influence may be reduced.

Pregnancy in a woman or in an animal is the result of the union of a single spermatozoon with a single ovum, or in the case of twin or multiple births of a corresponding number of spermatozoa and ova. In women as a general rule only one ovum is discharged at a time (though twins and triplets are not very uncommon), so that usually of the millions of spermatozoa discharged by the male and entering the female reproductive passages, only one spermatozoon is successful in fertilising an egg.

In spite of the very large number of spermatozoa discharged it occasionally happens that not a single active sperm reaches the ovum in its passage down the oviduct. Great numbers of spermatozoa must in any case lose their way and perish in the glands of the uterus or elsewhere in the female reproductive tract; the enormous number of spermatozoa produced is nature's device to increase the chances that the ovum shall be fertilised by one of them. There is always the possibility (though it is not a very common one), that where a couple fail to have children it is not the female partner but the male who is responsible owing to an inadequacy in the supply of healthy spermatozoa.

A common cause of temporary sterility operates in cases where sexual intercourse is practised at unsuitable times. It has already been said that whereas no time in the menstrual cycle of the woman can be regarded as an absolutely "safe period" (that is, a season when coition will inevitably be succeeded by sterility), there is evidence that intercourse is most likely to result in conception if performed about the fourteenth or fifteenth day after the beginning of the menstrual flow, since ovulation is more frequent at this season than at any other stage of the cycle.

A question of considerable practical importance relates to the possibility that the female orgasm, that is, the climax of sensation at coition, may be a factor in human ovulation in the same kind of way that coition is an essential factor for ovulation in the rabbit and the ferret. There is no doubt that the intensity of sensation accompanying the female orgasm is very variable, and that with some women coition may occur without full sexual satisfaction, the orgasm being only imperfectly completed. It is possible in such cases where there may be some degree of incompatibility between the two partners in coition that ovulation may fail to take place. Cases have been recorded where a woman married to one husband may never experience a true orgasm and fail to have children, and subsequently after union with another husband may experience the orgasm the first time and produce offspring. It must not be supposed that the orgasm is normally essential for fertility, but it may be regarded as extremely probable that failure in mutual pituitary stimulation due to the absence of any sort of courtship phenomena is a cause of temporary or permanent sterility with married couples. The orgasm also probably plays a part in the sexual act by leading to contraction and relaxation of the womb and thus to be a sort of suction of the spermatid fluid upwards into the genital canal.

Another cause of temporary, or, occasionally even of permanent, sterility in both male and female, is a condition of excessive fatness or adiposity. This is a frequent cause in domestic animals, and it undoubtedly operates, though to a much less extent, in men and women. In the lower mammals it is known that the ovarian follicles degenerate as a result of excessive adiposity. The smaller and least mature follicles are affected less than the larger or more ripe ones, and if the condition of fatness is reduced the former may take the place of the degenerate follicles and normality be restored. Reduced fertility leading to complete sterility may, on the other hand, result from too impoverished a condition and malnutrition due to under-feeding or a faulty and unsatisfactory diet is known to be a cause of ovarian follicular degeneration in animals. An improvement in the quantity and quality of the food is followed by maturation of those follicles which have not perished and by a recovery of fertility. This is in the female. Sterility due to impoverishment of nutrition is rarer in the male, and may be said to occur only in extreme cases of under-feeding. How far these influences operate in the case of man is unknown. It is, however, well established that infertility in woman is in many cases due to a diminution in the normal activity of the sex glands and the sex hormones. In some cases this is accompanied by abnormality in the menstrual process. It has been shown experimentally in animals that failure on the part of the male to produce spermatozoa and failure on the part of the female to maintain development of the embryo in the uterus can be due to the absence of a particular accessory food substance known to scientists as vitamin E. This food substance exists normally in green food, wheat germ, and so on, and is present in all normal diets. An animal such as a rat if deprived of vitamin E, although it may be maintained in a state of health so far as its other functions are concerned is unable to have young. As to whether the absence or scarcity of vitamin E is ever responsible for infertility in men and women is unknown. But it is unlikely that it is a factor in conditions approaching normality.

CHAPTER THREE
PSYCHOLOGY AND SEX

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I. INTRODUCTION: OUR ATTITUDE TO SEX

Most people know that psychology throws light upon how men and women think, feel and act. What can it tell us about sex? I believe it can tell us a great deal, and that a knowledge of the *methods* psychologists use to obtain insight into human behaviour in general can help us to a much clearer understanding of its sexual aspects.

Sex looms large in our lives. Our view of ourselves is bound up with our sex: and this affects our relations with other people. When a man is introduced into a company of women, or a woman joins a group of men, the whole atmosphere changes. Our very institutions (even those utterly unconnected with marriage, intercourse and birth) are influenced by our attitude to sex. Naturally, therefore, we are all intensely interested in the subject; but we tend to view it with amused contempt. It provides the main spice of gossip; and comes into music-hall songs in the form of phallic (penis) symbols, such as sausages and bananas. Yet, though we chatter about sex, we seldom really think about it. H. G. Wells said of one of his women characters that "her teachers and mistresses had done their best to stamp her mind with an ineradicable persuasion that sex was tremendously important, and on no account to be thought about." It is only during recent years that anything like open and serious discussion has been permissible in ordinary society. Sex was regarded as both too obscene for anything but facetious talk, and too sacred for frank and thoughtful consideration.

Steadily, in the face of prejudice and obloquy, a series of scientific workers have dealt with the subject in a sober and critical spirit. Great pioneers like Havelock Ellis blazed out a trail which has been followed by many other students of sex. It used to be thought that human beings only begin their sexual lives at adolescence, when physiological processes, produced by secretions of the sex glands, make bodily changes noticeable. Nowadays we have evidence that our sexual lives begin in the cradle. When they end I am not able to say. A young French girl, who had been disappointed in love,

tearfully asked her grandmother: "When is one finished with this heart-rending business of sex?" Grandmamma answered wistfully: "I don't know, my child." The retention of sexual interests into old age is usually, indeed, a sign of continued emotional and intellectual vitality.

We have said that sex appears very early. There may even be influences on our later life in pre-natal and birth experiences. Freud maintained that the conditions under which the unborn baby (foetus) exists before birth—a comfortable state in which everything is provided without effort—makes the change to less easy conditions after birth unwelcome to the living creature, and that this may have definite repercussions later on. We can trace, in fact, a long and varied development before we reach the stage of normal hetero-sexual love for a person of the opposite sex. At first, there is pleasure in our own bodies and their functions, which we may call auto-gratification. Then this pleasure-urge, or libido, is directed towards one or other of our parents. After passing through these phases, the libido will, if all goes well, be freed from attachment to parents and be directed to someone of the opposite sex. Freud speaks of all these forms of activity as *sexual*, although they have primarily no connection with sex as we commonly understand it. The justification for this extension of the word "sexual" is that such gratifications do seem, in the end, to become incorporated in, and affect, the genital aspects of sex which appear later.

In many other parts of human behaviour, besides that concerning sex, the individual's adult attitude to the world is affected to a terrifying degree by his experiences in early years. It is commonly said that "the child is father of the man." Modern psychology has made this saying enormously more significant by describing the processes by which events in these early formative years affect adult life.

We do not, of course, need to create a science of behaviour before we act. Living, in all its branches, is an *Art* before it becomes a *Science*. We learn to talk, by contact with other people who talk, without knowing anything about the rules of language which are embodied in the science of grammar. We learn to reason, and reason effectively, without knowing anything about the science of reasoning which we call logic. Nevertheless the step from merely doing things to knowing why they are done is a very important one. In sexual matters men and women can carry on without thinking much about them, as they have done for centuries. In doing so they are likely to meet disappointments which greater knowledge would avoid; and

they may never achieve the fullest possibilities in human love which are opened up by deeper insight into its nature. That is why we ought to try to think critically (that is, scientifically) about the principles underlying human behaviour in general, as an aid both to the control and to the enjoyment of sex.

II. THE PSYCHOLOGICAL APPROACH

Psychology is a science. So we must try to understand what is meant by that. Do not imagine that a science is something different in kind from common thinking. It is only commonsense reflection more critically, and more consistently, applied. There is nothing in the method of science which the ordinary person cannot understand; for it consists of processes which he already knows from his own experience.

Indeed the study of *any* field of human experience can become a science. What makes a study scientific is not the nature of the things it deals with, but the way it deals with those things. The particular way which we call scientific consists essentially of two steps. The first is the critical observation of any given body of facts; the second the systematizing, or the setting in some sort of significant order, of those facts. Knowledge of a chaotic body of facts has to be rendered intelligible. Facts, for instance, do not constitute the science of history until they have been interpreted: they are in themselves merely, as Macaulay said, "the dross of history." We apply this method in ordinary life. The inspector, in the detective story, critically examines the facts of the case, and then thinks them over in an attempt to set them in order and interpret their meaning.

Let us take an example from psychology. If we meditate on all the facts we know concerning remembrance, we discover that it is not a simple matter of an impression being made, retained, and then recalled. Another factor is present. We tend to forget what is unpleasant, or unwanted, just as we tend to notice only what we wish to notice. None so deaf as he who won't hear. In short, reflection on the facts of forgetting leads us to the "ordering" of these facts by finding that there is a selective *feeling* element in remembrance. This throws light on all sorts of situations in ordinary life. If your wife forgets your tobacco, even when it has been put on her shopping list, you can be sure that she does not want to remember because she thinks you smoke too much. This ordering of the facts explains, too, an attitude we all accept; namely, that there are two fields of human experience in which feelings are so strong that forgetting is unforgivable: war and love. If a soldier on active service forgets an order

entrusted to him, he is liable to be shot. If a lover forgets his appointment with his beloved, she knows intuitively that there is something wrong even if the forgetting was not deliberate.

Reflective brooding on bodies of facts occurs in every domain of human activity. Its value is that it casts known facts into fresh and fruitful combinations, thus bringing order and method into all our experience. But in saying that reflection becomes scientific by becoming more critical and more systematic we must not for a moment suppose that this change is an easy one. It has taken centuries of human struggle to achieve it. Each advance of the method into new domains has been hailed in turn as either ridiculous, blasphemous, or indecent.

Resistance to scientific treatment is particularly strong in the human sciences, because we lack the nerve to be critical in matters which come too closely home to our frail human nature. Psychology is one of the oldest of studies yet it is the youngest of the sciences. It was in the field of geometry and certain parts of the external physical world that the first victories were won, at man's intellectual awakening, in Ancient Greece. These subjects are furthest removed from personal hopes and fears. Extensions nearer to human nature have had to be fought for at each stage. This accounts for the ferocity with which the application of scientific method to man's bodily nature, such as Darwin's work on evolutionary biology, was attacked. When the method was turned, in our time, to human mentality, and to products of mind including social institutions, the same opposition was met. The hysterical storm of abuse which greeted the work of Freud is an example of this. We may say, in fact, that men had to reach a certain level of reflective impersonality before they could discuss questions which aroused their passions. On such subjects they are "too anxious to be certain to have time to know." It is only at a comparatively late stage in the history of man that he has become critically-minded enough to look on the world of human affairs with clear and objective eyes.

In sexual affairs this desirable consummation has not yet been reached. The subject is still regarded by most people with that mixture of fascination and fear which is destructive of any scientific temper of mind. We can see this in the strong opposition which still exists in some quarters to sex enlightenment. Children are left uninstructed, save for what they can pick up casually. Yet to deny facilities for well-planned sex instruction is, as Havelock Ellis said long ago, to believe that we need not supply sources of pure water while there are puddles in the street to drink from.

Psychology is able not only to note, but even to throw light upon, these emotionalized resistances. In so doing, it may help us to overcome them. It seems, for instance, that man's thirst for knowledge gets a first real check through his desire for withheld sex information: and that the difficulties he encounters in reaching an objective world-view are partly due to the obstacles put in the way of his satisfying that early desire. The shame-faced evasiveness with which his curiosity was met has inculcated in him a lasting feeling that all knowledge is guilty knowledge. That there is a connection between knowledge, and sex-knowledge in men's minds is shown by the use of the word "know" for sexual union: "And Adam knew his wife." The forbidden apple was, of course, from the tree of knowledge of good and evil.

Freud found that the cause of most of his patient's troubles in adult life was failure to get rid of childish ways. Our difficulty about knowledge is only one example of how all sorts of feelings connected with childish preoccupations linger on in the adult mind. This is true of such matters as suckling, the excretory functions, and fear of losing the mother's love combined with hatred of the father because of his intimate relations with the mother. Most people would deny this off-hand. There is some justification for their denial, because these preoccupations are seldom openly present in our minds; nevertheless they exert a hidden directing influence on the trend of our thoughts, and on our adult sexual life. It is, indeed, upon our being able to drag them into the light of day that successful treatment of sex difficulties depends.

In these matters, science, though only a keener form of ordinary reflection, reaches results very different from those obtained through uncritical "commonsense" thought. It is this scandalizing of our accepted pattern of beliefs, customs and habits which has made men of science perpetually suspect. Dean Swift in *Gulliver's Travels* poured scorn upon members of the newly-formed Royal Society of his day for what he considered their ridiculous antics. He pictured some of these natural philosophers on the island of Laputa busying themselves trying to extract sunbeams out of cucumbers. That seemed to him as absurd a project as he could well imagine. Yet to-day everyone knows that green plants actually do in a sense "store" sunlight which is essential to the formation of some of their contained vitamins. Similarly, if a scientist offers us evidence of unsuspected sexual depths in the lives of human beings, we must be prepared to examine it with open minds.

The late emergence of psychological science gives it a character of its own. It does not differ in any radical way from other sciences, but it is less closely knit. The ordinary reader who dips into psychological books is liable to be put off by the variety of terms used, and by the widely different interpretations put upon human behaviour. Does psychology deal with facts or only fancies?

I think it is safe to say that the diversity is one of form rather than of content. We must remember that there are often alternative interpretations of any given body of facts. It is the whole point of a good detective story that it leaves you guessing, until the very end, who the perpetrator of the crime is: the clever author, putting all the facts before you, so arranges them that you suspect each of the characters in turn. Besides different interpretations there are also alternative methods of dealing with a given body of facts, each using different terms and techniques. If you are a lover of detective fiction you will probably have your favourite detective because you like his particular methods.

It has been the same in all the sciences, especially in their early stages of development. There was a time, in the history of physics, when the facts concerning light were dealt with by one set of scientists as being due to waves in the ether, like small wireless waves, radiated from the luminous body: and by another set, including the great Newton himself, as due to minute particles emitted by the luminous body. Each of these descriptions fitted equally well as the facts *then known*. As a science matures, those explanations which fuller facts show to be inadequate get weeded out.

Psychology is still at the stage when there are many divergent possible modes of dealing with the same body of facts concerning human behaviour. To pass from J. B. Watson to Freud, or from Jung to Adler, is like moving into different worlds. Yet though these various psychologists express themselves in such very different ways, the work of each of them has practical applications. Their followers, each taking a separate line, can record a reasonable percentage of successes in psycho-therapeutics, that is, in the work of healing mentally maladjusted individuals. This would seem very odd indeed if we did not remember that they all deal with the same human facts, however different the terms they employ to interpret those facts and throw them into fruitful combinations.

For these reasons it is more necessary in psychology than in other sciences to distinguish carefully between the facts themselves and the terms used in describing them. For example, if we give an egg to

a broody hen she will at once sit on it, and continue sitting on it until it is hatched out. The egg to her is, as William James said, "a never-too-much-to-be-sat-upon object." We describe this by saying that an egg touches off, in a broody hen, a tendency or disposition to respond to it in a particular way. "Disposition" is a very convenient term to use: but we must never forget that what we actually observe is disposition-behaviour, and not the disposition itself. We see the hen's activities in a given situation; we do not encounter disembodied dispositions in the farmyard.

In this connection, it is necessary to remind ourselves that man is not merely man. He is, too, an animal—and a descendant of animals. His behaviour is so closely linked up with that of other animals that human psychology essentially includes animal psychology, the latter throwing a great deal of light upon the nature of many parts of human behaviour.

It should now be clear why it is necessary to stress the basic importance of what is directly observable in behaviour. This provides the only firm foundation for any psychological building.

III. THE PHYSIOLOGICAL APPROACH

Stressing what we actually observe enables us to understand an important difference which exists between two possible ways of observing the facts of behaviour. (1) We can directly observe our own, but only our own, experiences *from inside*; as I do when someone treads on my corn in a 'bus. Such direct inner observation is called Introspection. (2) Or we can observe other people's experiences *from outside*, as when I see someone else wince when I tread on his corn in a 'bus. This we call Extraspection.

As observers of behaviour each of us is forced to study all other creatures from outside only. We cannot get inside their skins and obtain direct knowledge of their feelings. We can only infer them from strictly external observations, and such inferences are precarious. I may, for instance, be able to judge the feelings of the man whose corn I trod on in the 'bus from his wry smile of injured but friendly tolerance for clumsiness, or from his angry scowl of resentment; but he may be a poker-faced individual who sits stolid and unmoved by the accident. In this case inference about his feelings will be difficult.

We call the occurrences which move a creature to activity Stimuli; and the activities so touched off Responses. When someone treads on my corn, my interpretation of the occurrence is directly in terms

of the stimulus (corn trodden on) and my response, of which I am immediately aware. When I tread on someone else's corn, I know what the stimulus is, but I can only interpret the response of the other person in terms of my own feelings in similar circumstances.

We can, then, adopt either of two complementary ways of looking at a living creature's activities from outside. We may either interpret them in terms which do not use introspection at all: this is the way which comes most naturally to the *physiologist*. Or we may interpret them in terms drawn from our own inner experience: this is the way which comes most naturally to the *psychologist*.

In so far as we can elucidate completely the living creature's activities without using terms drawn from conscious experience we should do so. It is remarkable how much of animal and human behaviour can be covered in this way. The credit for this is largely due to a group of workers, led by Watson, who call themselves Behaviourists. They have tried to confine themselves to extraspection in their work, and in spite of this limitation they have been able to find out all kinds of things about animal behaviour which would seem to be impossible unless we could look into the animal's mind. For example, Pavlov, the great Russian worker in this field, experimented on dogs. We all know that if we are hungry, and food is placed before us, our mouths begin to water. In short the stimulus, sight of food, calls forth the response of salivation. Pavlov proceeded to show that the response of salivation in dogs could be attached to an entirely different stimulus. On a series of occasions he sounded a bell at the same time as food was put before the dog. After a time salivation was produced at the sound of the bell alone without presenting food at all. A physiological response of this kind is called a reflex: and what Pavlov was doing was conditioning the reflex. That is to say, he was attaching a new stimulus to the old response.

He went further. He constructed an instrument for measuring exactly the salivation of a dog, under standard conditions of course: and then showed with greater precision that the conditioning could be made to a particular note. Once this had been done, then the sound of another bell, whose pitch was more than a certain difference from the original note did not produce salivation. By a series of experiments he was able in this way to determine the dog's discrimination to slight changes of pitch, and found it to be keener than that of men. More remarkable still, it has been found possible, by similar methods, to condition salivation to the sight of different geometrical shapes. When this was done for a circle, it could be determined, by presenting a series of ovals of decreasing elongation to

the dog, how near an oval shape had to approach the circular form before the dog reflected the difference in his salivation. You will see from this that information is being reached about the dog's sensory discrimination which one would suppose could only be obtained if the dog could tell us about it. Yet the whole body of work was done by extraspection only.

It is not to be expected that extraspection by itself will be able to tell us the whole story about behaviour, either animal or human though (as we shall see later) it plays a very important part in tracing the effects in adult human behaviour of conditionings, sexual and other, which take place in infancy. Cure of consequent maladjustment to adult life consists in some form of de-conditioning.

We can now put the matter in another way. The physiologist studies the bodily aspect of an organism's activity whilst the psychologist studies its mental aspect. It is obvious that co-operation of both is essential for a full understanding of behaviour. This leads us to the conclusion that we need both these sciences in the diagnosis of sexual disorders. For example, sexual excess or misdemeanour may be traceable to glandular disturbances. In that case medical treatment is needed, if such be possible. On the other hand it may be due to mental factors, when the psychologist should be called in.

Homosexuality is a case in point. This may have a physiological basis in that the sufferer lacks the proper hormone balance: or it may be due to psychological factors such as seduction, example or defective early training. Again, infidelity in love (according to Adler) sometimes occurs when the unfaithful partner has failed in mating, and attempts to find reassurance of potency in more easy fulfilment—another case of combined physical and mental factors.

The medical man and the psychologist should be, and are increasingly becoming, not rivals but allies in the work of healing.

IV. THE BIOLOGICAL APPROACH

We must turn now from the physiological approach to the equally important biological science of heredity. This has a bearing on every side of psychological work. Man is an animal, subject like other animals to biological laws. Like them he has ancestors; and like them his equipment at birth is determined by those ancestors.

It is part of the psychologist's business to examine animal and human behaviour objectively, and to classify it into its various types. When he does so he finds that there are clearly some kinds of behaviour, the capacities for which are *inborn*. Such capacities form part of our Biological Heritage. But there are capacities for other

kinds of behaviour which are quite as clearly not inborn, but *acquired* in the lifetime of the individual. These form part of what I shall call our Cultural Heritage.

As an example of the first kind we may mention the reflexive type of behaviour, exhibited in salivation, which is obviously innate. Another instance of this sort of behaviour is the type we call instinctive. If we place a finger across a young baby's palm the hand closes firmly around it. No one taught the baby to do this; that is why we speak of the capacity for it as inborn.

Speaking the English language, or eating with a knife and fork, are examples of the second or acquired kind. It is true, of course, that the baby's babbling forms the innate basis for the acquired behaviour represented in speech; there is an innate language capacity. There is not, however, an innate English-language capacity. In the same way, the human being's use of a knife and fork has its origin in our innate appetite for food; but whether we use knives and forks, or chopsticks, to deal with our food is decided by the social tradition which we have to learn as we grow up. The whole set of such acquired habits and customs, which we build on the basis of what is inborn, we call our cultural heritage.

Heredity decides our potentialities: it cannot tell us what we shall make of them when they are converted into actualities. Man is not merely a quotation from his forebears; he has to live with them. Hence the need for studying what is inherited in human beings, and of distinguishing it from what is learned. It is not always easy to do this, because so many things may happen in the first years of our life of which we have no memory, but which nevertheless influence us. Modern methods of analysis which bring to light these factors show that many characteristics previously considered to be hereditary are in reality due to early environmental conditions. The importance of this is that most sexual derangements are of this kind. They are usually not the products of a hereditary taint (though there may be a congenital disposition to them) but of early experiences. As such they need not fill their possessors with a feeling either of guilt or hopeless despair.

Biological inheritance accounts for the bodily structural basis of our activities but not for the activities themselves. Babies inherit the sensory and nervous organization which forms the mechanism for making the response of fear to stimuli coming from outside; and it used to be thought that they were also born with instinctive fears for all sorts of specific stimuli as well. Watson was able to show that the situations which called forth fear responses in young babies are

much less than had been supposed. New-born babies are not, for instance, instinctively afraid of the dark, or of large animals, or of furry objects. Indeed the only situations which evoke fear are sudden removal of support, and loud noises. As the baby grows up the fear response gets attached to all sorts of other stimuli. The nervous parent makes a nervous child. By exhibiting his own fears, he is conditioning the child to new fear situations as effectively as Pavlov conditioned his dogs.

In the human child the inborn structures for making various responses are very elaborate: but the situations which call out those responses are few at first, though they rapidly increase in number. It is this which distinguishes the human baby from young creatures lower in the animal scale. The insect is born with an immensely simpler bodily structure, but at once uses it to make the most complicated responses to definite stimuli. Insects therefore appear in the world reacting to a narrow but specific environment in a complete and unchanging fashion. There is very little learning from experience, and none from parents, for most insects never see the previous generation. Learning increases as we go up the scale. In young chicks there is already some degree of generalized disposition. They exhibit, for instance, the general response of following any moving object; and normally this is attached to the mother hen. Yet William James was able to show that an incubator chick, in the absence of a foster-mother, will attach this response to a boy or to any moving object which catches its eye in this period. As we go still higher up the scale we find that young animals such as kittens are not so fit at once to fend for themselves. There is a considerable period during which generalized mechanisms of response are attached to a variety of specific situations.

When we reach the human baby the generalized character of what is inborn, and the period of immaturity during which these general capacities are attached to different situations, is enormously extended. Therein lies our hope for mankind; because it is this long, helpless but experimental youth of man which provides the opportunity for him to progress beyond mere animal activities to arts.

We can now see why the cultural heritage, the building up of systems of habit of a more expressive kind upon their crude emergence in instinctive behaviour, is what gives graciousness and urbanity to the larger part of civilized life. Primitive desire is transmuted into the sentiment of love. There are those who are always harking back to the primitive. I have even had it said to me by a distinguished professional woman, that the only excuse for

sexual intercourse was an overwhelming sudden impulse undiluted by any other feeling. This is the leave-things-to-nature attitude. It finds expression in modern literature in the novels of Ethel M. Dell and other members of the "treat 'em rough" school. It even appears in the work of D. H. Lawrence whose stress on the dark, cruel and primitive forces in human love is combined with scorn for the "tenderness" of civilized man. Sometimes this return to the natural, perhaps in weariness at the complexities of modern life, is advocated in so crude a fashion that one can only suppose its exponents desire to regress to the pristine simplicity of the upstanding ape. At other times it is a more sophisticated view; as in those who remark blandly, picking up their chicken bone, "Fingers were made before forks."

There is a certain attractiveness in this view. Release from the thralldom of convention on occasion is pleasant. It must be remembered, however, that the only persons who really enjoy breaking the rules are those to whom the rules themselves have become almost second nature. It is in their deliberate awareness of what they are doing that the fun of such actions consists. In this connection Susan Isaacs has an interesting passage on the parallel case of love-making. "It is in the very unconsciousness and spontaneity of the love-making of Romeo and Juliet that its special beauty lies; while the proverbial fascination of the widow springs largely from her open-eyed knowledge of the full implications of her own behaviour."

We may say then that man, as distinct from the rest of the animal world, is much more the creature of habit than of instinct. There must be something to start with. What we make of that something may move it far from its origins. Manners, speech, dress, beliefs, social organization—all these show the marks of acquired behaviour. It is a mistake, therefore, to speak of man as though he were the creature of instincts, these being regarded as inborn urges impelling him to act in certain ways. It gives a fatalistic tinge to all forms of appetite behaviour (including sex) so that even crude or excessive manifestations of them are regarded as beyond human control.

It is at this point that another science, anthropology, allies itself with psychological work. Here, too, there is a similar drift of opinion towards stressing that side of human behaviour which is represented in its acquired culture. "Man is never governed by instinct alone" Malinowski has told us. "Biology supplies the ends and outlines of human behaviour, but the means are cultural, man-made and varying with society." "Even maternity," he continues, "is not a mere biological fact. The human family rests upon the fact that instincts are transformed into sentiments, and that this transformation is

carried on within a moral atmosphere under the operation of a body of tribal law and within a scheme of material culture."

Let us take another example of this attitude of modern anthropologists. The practice of head-hunting among the Papuans is not considered to be due to innate bloodthirstiness. It is dependent on a body of tradition—an element in their culture. Manhood is attained by the youth who can bring back a head from a hostile village. Suppression of head-hunting by the authority of British rulers led to degeneration, for none of the youths could produce a certificate of courage which would express the fact to their womenfolk that they were fit to marry. This difficulty was obviated by the substitution of an equally hazardous ordeal, that of bringing back a wild boar's head.

This means that "human nature" can change, if we understand by this that it is possible for men to produce culture substitutes for their more barbarous activities. Such activities are not, therefore, an essential and unescapable part of our behaviour. In the England described in Fielding's novel *Tom Jones*, the young son of the squire was considered merely to be expressing the natural consequences of his sex when he indulged in the sport of seducing the girls of the village. We no longer regard this pastime as either admirable or inevitable.

In other words our patterns of behaviour embodying an acquired attitude to such things as our relations to the opposite sex, to parenthood, and so on, are culturally induced. The question now arises how the culture systems, expressed in our social heritage, get themselves constructed out of the raw materials of our biological heritage.

V. HOW WE LEARN: THE ORIGIN OF SEXUAL PREFERENCES

We have seen that the human baby is born with, and limited by, a definite though complicated natural equipment; but that its first responses are so indeterminate that guidance has an important part to play. This does not mean that the baby is passive clay moulded by his environment. He is active: as the harrassed mother realized when she called out to one of the older children "Go and see what baby is doing and tell him not to."

Let us call the observed original responses of the creature, *primary* disposition-behaviour: and the later acquired responses, *secondary* disposition-behaviour. The first point we should get clear in our minds is that somewhere in between these two there must have been a period of change. "Learning" is the name we give to what happens in this period. Thus in most animals, the primary responses to danger situations is that of either immobility or flight—as when a

rabbit crouches motionless before us or dashes away at our nearer approach. These primary responses to danger situations would, however, be worse than useless to a man driving a car. It would be fatal for him to attempt either to escape by climbing out of the back of the car, or to remain paralyzed with fright in his seat. What he has to do, when learning to drive, is to replace these responses by the secondary response which Rivers called manipulative activity. He has to learn to respond to danger situations by doing things quickly with his hands and feet.

How are these changes achieved? There are three different ways of acquiring secondary disposition behaviour. The first we call *Fixation*. In this we fix, or set, an existing response (or a newly acquired one) to a given stimulus, so that it is called out more readily. A chain smoker is the victim of such fixation: he has made almost automatic the response of lighting another cigarette to the stimulus of finding the previous one at an end. The driver of a car, once he has learned the uses of the controls, fixates them by practice. This way is a matter of mere repetition. We use it when we train the young baby to good physiological habits, both feeding and excretory, by regulating the times for these. We even find it helpful in the first stages of character training, as Aristotle pointed out, when we habituate children to performing certain acts long before they understand their desirability or usefulness—thus providing the basis for their valuing these acts for their own sakes later on.

The second way of learning, called *Conditioning*, consists in making an old response function to a new stimulus, as when the dog's salivation is attached to the new stimulus of sounding a bell. This, too, has something mechanical about it. It is also alarmingly fortuitous. Any given response can be attached to the most astonishing situations or objects. We shall realize this if we remember that conditioning is the basis for the psychology of the souvenir. No one who has ever sat in his lumber room, amidst the litter of undiscarded odds-and-ends which he now has to pass on for salvage, will doubt the power of the most curious articles to arouse memories and feelings which are totally unrelated to the original character or function of those articles. We all know, too, how deeply moved we can be by all sorts of objects connected with someone we love.

Conditioning also underlies the very important process which psychologists call *Deflection*. The primary response to the stimulus of attack is fighting, but boyish pugnacity carried unchanged into adult life would be a social handicap. It can, however, be conditioned to other stimuli than physical attack. We can account in this way

for such things as the mountaineer's eagerness to struggle against natural obstacles, and the fighting enthusiasm of the crusader for unpopular causes. When deflection results in more socially desirable activities it is called Sublimation.

The third, and most important, way of learning we call *Adaptation*. In this the organism suddenly replaces the old response to a given stimulus by an entirely new one. There is a kind of beetle whose primary response to finding a dead mouse is to bury it on the spot. Fabre tried the experiment of placing the mouse on a brick lightly covered with sand, leaving deep earth all round. The Burying-beetles tried vainly for hours to inter the mouse where it lay. At last they made the new response of dragging the mouse to deep earth before burying it. This power of making a novel response when the old one fails passes beyond mechanism. Whenever it appears, whether in the trial and error movements of animals or in a man solving a puzzle, it is always a sign of plasticity.

These three ways of learning are combined to produce the variegated patterns of human acting and feeling. The baby is perpetually exploring its own self and the world outside it. Constant conditioning extends the range of its responses; discovery of new ones enrich their quality; and each gain is consolidated by fixation. In this way we build up the great systems of action which we call Skills, and systems of feeling which we call Sentiments. These developments are marked by an ever-increasing unification, so that in the end the whole creature becomes more and more involved in every act. At its highest, the skill of the genius (be he craftsman or surgeon or cricketer) seems to express the whole personality. In a similar way the organized feeling systems of the poet or the saint reflect something of their individual and unique quality.

In regard to sex, all these processes play an important part. Fixation here, as in other fields, is a double-edged instrument: it can be useful in consolidating advances in behaviour, but it can also hinder progress by stereotyping an individual's activities at an early stage in development. We have an example in masturbation. Quite young children and even babies learn to masturbate in some form or other. It may be an outlet for sexual energy and is often useful as a relief. The danger is that early and excessive masturbation may arrest sexual development at the auto-erotic phase. The consequent concentration upon himself and narrowing of his experience tends to isolate the masturbator unduly from the world, making him what we call an introvert, as opposed to an extrovert who goes out joyously towards the life around him. It may also get in the way of his full

enjoyment of hetero-sexual life later on; though even in hetero-sexual love touching and caressing which amounts to mutual masturbation takes an important place in that love-play between two partners which forms a necessary preliminary to the most effective and satisfying coitus. Masturbation should not, I need scarcely say, be fulminated against as a sin. To those who are bothered by it, the danger can be made understandable by drawing a parallel, in simple language, with food. The masturbator is likely to find himself in the position of the person who clings to the foods he acquired a taste for in childhood, to the exclusion of all else, until he finds that he is unable to discard his early likes and dislikes and has cut himself off from a whole world of gastronomic experience.

It is important for parents and teachers to realize that undue and emotionalized anxiety about the child's natural exploring interest in the body and its functions, sexual and other, may condition him to undesirable attitudes in later life. If we induce a sense of guilt, by our fear of nudity and alarm at his interest in bodily processes, he grows up to regard the body and its functions as something forbidden and therefore fascinating—subjects fit only for obscene jokes. If we indulge in romantic talk about "abuse" of that temple of the spirit the human body, he comes to view it as mysterious and sacrosanct. Combined, these unwise conditionings form the ground for that adult attitude we mentioned earlier, which regards sex as both too dirty and too sacred for rational consideration. What we need, in early training, is less heat and more light.

Conditioning has an important bearing on our sexual development in another way. From what has been said about the great range of its possibilities, we need not be unduly surprised at the strange vagaries of what is called Sexual Fetishism, that is to say, the attachment of sexual responses to all kinds of objects quite different from those which normally arouse them. We call these objects fetishes because, like the savage with his fetishes, we invest them with power over us. Attachment may occur through some accidental early experience in which the object becomes associated with sexual feeling. This may happen when genital sensitiveness (either natural or induced) appears precociously, before puberty and increasing knowledge have indicated the normal channels of sexual desire.

The passion for certain kinds of materials such as silk, fur, velvet, rubber or leather; or for hair, teeth, the foot, and other parts of the body—all these are probably produced in this way. Again, the attachment may be to clothing as a whole. We all know the male attraction for high-heeled shoes, or frilly undergarments and intimate

feminine wearing apparel such as corsets. This sort of thing is not confined to men. Women have similar tastes. The musical-comedy song, "I like something in a uniform," expresses this; and I have met instances of it in a passion for evening dress, rough tweeds and many other characteristic kinds of male attire. There may be other factors, such as admiration for social or official position, involved here; but there are definitely cases in which the attraction is purely sexual, and can be traced back to its origins.

There are fetishes connected with any of the senses: smell, touch, hearing and even pain. In all these cases the fetish may range in power from being merely an attractive additional factor in normal sexual intercourse to becoming a complete substitute for it. In the latter case it may lead the unfortunate sufferer into serious difficulties when he seeks to satisfy his sexual needs by such bizarre acts as cutting off the hair of young girls or stealing their shoes. The danger is increased with the more unpleasant fetishes connected with such things as excretory functions and products, and even with corpses.

All sorts of peculiarities can, then, arise from the association of sexual feelings with particular objects. It also happens with situations. Thus an act like sucking, from our experience at the breast, may be the basis for erotic kissing. Again, a chance glimpse of sexual intercourse between others, by a young child, may be a shock and have a lasting effect upon his later attitude to sex. Or such a sight may give pleasure and result in the *voyeur*, that extreme example of the Peeping-Tom whose main satisfaction has become centred on merely seeing sexual acts. Conditioning to situations also, then, opens up infinite possibilities of acquired sexual predilections. The normal person grows out of a large number of his early conditionings, passing beyond his object loves. Nevertheless some parts of this earlier phase remain in us all.

At this point we must remember that in sex, as in the rest of life, we each have our own individual tastes and preferences. It is this which adds to the richness of social intercourse. We are perpetually discovering new lights on old friends. So it should be in love. It is in mutual exploration of each other's sexual possibilities that we rise from mere animal copulation to complete human union. In this way our fetishes (unless they are of the kind which no normal person can stomach) play an important part, for they concern all that is most intimate and personal in our sexual feelings. Nothing is indecent between two lovers except what is displeasing to either. Fetishes may, indeed, according to Krafft-Ebing, be a factor in sexual

selection; and Binet suggests that normal love seems to be "the result of a complicated fetishism." Tarde takes a further step. "Constancy in love," he says, "is rarely anything else but a voyage of discovery around the beloved person . . . The most faithful lover does not love the same woman in the same way for two days in succession."

Deflection, also, plays its part in sexual matters: as when sexual desire is turned from its normal object, that is a person of the other sex, to someone of the same sex (homosexuality), or even to animals (zoophily). It has its other side, too, as when sex is sublimated and its energy diverted to all sorts of cultural activities. In sublimation, however, there is a sort of damming of emotion which supplies us with mental power, much as the dam of a reservoir enables us to tap a source of water power.

To the part which feeling and emotion play in our lives we must now turn. Put briefly, the emotional side of our nature is both a blessing and a curse. It helps advance because it is a factor in producing adaptive or plastic behaviour; and it hinders advance by emotional fixations, especially in early childhood, when feelings are strongest.

VI. THE BIRTH OF INTELLIGENCE: EMOTION AND SEX

When any creature uses the third way of learning, and adapts its responses to changed circumstances, it exhibits a type of behaviour radically different from what such adjustment begins and ends in. Both the primary instinctive behaviour from which it starts, and the secondary habitual behaviour which it reaches, are *Stereotyped*: that is, the response to a given stimulus is more or less invariable; but during the change from primary to secondary, the behaviour is of the type we call *Plastic*.

Whenever this appears it is a mark of intelligence. For we call a creature intelligent if it is adaptable, quick to discover ways of dealing with a new situation or difficulty. We can observe intelligent behaviour in animals; as when a dog finds his way out at the back when the front door is barred against him. Even among insects there are some (the "revolutionaries" Fabre called them) which rise above the machine-like rigidity of their fellows. Intelligence is not therefore essentially bound up with reason. In man, however, reasoning—by which we mean the play of ideas in the mind—enormously enhances the quality of his intelligent activities. He can experiment in thought as well as in deed.

It is difficult to over-estimate the immense possibilities which this possibility of plastic adaptation opens out to living creatures. The

organism can face up to change in its environing conditions; and even adventure into, or create, new ones. New sources of power, for instance. It is in the higher mammals, of course, that this is most clearly marked. If we present a chimpanzee with the practical problem of getting at a bunch of bananas hung high out of his reach, he can solve it by fitting together the pieces of a jointed rod pulled apart and left in his cage. Chimpanzee inventiveness is, however, sterile. The trick has to be discovered all over again by the next chimpanzee. In man we have a social animal who has developed, as part of his social interactions, that marvellous instrument for communicating with his fellows which we call language. Through the spoken and written word he can preserve the riches of a life's experience for those who follow him. It is this ability to utilize the capitalized experience of the human race which lifts man so high above the brute. This social heritage has, however, to be handed on to, and made its own by, each generation in turn. That is the function of education.

How did plastic intelligence come into the world? The answer is that it is produced because all creatures not only know and act, but also feel. And it is these feelings—of pleasure or unpleasure, satisfaction or dissatisfaction—which guide the creature in its adaptive activities. At first young chicks peck at any small objects: but Lloyd Morgan found that in two days they learned to pick out pieces of chopped-up yolk from white of an egg. When he then mixed bits of orange peel with the similarly coloured yolk of egg, these were at first picked up; but the chicks soon learned to avoid them. There is no doubt that they were guided towards the new response of discriminating between orange peel and yolk of egg by the less pleasant taste of the orange peel. This suggests that the creature's awareness of the feeling side of his experience, as pleasant or unpleasant, helps to produce adaptability. In general, for all creatures (including man) it is the pleasure of success and the unpleasure of failure which induce (when a primary response has failed) the striving required to find the new response which provides a way out of the difficulty. In short, Feeling is the nurse of intelligence.

In human behaviour we all know what a large part feeling plays, especially in its intenser form which we call emotion. We feel fear in a danger situation, anger in one calling out pugnacious behaviour, and so on. The emotional side of our response only rises to its fullest intensity, however, when the acting side is interfered with. When we can flee from danger we do not feel the emotion of fear; but if we are stopped in our flight we at once experience it strongly,

and probably try other methods of escape. Thus not only does feeling help to produce and guide the adaptability in intelligent behaviour: it also energizes it.

Physiologists have shown how this comes about. There is a close connection between emotion and the accompanying bodily changes. It may even be that emotion itself is just awareness of such changes. These (increased heart beat, quicker breathing, pallor, and so on) are produced by that part of the nervous system called the sympathetic or autonomic system: a system of nerve fibres quite distinct from the main central system of brain and spinal cord, but connected with it. Cannon has shown that many of these changes provide for heightened physical activity. For example, in fear or rage there are changes in the autonomic system which cause the supra-renal glands to secrete a substance called adrenalin. This sets up a variety of bodily effects: amongst others, the rapid recovery of a muscle from fatigue, and changes in the contents of the liver which result in an increased supply of sugar and therefore of energy to the blood stream. In a literal sense, then, emotion energizes alternative responses.

We can now see why sublimation can be regarded as a damming of emotion which enables us to divert the emotional energy in sex to quite different activities. In this way an unhappy or inconclusive love affair may provide the spur to ambition in other spheres. Who can judge how much the work of Dante had its motive power in his *distanced* relation to Beatrice? Sublimation can, be it noted, result not only in the arts but also in activities of every sort. It has even been suggested that the amount of control over, and the manner of limiting opportunities for, sexuality in any society determines the scope and quality of its civilization. An over-sexed society is an enervating one.

Now for the debit side of emotion. Feeling, which helped in the development of intelligence, later hinders it. For the weighting, by feeling, of the new responses tends to fixate in us feeling-habits which linger on long after their usefulness has ended. Our nurse turns out to be an old lady with conservative leanings who thoughtlessly hinders the child's growing up by encouraging him to cling to pretty but unprogressive childish habits.

This is greatly helped by the definite over-weighting of feeling in children. They fly more readily into rages or burst into tears, and in general react more violently than grown-ups. It is this characteristic of children which makes their early emotional history so tremendously important. Their passionate childish loves and hates, set up in the family circle, are carried into later years and make the

change to adult behaviour difficult. They make it harder to break away from family ties to independent existence. Deep attachment of a boy to his mother, or girl to her father, may even get in the way of free choice of a completely heterogeneous partner unlike either parent. Incidentally, it is these infantile attachments to parents, carried unwittingly into later life, which give point to mother-in-law jokes.

We can now appreciate the force of Freud's suggestion that the original form of mental activity characteristic of the earliest stages of human development, both in the individual and in the race, is based on the "Pleasure-Pain Principle." This, in both the infant and the savage, is a tendency to avoid pain and disagreeableness and demand immediate gratification of primitive desires. At this level there is no clear differentiation between fact and fantasy. We can see this both in children's make-believe and in the myths and superstitions of the savage. Later, however, another principle appears: the "Reality Principle," in which our impulses are controlled by a growing sense that we are not all-important in the world, combined with increasing realization of the realities of that world.

There is a physiological basis for this development also. We are made aware of the bodily changes, involved in emotions and produced by the autonomic nervous system, by impulses conveyed to the higher brain through a part of the lower brain called the optic thalamus. Head and Holmes showed that if this is injured or diseased, and so severed from the higher brain, a condition of emotional over-weighting occurs. Now the optic thalamus is a primitive part of the brain, and it is only in man that it is so enormously overshadowed by the higher brain. This suggests the reason for the larger part emotion plays in animals, and explains why in man it is possible for the higher brain to control the emotional impulses breaking through from below. Men have, however, to learn to use this nervous machinery of control with which they are born. Successive layers of control are slowly built up, but there is always the possibility that sudden strong emotion may break its way through them even in the adult.

In this connection it should be noted that there is a carry-over of emotions. When one has been aroused, and the controls thus lessened, it is easy to pass to another. After a moment of intense emotion of any kind the love-emotion more readily appears. ("We fell out, my wife and I, and made it up with tears.") Not only anger and fear, but also extreme aesthetic exaltation and religious fervour can be rapidly converted into sexual emotion. Similarly it is easy to change from intense love to violent hatred. Indeed these emotions

can exist together, and readily change one into the other. This is called *ambivalence* (two-sidedness) of emotions. It explains the fact that, even with happy lovers, there may be an element of desire to hurt each other. In love-play kissing suddenly becomes biting. These two sides, in excess, produce the person who gets sexual pleasure in hurting his partner (the sadist) and the one who desires to be hurt by his partner (the masochist).

Emotion, then, is like fire: a good servant but a bad master. Nowhere is this more clearly exemplified than in matters of sex. Nearly every worker in this field has, like Cyril Burt in his studies on the young delinquent, found himself forced to recognize that emotional instability is at the root of a great deal of sexual misdemeanour—though there are cases in which it is due to depressed vitality amounting to frigid insensibility. It is the duty of parents and teachers to try to understand this, and to help their charges to achieve increasing control as they grow older. They can do so by fostering the development of those massive feeling systems called sentiments. These, when brought into some sort of unity, act like a flywheel in regulating and stabilizing the supply of emotional energy from below.

VII. THE DEVELOPING SELF: CONTROL THROUGH TRAINING

By a sentiment we mean an organized system of feelings. These constitute our loves and hates.

There is a difficulty about the use of the word love. Sometimes we mean by it the sex act, and feelings connected with it. At other times we mean the tender emotion we experience as friendship for others. (I need scarcely say that this tender emotion has become for civilized folk a real part of human sexuality.) When we speak of sentiments as loves, then, we are using the word in the wide sense which is expressed by saying that love can centre itself on all sorts of objects. We can love human beings, dogs, gardening or justice. Around the object of our love there crystallize all sorts of feelings which get welded into organized systems drawing into themselves every part of our being. When we love anything we find pleasure in its presence, and desire for it in its absence; there is hope in anticipation, and anxiety in expectation of its loss. The sentiment of love becomes a great deal more than the primary feeling on which it is built.

In our hates, as in our loves, this organization of feelings is similar. But just as love delights in the presence of the loved object and seeks richer communion with it, so hate finds its object an offence, and

tries to destroy or avoid it. This brings out a difference between love and hate. In general we can say that our loves aim at wider expression. They are outflowings of life-energy, and therefore on the whole constructive; whereas hate is always a form of destruction. This may be necessary sometimes. Hatred of injustice, for instance, is only the other side to our love of justice: but hate should be used sparingly, as the gardener uses his pruning knife with discretion when cutting out rotten or useless wood.

Our main feeling systems are built upon humble needs of the body such as sex, food and shelter. Or upon a simple feeling for (that is, an interest in) some object. An "interest" is a sentiment system in the making. As the sentiment develops it increases the *range* of the primary feeling. Thus we begin by liking a particular dog; we extend our affection to dogs in general; we become knowledgeable about dogs and their ways; and we may finally find our whole being involved in movements for the better treatment of animals. Sentiments increase also the *intensity* and quality of the primary feeling. The need for food becomes an interest in food; this gives rise to the noble art of cookery which provides us with a field for the exercise of both skill and aesthetic judgment; eventually, eating becomes exalted to the dignity of a social function in which dining together includes, but is much more than, the nourishment of our guests.

Falling in love with another person follows the same lines. Beginning in a simple sexual interest it soon passes beyond it, both in range and intensity. We look more sympathetically at others in love; and we find our whole being infused with an intensity of feeling which far transcends, though it still includes, sexual desire.

It should be noted that hindrances to all we desire in love are definite factors in its growth. Easy conquest is an enemy to love. Obstacles dam emotional energy and direct it more forcefully to its object. Sir Percy Nunn wisely remarked that "the course of true love never did run smooth, because it never could; for only difficulty, disappointment and hope deferred can evoke the energy that makes a genuine sentiment." This is the psychological objection to casual or promiscuous love-making. A complete sexual relationship, to be deep and lasting, needs time to mature.

So stable and influential do our sentiments become that it is not too much to say that if we know what a man loves and hates, we know a great deal about him. The most important sentiment of all, however, is that which is centred around the *Self*. This comes about because all other sentiments involve the self. My love for Beethoven,

for example, is necessarily *my* love; depending on my initial taste for music, on the opportunities I have had of hearing his work, and on my judgment of it in the light of the music of other composers. Since the self is coloured by every other sentiment, we are each of us many selves. Besides my musical self there is my working self embodying the sentiments relating to my job, my home self, my social self which appears when I am in company, my political self—and many others. These selves are not always consistent with each other, and it is unlikely that they are ever completely co-ordinated in any one person. Inconsistencies in human behaviour are more often due to failure to co-ordinate sentiments than to deliberate hypocrisy.

The never-ending process of reconciling our sentiments explains their value in enabling us to put away childish things. At first we are relatively at the mercy of the passing moment. The sudden impulse of the child with a sweet-tooth to steal a tart may well win the day. The older child may be able to resist the temptation by opposing to it the sentiment of love for his mother, and consequent desire not to pain her. In the adult we find that opposing sentiment systems may even be able to repel an urgent bodily demand. The tired sentry's need for sleep may be overcome by his sentiment of loyalty to his fellows, and still more by his ideal of himself as a stickler. It is this last, the great sentiment of the Ideal-Self ("What we back ourselves to be and do" was William James' way of describing it) which is all-important. It is this which enables us to mount from the level of desire aimed at an immediate satisfaction to the level of will directed to distant, and perhaps ideal, goals. The ideal-self constitutes our Conscience.

The application to controlling the imperious appetite of sex is obvious. Children often begin to take an interest in the opposite sex well before the age of puberty. That interest can (if not sneered at or opposed by elders) rapidly transform itself into steadying sentiments of great value later. I am quite sure that most parents fuss too much about these first shy adventurings of their children into what we unkindly call calf-love. Sometimes their anxious concern is the direct expression of hidden jealousy.

At puberty genital sexuality comes to the forefront. This, too, should be expected: not frowned upon and forced into hiding by parents and prudes. Otherwise definite and dangerous conflicts will be set up in adolescence, and bar the way to a proper balance, directed by the ideal-self, between tender emotion and sexuality. There are many appreciations in literature of the chivalrous and sensitive

character of early love. The wise parent will welcome these signs of growing-up as marking a healthy transference of love from themselves to others: and a sensible society will provide opportunities for the frank mixing of young men and young women. We should not rely on artificial hindrances to provide the obstacles necessary to the growth of fuller and more stable sentiments; these will be forthcoming in the natural difficulties involved in mutual choice and practicability of attainment.

The sum total of our sentiments is what we call our Character. In a very real sense we are each cultivators of our own characters. Like the gardener choosing his plants, we have to select those interests we mean to make our own and foster their growth into sentiments. We have to hold fast to some of our selves and relinquish the rest. During the plastic years of youth we need good training and advice from older heads, in order that our range of choice may be as wide as possible, and our selection wisely made. Thereafter comes a time when we realize that the main sentiments which are to be masters of our being have been established. Beyond that, all that remains is their fusion into some kind of unity about the central core of the ideal-self. This unified system of sentiments about a central focus constitutes our Personality. We are not born persons: we achieve that status.

The importance of such fusion is that it enables us to grapple with those perpetually recurring conflicts between sentiments which threaten the unity of the self. We resolve these conflicts, in so far as our powers permit, by setting up some view of ourselves in relation to the world as a whole: a general attitude to life, a philosophy or a religion. Such a world-view may of course be defective. It may be trivial, as in the woman of fashion or the man-about-town. It may be unworthy, as in the miser or the libertine. It may be narrowly conceived, as in the religious or political fanatic. Again, our world-views may be soporifics designed to numb our conflicts rather than to resolve them.

Youth needs a world-view as a directive to action; but it is alarmingly susceptible to even the most ill-informed or unmeaning ideology if it is presented with arresting dogmatism. Nevertheless it is only through the creation of some sort of unified view that the ideal-self (worthy or not) can exert an influence on our behaviour. It does so by creating an integrated personality. The value of such a personality depends on whether the ideal we hold before ourselves is good or bad.

VIII. DISUNITY IN THE SELF: CONTROL THROUGH KNOWLEDGE

So far the development of the self has been dealt with as though it were entirely the result of conscious deliberation. If this were so, control of our destiny would be infinitely simpler. But as we have already hinted, conscious training alone never succeeds completely in unifying our sentiments. This is because the self is held together by memory; and if the cement of memory perishes, the self disintegrates. Feeling-systems may thus work loose of the main stream of consciousness, only revealing themselves indirectly in our activities. These hidden influences, lying beneath the comparative calm of conscious life, are likely to disturb it at any moment.

Our conscious activities can, in fact, be compared with the business transacted at the public meeting of a shady company. It looks all right on the surface. Nevertheless the ostensible business done is not always what it seems; the reasons given for doing it are almost certainly not the real reasons; and the decisions taken have probably been settled, outside the meeting, long before they are put to the vote. Something of this kind takes place in the human mind.

As a simple indication of how these undercurrents in our being work, perhaps I may be allowed to give a personal instance. A long while ago I noticed that whenever I found myself faced with difficulties in my own profession, I tended to put them aside and turn to all sorts of jobs connected with the house in which I happened to be living at the moment. I always, of course, had the most convincing reasons for starting on a new scheme of decoration, or re-arranging the kitchen, or whatever the particular alternative was which I substituted for my own work. (This finding of excuses for what we really want to do is called Rationalization.) After a time I realized that fussing about the house was a "defence" mechanism, providing me with the means of evading difficult or disagreeable pieces of work in my own line: but I was puzzled as to why it always took this particular form.

Now psycho-analysts insist that the attitude adopted by a child towards the members of his family, heavily over-weighted in feeling as it is, deeply affects the grown-up individual's outlook on life. It slowly dawned on me that herein lay the explanation of my peculiarity. My father was a builder. I always, as a boy, looked forward in my daydreams to taking up this line of work in some form. I did not do so; but the tendency to turn to the house, as a relief from the troubles of the moment, was a clear indication that this influence was still active in me. Once I grasped this, I felt in my bones that it

was the correct explanation. I also found that, as soon as it had been brought into consciousness, it made me much less liable to be disturbed in the prosecution of my own work than I was before. These two accompaniments of my discovery are characteristic results of bringing such hidden influences, which we call Complexes, to light.

Complexes are feeling systems of which we are normally unaware. They are like sentiments, except that the latter are open to direct inspection. When I turned from my own work to some household job, I was acting *as if* I had a strong sentiment of which I was not aware at the time.

If we are not aware of them ourselves, how is the existence of such complexes discovered? They can only be inferred, usually by others, from the evidence which our activities themselves provide. The starting point of Freud's method was his discovery that patients suffering from mental breakdown sometimes recalled, when hypnotised, painful incidents of early life; and that the recovery of these memories, with release of emotion (which we call catharsis) brought relief. Later on Freud found that he could induce his patients to remember their forgotten experiences if he encouraged them to talk freely and at random, and tell him whatever came into their minds connected with things and events in their dreams and day-dreams. This is the method of free association. Ordinary introspection, unhelped by these methods, is generally ineffective. Psychoanalysis is therefore nothing more than a technique for making complexes accessible to consciousness.

A typical case is that of Rivers' patient who suffered from the complex called claustrophobia, or unreasoning dread of being in enclosed spaces. Rivers showed, by analysis, that the origin of the dread was a painful and long-forgotten incident in the patient's early childhood, when he had gone to sell something to a rag-and-bone merchant whose house was reached by a long dark passage. On returning he found that the door of the passage had been closed; and, being too small to reach the latch, was thrown into sudden terror by the growling of a dog in the dark beside him. Once this memory was revived, his fear of enclosed spaces vanished. In ordinary life this dread would only reveal itself in a sense of vague uneasiness in enclosed spaces like lifts. In a time of sudden stress, however, the complex showed itself in the form of uncontrollable dread.

The usual way of expressing how such complexes arise is to say that the painful "memory" had been repressed into the unconscious, where it remained temporarily dormant. A less misleading way of putting it is to say that fear, the natural response to a growling dog,

was conditioned to the enclosed space in which the boy happened to be at the moment. In the future, even with no dog present, fear was therefore likely to be touched off in him by any enclosed-space situation. As the memory of the incident faded (we all tend to forget the unpleasant) the cause of this condition disappeared from consciousness, and he became unable to meet the situation with a rational attitude, because he was unaware of the real factor involved in his fear—namely, the forgotten incident. Once that memory was revived and reinstated in the memory-system of the conscious self, the groundlessness of the fear was realized, and the claustrophobia disappeared.

Investigating any set of facts, using similar techniques, various schools of psycho-analysts employ different modes of interpretation. A follower of Jung, for example, would probably see in my own complex concerning houses an over-compensation for that lack of complete adjustment to the environment which is characteristic of the introvert. In turning to household jobs, he would say, there is a kind of relief from the indrawn labours of the student. The extrovert part of my being, that which is concerned with concrete external things, had been neglected. To compensate for this, it suddenly reasserts itself and affects my behaviour.

Freudian analysis tends to dig deeper. The young child's main emotional interests are naturally turned towards its parents. These may, by fixation, hinder the next step forward in normal development. A Freudian would probably therefore regard my complex as the product of mother fixation. The childish daydreams of following my father's occupation were really the result of attachment to my mother; infantile attempts to take my father's place. The resulting complex persisted into adult life, securing indirect expression in times of strain. In severe cases the patient himself cannot usually obtain any clue to the complex involved.

At this point we must note that in the production of both complexes and sentiments there is always something which is being *inhibited*: but inhibitions like forgetting, which produce complexes are unwitting. We call these Repressions. Inhibitions which are deliberate and conscious we call Suppressions. These latter occur in the creation of every skill, where we discard awkward or unnecessary movements; and in the building up of a sentiment, where we concentrate upon its object and reject irrelevant feelings. In the growth of both crafts and loves, a wise economy simply weeds the garden. To say that suppression is bad is therefore nonsense. On the other hand repressions can, and do, produce a great deal of harm.

There is another important difference between complexes and sentiments. Complexes are, in the main, produced by the more mechanical processes of fixation and conditioning. In the creation of sentiments these processes also occur, but here plastic adaptation is also a factor. This means that the resolution of conflicts between sentiment systems is a more or less rational procedure. Complexes, however, lurk below the level of conscious life; so their part in a conflict is not realised. That is why they produce states of vague foreboding and worried indecision. Like the inner clique of the shady company we used as an illustration, they are difficult to deal with because they work in the dark.

The trouble is that they affect the unity of the self. Many complexes are of a superficial kind, produced in later life. These merely disturb that unity. Hart mentions a young man who suddenly turned from religious activities to the most violent propaganda of an anti-religious kind. He himself fully believed that the change was made on purely rational grounds. Actually it originated in the fact that the girl with whom he had been engaged had eloped with one of his fellow Sunday School teachers. Analysis of complexes like these can, when our friends show unexpected heat about something, be made into the amusing parlour game of "Spot the Complex." There are, however, more serious complexes which produce radical disintegration, and may completely destroy the unity of the self. Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde* is no mere flight of fancy: it describes a possibility. Great writers in all ages have been able to delve, with the intuition of genius, into the story of human life—so moving because its strands have been so strangely mixed. They have portrayed, long before the pedestrian methods of science disclosed their workings, the conflicts resulting from deep-seated complexes—as in the palsied indecision of Shakespeare's *Hamlet*, and the tragic doom depicted in the *Oedipus* of Sophocles.

Our human drama begins with our outraged entry into the world from the vegetative comfort of the mother's body. The new-born baby, pathetically helpless, is nevertheless a greedy and self-centred little animal. As he grows older and asserts himself more, he seeks his satisfactions vigorously and resents their non-fulfilment with empurpled rage. His first concerns are with sucking at the breast, excreting, and increasing consciousness of his own body. These are represented in psycho-analytic literature as the phases concerned respectively with the mouth (oral), with excretion (anal), and with tactile, visual and other pleasures in the body which we call the genital phase because it is more closely related to sex proper than the

others. All these activities have to be regulated by habituation at the unwitting level of repression. It has taken a long time to realize the resistance which the little animal dumbly makes to outside interference. We have been blinded to this inner conflict by those moments of contented sweetness which satisfied babies present for our delight; but the struggle is not waged without wounds. The scars reveal themselves indirectly in later life. Paradoxically enough it is these which gave us the first inkling of the struggle itself.

To the baby every feeling is intensified. Withdrawal of the breast is denial of love. To be left alone is to be utterly forsaken. The necessary regulation of the baby's life is only accomplished at the expense of emotional upset. At a later stage the child has intense interest in excretion: it is an act it can do all by itself, and one by which it produces something all its own. Yet elders have to erect a barrier against this perfectly natural interest. It is the same with the naked body, and in particular with the sexual organs. Parents are uneasy at nakedness and offer what can only be an inexplicable reluctance to allowing their own bodies to be seen.

It is not surprising that conditionings produced by these restraining attitudes make it hard for the child, in later life, to deal with the subjects of his first interests in anything but an emotional way. Excretion and its products are disgusting: that is they combine a guilty attraction with extreme repulsion. The body has a tinge of shamefulness about it. Some of its parts cannot be named in round Anglo-Saxon terms. The names of bodily products are used in swearing, which is simply release of emotional tension by the use of forbidden words. Scribblings in lavatories, humorous stories which depend for their effect upon the indirect expression of something we ordinarily bar from conversation—all these are the results of repressions.

We must remember that being shocked at anything means that we cannot adopt a rational attitude towards it: reason has been dethroned. Men had to overcome their disgust at the dead human body before they could dissect it, and so create the sciences of anatomy and physiology. Not until we are able to look with calm and uncensorious eyes on the tortuous ways of the sexual impulse will there be a real science of sex. Reason is the only thing that can be trusted, Clive Bell has reminded us, "to hunt down those inhibitory bogies that haunt the brains of barbarians."

Quite other, but even more important, repercussions in later life come from the period when the child becomes aware of other persons besides his mother. He finds himself the centre of a domestic

situation fraught with dramatic possibilities. His first attachment is naturally to his mother, to whom he turns for comfort and for love. The father enters as an interloper, who makes his own demands upon the mother, and stands in some not yet understood, but obviously intimate, personal relationship to her. Now for the child, any interference with his desires, any attempt to displace him from the centre of interest in his mother's world, is resented with passionate intensity. The jealousy thus engendered against the father is repressed. Nevertheless it persists and forms the basis for all sorts of aggressive impulses in later life. The boy, having most of his desires satisfied by his mother, develops hostility to the father. The girl, after passing through a stage of devotion to her mother, transfers her affections to her father and enters into rivalry with her.

When bodily changes, at the approach of adolescence, create the genital phase of desire, the attachment of boy to mother and (to a lesser extent) of girl to father, meets tremendous resistance. Freud has described this situation, so far as the boy is concerned, in terms of the story of Oedipus who unknowingly killed his father and married his own mother. The tragedy has cathartic significance for us all because, in moving us deeply, it releases (and so relieves) unacknowledged murderous and incestuous forces hidden deep within us.

It is difficult to realize these undercurrents of feeling because they are never brought clearly into mind, never acknowledged. Indeed their very power comes from ignorance that they are at work in us. It is a heavy price we have to pay for the right of entry into a social order. Primitive folk (with a simpler order) and uncultured folk (making fewer demands) suffer less from these twin complexes connected with sex and aggression.

What are we to make of all this? Psychologists and social workers alike hold that children must be brought up in an atmosphere of loving care. Yet we find that family life, even at its best, is an arena of inner conflicts—conflicts, it should be added, which rage untempered in that disaster the one-child family. Nevertheless it is clear that we are bound to help children to adjust themselves to society; and so we cannot allow primitive impulses to have their way with them. The system of restrictions at the pleasure-pain level which brings order into the behaviour of the child is called by Freud the Super-Ego. It is not, strictly speaking, an ego at all, but a set of early prohibitions become habit. It is entirely different from the inhibitions of the conscious self which we call conscience. The one wields the instrument of repression, whilst the other is the appli-

cation of standards at the level of deliberate suppression. The super-ego retains its infantile character throughout life; and it is the inconsistencies between it and conscience which give rise to most of our troubles.

It is possible that the particular configuration of complexes described by Freud may be peculiar to his own setting in middle-class Vienna; and that other culture-patterns, with differing types of family relationships, may produce their own characteristic variations in the hidden influences at work. But the basic outlines are probably correct. Psychologists in general do, however, tend to let the frustrations involved in adjustment to family life overshadow those created by poverty, social insecurity and dogmatic cultural traditions. The continuation of sexual attraction to parents is probably not the sole basis of our fixations and consequent anxieties, but only a contributory factor in a wider thwarting of spontaneity.

Broadly speaking, the related complexes centred in aggressiveness and sexuality reveal themselves in conscious behaviour in double, ambivalent form. Aggression appears primarily as a dependent subservience; and secondarily (in reaction from this) as a self-condemned rebellious attitude to life. The sexual complex appears primarily as the fear of sex represented in prudery: and secondarily (in reaction again) as guilty obsession with sex. Inner aggressiveness and sexuality are cloaked, in other words, by an ominous docility and an unstable primness—ending too often in the militaristic and sadistic outbursts of readily regimented peoples, and in the sudden sexual outbreaks of over-restrained prudes.

Even in the absence of these eruptions, submission and shame, both based on grudging acceptance of regulations only dimly apprehended, give rise to conflicts ending in anxiety, fear and paralysis of will. They are thus similar to hates: negations of activity, and so on impoverishing of life. That is why we should try to get rid of their influence. Our aim should be, clearly, to encourage in our children independent outflowings of energy. This we might do by applying lighter and less emotionalized controls, delayed (so far as is humanly possible) until they can be understood and consciously accepted. Only so can we save them from the explosive automatisms which result from neuroses. When these do occur, in later life, they need treatment, not blame. Here we reach the vexed question of freedom and responsibility.

I think we are safe in saying that what mental derangements do is to reduce the range of free volition. They do not necessarily destroy it entirely. For relief is possible from the rigidities of neurotic behaviour

if the underlying complex can be dragged into the full light of consciousness. That is the function of psycho-analysis.

In short, the more we know of the conditions which affect our behaviour the freer we are: and this is as true of bodily as of mental conditions. That takes us back to the relation between the medical man and the psychologist. They each study, in so far as they are men of science, that part of behaviour which is mechanism—that part which is stereotyped and therefore calculable. Only in such fields can causal laws, bodily or mental, be found. The great extension in recent times of our knowledge of causal relationships, both quantitative and qualitative, gives us greatly added control. Once discovered these laws are applied in treating *organic* disorders where the machinery itself is defective or damaged; and *functional* disorders where the machinery is whole but has stopped working smoothly.

In the normal healthy man, however, minor derangements adjust themselves. He resolves his conflicts daily, without the need for special help, just as he throws off a cold when really fit. There is, in fact, a subtle element of control over the machinery of both body and mind in a harmoniously integrated human being. This we call "positive health." During more serious illness such plastic adaptability is lessened or lost. Then it is the business of the medical man and the psychologist to restore control to the patient by remedying the defect or tuning up the machine. Fundamentally their labours, whether on body or mind, consist in helping the patient back to the condition in which he can once more do without their services. There are some patients who cling to their help, refusing to take over again: unable, that is to say, to allow their plastic adaptability to reassume control.

Happily most of us win through—I cannot say without neuroses, but without obvious loss of balance in normal times. Nevertheless Freud has suggested that the claims society makes on the individual may become so high as to be too much for him. He thinks that, in this sense, we in our day may be "living beyond our means." Our failure in times of strain to avoid civil and international strife, to check sadistic cruelty to the helpless, and to curb sexual license, may be a sign of widespread neuroses. Study of their origins is our only hope of control. Freud himself was well aware of this. His aim in all his long labours was, in Flügel's words, "to face courageously the less civilized and respectable parts of man's nature, not in order that we might more readily indulge them (as some critics seem to have supposed) but that by understanding them, we might control them in the light of reason."

IX. THE SELF AND THE WORLD: SEX IN LIFE

The heart of the problem of wise living is, then, how to achieve the knowledge of both self and not-self which will enable us to adjust ourselves effectively to the full realities of our human environment.

Here, dealing with matters which so intimately touch our personal pride, we reach the very stronghold of rationalization. In infinitely twisted ways we evade recognizing the facts about ourselves. The bold front assumed by the inwardly shy person is a "defence" mechanism. Boastfulness about love-affairs is often a "compensation" by means of which the boaster conceals, even from himself, his own impotence. Our very illnesses are sometimes, without our knowing it, of our own making: a giving up of control to "escape" from a troublesome situation. The sort of scandal we pass on about others usually consists of something we would really like to do ourselves: in technical language we "project" our unacknowledged wishes into others. Our "regression" to belief in the magical powers of love-charms is an indication of infantile characteristics still lurking in us. In short, the last thing we are ever likely to know fully is ourselves.

The second part of our problem of adjustment to our environment is wider than is commonly realized. For animals, the environment means little more than their physical surroundings: but for man it is much more than that. We have to adjust ourselves, of course, to the world of nature, as scientific exploration increasingly discloses it to us: but we must also adjust ourselves to the world of society, of interlacing social relationships; and to the world of values, both moral and aesthetic.

In matters of sex, as in all other human affairs, the need for this threefold adjustment can be clearly seen. It has taken many ages for men to realize the bare facts of procreation. Primitive peoples often entertained the most curious notions concerning it, and these are repeated in the fanciful imaginings of children or embodied in old wives' tales. For biological facts, mankind has always had "a bad ear for new music." It has taken many generations to persuade grown men and women that fresh night air is not harmful. Apparently it will take many more before mankind rids itself of its superstitious fears about sex. Ignorance of sexual needs, and exaggerated reactions consequent upon their denial, stand in the way of a reasonable attitude on the subject. The training of girls in middle-class boarding schools which aims at the sex-ignoring athletic or scholastic ideal, produces a dangerously negative attitude to sex; whilst homosexuality and cynicism are the dangers run in

corresponding types of boys' school in which the normal emergence of sex is driven underground. It is not surprising that a healthy robust sexuality is the exception, especially among the more highly educated classes in the community.

These are not the only obstacles to progress. Even when we know and acknowledge the facts about any field there still remains the difficulty of applying that knowledge in our social arrangements. This brings us to adjustment to the world of society. First of all, we must remember that men are necessarily born into some sort of community. There have been many cultures before our own, each with its own contribution to human life. Each, too, has been a kind of pattern to which the activities of its members have had to conform to be effective, much as the poet conforms to the sonnet shape in order to write a sonnet. These limitations are, indeed, an essential factor in the final achievement. Life is like a game of bridge. The cards dealt out to us represent our inborn endowment—potentialities only until we make use of them. The rules of the game, which have to be learnt afresh by each generation, are the interlocking systems of habits and beliefs which go to make up the social tradition into which we are born. What we make of our hands will depend upon how, inside the rules of the game of life, we apply whatever knowledge and skill we have been able to acquire.

The rules imposed by a given culture at any time may lag behind men's knowledge. This is the source of the weightier hindrances to biological sanity. Thus, with us, the sexual arrangements of our day are based on mental habits and beliefs surviving from an earlier pastoral level of civilization in which women were a possession, part of the live-stock on the farm. The barbarities of our legal code concerning marriage, our inhuman attitude to illegitimacy, our savage punishment for sexual peculiarities which do little or no social harm—all these draw their strength from obsolete social traditions. In short, the social arrangements of man at any given place and time upon the earth's surface may fall below human sensitiveness. I suppose it is true that our codes must, in the nature of things, always fail to express our vision of what might be: but there is no need to suppose that morality is to be found essentially in what is past rather than in our striving towards a future better adapted to human realities and human needs.

It is here that we meet the necessity for adjustment to the third world; that of values both aesthetic and moral. We have said earlier on that man, through his intelligence, has the power not only to adapt himself to his environment, but even to change it. He can

progress: and this involves, besides the living acquisition of a material and social culture by the new generation, its modification in the direction of increasingly sensitive adjustment to an ever-changing world. Such betterment can only come after the application of real moral judgments.

There is a common tendency, however, to assimilate uncritically what is seemly and good to an existing moral code. This has an unfortunate consequence. For our young men and women, looking frankly at the effects our present code produces, judge its failure to be a failure of morality itself. They even begin to doubt whether there is a moral order at all. This is unnecessarily sceptical. If law and morals are, so to speak, the solidified expression of human achievement in its struggle with the primitive, then each new generation must make this conquest afresh. That is what Kant meant by saying that you can only enter this realm of values "by voluntary enlistment." This clearly makes sexual ethics a more difficult business; but it also makes it more interesting and vital. I cannot help feeling that there is more hope for the future if we appeal to the heroic strain in youth, instead of relying unduly upon the mechanical supports of ready-made systems.

Moral codes have, in fact, often served no real need except that of social order. Even religion in its less reflective forms has too often been, according to Dean Inge, "a powerful antiseptic which preserves mummified customs that have long outlasted their usefulness, and otiose dogmas that have long lost their vitality." He adds that the history of customs and beliefs which have been put under the protection of religion is very instructive; but he goes on to argue that we must not judge religions, any more than other movements of the human spirit, by their beginnings instead of by what they may become. Because ugly practices (like widow-burning, child-marriage and stoning for adultery) have been protected by religious systems, it does not follow that a healthier attitude on sexual affairs must not rely, ultimately, upon moral and aesthetic judgments of some kind. Scientific knowledge does not, of itself, liberate men when their souls are cowed and perplexed.

This is brought home to us if we remind ourselves once more that man has already won for himself much more knowledge than he seems able to apply to social affairs. We have seen this in his failure to achieve biological sanity in the realm of sex. It is also true of other fields. We know that modern war between nations is a destructive horror, and we have explored the international arrangements which might help to prevent it. We have planned "moral equivalents" to

war which would demand the same initiative and self-sacrifice, but directed to the ends of humanity. It is all of no avail. Wisdom is not knowledge alone, but knowledge *plus* the power to apply it. How does this dreadful paralysis of the will which prevents us from applying knowledge to social and international affairs come about?

One reason is that this can only be done by changes in cultural and national traditions which would make modifications of their codes possible: and men have always been haunted by a sharp sense of cultural insecurity. They dare not loosen the bonds of the existing tradition because they do not know where that process will end. It is this which makes men shrink from every advance, and clutch at immediate safety. It is fear which is the villain of our human drama.

If that were all, we might hope that someday we should be able to kindle an inner light in men from the torch which thinkers, poets and prophets have passed down to us. "But if the light that is in you be darkness, how great is that darkness?" The fear which forces men into demands for security and leads direct to war comes from the recesses of our being. The dark armies of our hidden selves are always mobilized. The call for security, or for a scape-goat, is the neurotic expression in conscious life of a repressed but still living aggressiveness. In the same way the fear which appears in our conscious activities as prudery is the product of sexual repressions; and prudery rots all attempts at sanity in sexual affairs.

Let us take an example of how it brings in its train the very things it dreads. In most cases a boy experiences his first clear sexual pleasure about the age of puberty when he masturbates, with the image of some girl known to him in his mind. If the act is heavily condemned as sordid and disgusting, the boy becomes reluctant to associate it with anyone he really esteems, and pictures instead someone whom he, for social or other reasons, despises. He is thus led to dissociate tender emotion from sexuality (the ground for vapid sentimentality about love); to connect the sexual side of love with common women (the beginning of the attitude which creates prostitution); and to divorce sexual ideas from women whom he respects (the basis for the common male view of the good woman as a sort of cross between an angel and an idiot—the origin of the "double standard" for men and women). Prudery, precipitating what it dreads, is unwittingly the enemy of morals.

The struggle towards light is one, therefore, which is not clear-cut and explicit. One of the combatants is shrouded in obscurity: and all conflicts in which this occurs result in the unhappy mental

state we call worry. This in turn spawns that most devastating of all hindrances to effective action, a set of exaggerated inhibitions based on phobias or fears. Man, then, is a creature divided against himself. In flashes of genius he reaches heights immeasurably beyond his animal ancestry: but when he clutches, with clumsy hands, at these visions, and tries to embody them in a new social order, he finds that they are weapons turned against the deep, self-centred animal stupidity to which he is also heir. He is, in the words of Fulke Greville, "Born under one law, to another bound . . . Created sick, commanded to be sound." The physiological aspect of this disjunction is expressed in Stekel's work on *Impotence* by the phrase "The brain avenges itself against the spinal chord."

Is there then no hope? Is the human race doomed to impotence by aggressive and sexual neuroses implanted in each generation in turn; or (to put it in another way) by early inhibitions produced by conditionings at the lower unreflective level. I do not believe so. I believe that a generation may arise capable of more knowledgeable handling of children in their first few years of life, so that these neuroses are lessened. A return to the frank and unspoilt enjoyment of our animal bodies, lost to us since the times of Ancient Greece, would decrease the lustfulness we mask by our shames. I believe also that men may be able so to modify their treatment of children in later years of childhood and adolescence that our inner pugnacity, hidden under a veneer of docile and dangerous subservience, will be decreased.

The difficulties here centre mainly round the child's attitude to his parents, and to all they stand for in the social order. If we could create a generation of young people in which the negations of self-abasement were redressed by a more positive attitude towards their parents, we might avoid some of the troubles being stored up for them in the future. I put forward a suggestion for a possible line of hopeful advance. Suppose that, in our training, we designedly made continual demands on our children, suited to their age and capacity, and thus called forth their power of helping us. Suppose we encouraged in them the thought that one day *we* shall be weak and powerless and pitiful, and need their protective care just as they now need ours—then an attitude of greater equality and balance might well be produced, and might have profound psychological consequences.

What I have in mind is the encouragement of cool and independent benevolence towards parents: the kind of relationship which exists between good friends on a footing of equality. This would be

based on, but quite different from, the primitive possessive attachment of son to mother, and daughter to father. If emotional fixation of *that* kind persists it means, as we all know, that the "good" son or daughter makes a bad husband or wife. Indeed it is the hot possessiveness of family ties which, carried into later life, form the breeding ground of that infantile jealousy so universally destructive of fully adult sex relationships.

Children should, in short, be given more encouragement to emancipate themselves and stand on their own feet as independent individuals: to substitute for the external sanctions of the super ego, the free sanctions of conscience. They might then be less at the mercy of gang "leaders" who offer moral and intellectual blinkers as a remedy for despairing shiftlessness.

A deliberately fostered tradition, not precisely of ancestor worship, but of some consciously constructed, reasonable and aesthetically satisfying equivalent, would be useful here. It is possible that the placidity which seems to have characterized Chinese life for over a thousand years may have been the product of their respect for old age and pride of ancestry. It is significant that the tendency, in our era of confused alarms, is all the other way: towards passive acceptance of all that comes from the family, and callous insensitivity to making any sort of return to it.

Perhaps in these ways, or in others that the wit of man may devise, there will arise a generation able to obey the injunction "Be not afraid"; capable of marching breast forward towards the future. An age in which plastic intelligence will take control of the mechanisms of knowledge and action. This is not impossibly visionary, for though (as Freud has said) the voice of reason is a soft one, "there is something about its weakness. It never ceases until it has gained a hearing."

X. THE FUTURE OF SEX: THE ART OF LOVE

When that time comes we may expect that men will lose both their uneasy fascination for sex and their fear of it. One possible consequence will be that the subject will be treated with less heavy-handed jocularity. Sexual jokes depend for their explosive effect on repressions which will have lost much of their power. Love will still be joyous but it will be the joy of high spirits, not of released tension. Love will still be gay, like the spontaneous laughter of children, not depending on a sly wit to make it so.

With the smutty will also disappear the genteel. For gentility, which deludes itself that it is control of the primitive, is really a

denial of life. Men and women in this new age will believe that sex, like other primary human appetites, is not bad in itself but only when used out of its proper place or beyond its due degree. They will condemn the savage dictum of St. Paul, "It is better to marry than to burn," which reduces marriage to a second best, the best being perpetual virginity. Some people there will be, no doubt, who are not concerned about sex: but they will not need to pretend otherwise, in order to secure economic or social advantages. There will be others who, for a variety of reasons, will still persist in mortifying the flesh and preserving their virginity by (to quote Guyau's phrase) the method used with certain fruits—the process of dessication.

Ordinary healthy people will know that to discard sex means lack of either sap or balance. They will hold, with Bernard Shaw, that no political constitution will ever succeed, or deserve to succeed, which does not include recognition of an absolute right to sexual experience. The manner in which this experience is expressed will vary widely, both for men and women, according to the culture-pattern they are born into. But the puritanical fear of enjoying the good things of life should in time disappear from their minds, and they will enjoy sex as they enjoy food, wine, music and flowers. They will not regard frank delight in sexual intercourse, any more than hearty eating, as indecent or ungenteel; but they will *not* hold the view, common in our day, that it is unnatural not to give free rein to every sexual impulse. This travesty of psychological teaching, and the license it excuses, will seem as strange to them as the gross meals of Tudor times do to us. Both the glutton and the voluptuary lack the controls of temperate eating and sexual continence which are essential to the gourmet and the lover.

The freer age towards which we look will have unburdened men of many of their ancient taboos. A more scientific attitude to sexual matters will have rid its young folk of that sense of guilty excitement about sex which characterizes our generation. May not these greater freedoms, however, create the danger of love becoming a mere recreation, a lightly held pastime degenerating into that deadly dull thing, a cold and unimpassioned indulgence? I believe the answer to this question is to be found in a suggestion of Havelock Ellis, to whose penetrating judgment on these subjects we owe so much. Even in those who work for sexual enlightenment, he said, there is rarely the faintest recognition that "the one thing essentially necessary is a knowledge of the art of love." As soon as men realise this, a positive and rational check upon license and frivolity is assured. For it is only by deliberate discriminations and slowly perfected controls that

higher levels of skill in any art can be achieved; and the highest level of all, as we have seen, involves the whole creature.

The implications of this point of view are two-fold. It concerns the relation between two lovers; and it concerns the race. It is clear in the first place that once we view love as an art it has a claim to independent existence, quite apart from its connection with procreation. Does such acceptance of sexual arts for their own sake mean detaching sex from its biological end, with consequent danger to the race? Not necessarily: for unless a successful erotic life can be achieved between two people no complete and lasting union, such as would provide a firm foundation for the duties entailed by procreation, can be expected. Yet we leave this completely to chance, so that most folks marry without even the most elementary idea of the differing erotic needs of men and women. Balzac, indeed, compared the average bridegroom to an orang-outang, trying to play the violin.

If we really believe that permanent unions are the best means of providing for the individual that canalization of the sexual impulse essential to its reaching the fullest intensity, and for society the best conditions for the upbringing of children, then we shall be eager to bring into being the factors which make for lasting happiness in such unions. Access to information on the art of love will be one; another will be some way of ensuring, by freer relationships between the sexes, that first-hand individual choice which is necessary for effective sexual selection. Somewhere, somehow, men will learn to appreciate both sides of sex. It will become at once more delicate, more sensitive and more passionate: and will serve the biological end of procreation more effectively by becoming so.

An interesting objection to this view, that to value love for love's sake helps rather than hinders its procreative function, has been made by J. S. Krutch. He points out that it is only because the taste-buds on the tongue happen to be connected directly with the higher brain, and so send sensory impressions into consciousness, that eating can be made a ceremonial which enriches life. It is the same with sexual union. Sensory impressions from the genital organs, and from other parts of the body concerned in the act, enter consciousness; so lovemaking can develop into an art. It is quite different, however, with the *results* of eating and intercourse. The absorption of the food we eat, like the procreative process following conception, goes on without the intervention of consciousness. Consequently, though it is conceivable that man might live for eating or live for love, it is absurd to suppose that he will live to digest or to gestate. Krutch's

facts are right, but his conclusion is wrong. Men and women *do* desire good digestions to enjoy their food; and they *do* desire offspring, as anyone can see if he looks around his own social circle at the many disappointed couples who would give anything to have children.

There will of course, be individuals in this future world whose genius lies outside sex; people who deliberately set both love and children aside in order to devote themselves to some other, central passion of their being. This will be more a matter of real choice than it is now. In our day we owe more than we can easily assess to those, especially women, who have thus directed their energies to social and cultural work of the greatest value: but this has its sinister side (both in the work done and in those doing it) because it has too often been the result of forced celibacy, not one naturally guided by personal gifts and inclination.

Men have not been as bound as women in this. They have, none the less, been influenced in our modern societies towards an unsatisfying divorce of love from life; with the result that their main masculine energies have been directed to the fields of political ambition, commercial gain and war—sex being an aside or a relaxation. For too long, the sociologist Tarde says, it has been the predatory male in these domains, as in that of sex, who has taken the centre of the stage. Tarde has pictured a future in which this will be changed, because greater social cohesion will have been achieved both inside and outside the State. In the fulness of time, he suggests, disunity between sex and life will disappear; and, in love, the Don Juan type will be replaced by the Virgilian lover for whom love is not a thing apart but a way of life embodying its best and highest activities. Women have always, as child-bearers, approximated to this wider ideal.

If social and economic arrangements are such that children can once more become a delight and not a burden, and if the world into which they are born be one which we should wish for them, then men and women will not deny their procreative natures, nor shirk their racial responsibilities. They will discover in these a noble double duty: that of fostering in their children's minds, for the sake of mental health, concern for their forebears; and that of inculcating in them a sense of loyalty to those who will follow after, as a reason for begetting a physically sound progeny.

CHAPTER FOUR

SEX AND THE FAMILY IN PRIMITIVE SOCIETY

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I. VARIATIONS IN PRIMITIVE CULTURES

WE live in stormy times. Master of the material world, civilized man is the helpless victim of violent and conflicting forces generated by his own social order. Our civilisation is racked with contradictions that penetrate to the inmost depths of our personal lives. For the cracks in western civilisation are shown up not only in the economic discord and political dissension of our time but in the clashing ideologies that mirror them and in the conflicting values that compete for our allegiance. Like our economic and political organisation our intellectual and moral life is in a turmoil.

These are matters of pressing urgency for every one of us. They affect our bread and butter, our amusements, our health, our education and upbringing. They enter deeply into our most intimate and private life. For society is nothing more than the sum total of its individual members and the relationships between them; and to carry on his life satisfactorily each person has to reach an adjustment between his bodily needs and mental impulses on the one hand, and the demands imposed on him as a member of society on the other. It is no easy task to reach a satisfactory adjustment in modern European society even on the humdrum level of breadwinning. Far more difficult is the problem of intellectual and emotional adjustment in a society which offers us a dozen different philosophies of life; and nowhere is this more apparent than in the sphere of family relationships and of sexual life.

Why is this the case, and how are we to cope with it? Various aspects of this question are dealt with elsewhere in this book; but a complete answer—as complete as modern science can as yet provide—cannot be given merely from an examination of the conditions prevailing in our own civilisation. We are apt to take our own customs, conventions and morality for granted and to attribute failures in sexual and family life to innate defects of character or to original sin; or else, professing to be rational and objective, we

throw the blame on the malorganisation of our social and economic life. Is monogamy the natural form of human mating, as eminent ecclesiastics frequently assure us? Is divorce a necessary institution in social life or merely the product of depravity? Is the family really the foundation of society, as our statesmen never tire of declaring, or merely a result of our peculiar economic system? These and dozens of similar questions require an answer before we can establish precisely what is the function of sex in the development of the individual, what is the significance of the family in the social order, and what parts are played by innate endowment and by the social environment in the adjustments and maladjustments of sexual and family life.

It is not so difficult as it may seem to answer some of these questions, at least provisionally, in an impartial and objective way. Mankind has tried out, with more or less success, innumerable forms of social life. Looking only at the contemporary world, we find scattered over the five continents and the seven seas, hundreds of human societies, some consisting of only a few scores of souls, others of hundreds of millions of people. Amongst them we find a tremendous variety of forms of social life. Their ways of gaining a living, their forms of political organisation, their religious beliefs and practices, their customs, conventions and moralities differ strikingly not only from ours but also from one another.

Most of these societies we describe condescendingly as "savage" or "primitive." They are indeed primitive in that they have never discovered the art of writing, that they lack the technical instruments and resources which experimental science, that unique invention of Western civilisation, has given to us, and that money, as we know it, has no part in their economic life. In fundamentals, however, they are no different from ourselves though they may be black of skin and have crinkly hair, and wear nothing but a wild beast's skin. The lowliest Australian aborigine must eat and drink and reproduce his race. His body functions and his mind works with the same equipment as our own, though their activities are directed towards totally different ends and are expressed in customary modes of behaviour extraordinarily different from those prevailing amongst us. In particular, primitive people like ourselves live in organised societies, subject to specific codes of legal, political and moral conduct. They all have that distinctive component of human social life which animals lack, culture—a body of knowledge and skill, beliefs and practices, customs and conventions, language, tools, and so forth, which must be transmitted from generation to generation by the

process of education. By comparing the various ways in which similar situations and problems are handled in different primitive cultures and in our own, we can arrive at some idea of what are the contributions of inborn human nature, of the necessities of social life and of culture to the diverse modes of behaviour we find among mankind.

All human societies have to reproduce themselves to survive, not only in the physical sense of replenishing the stock continuously but also culturally, in that they have to keep their cultural heritage in being from generation to generation. The root of physical reproduction is sex, of cultural perpetuation the nurture of the young. These two factors, working together in many respects but in opposition in others, are the core of institutions, customs, and rules of conduct of vital importance in every human society. It is of great interest to note that many ways of handling the problems of sex and reproduction which occur in our society as the experiments or, some would say, aberrations of individuals or of eccentric small groups, are, in many primitive societies matters of established custom. Those aspects of sexual life which we leave to self-control are, in many primitive societies, subject to social control and *vice versa*.

So varied are the sexual and reproductive institutions of primitive peoples that it is impossible to generalise about them. Moreover, it is only recently that scientific anthropologists have given attention to this aspect of primitive cultures. One thing, however, is clear from our present knowledge: in the great majority of primitive societies sex is explicitly recognised as a fundamental fact of human life and a tacit conspiracy to banish it from the ordinary, every-day interests of men and women would be unthinkable. In some primitive societies this respect for the sex impulse takes the form of elaborate and solemn religious cults as sacred to them as the rites of the Church to a Christian and as significant in their social and personal lives. Frequently the paraphernalia of these cults includes phallic symbols, as among some tribes of the Guinea Coast of Africa, and the ritual includes celebrations denounced by Western visitors as sexual orgies. Primitive people tend to be more consistent than we are, and when they say that sex is a gift of their gods to be rejoiced in and revered, they show that they mean it. On the other hand, in many primitive societies the open recognition of sex is shown merely in the complete absence of pruriency with regard to it and in the ease with which it is referred to in all circumstances.

I have been speaking of the majority of primitive societies; but it should be mentioned that attitudes towards sex strongly

reminiscent of Puritanism in its heyday have been observed in some primitive societies. The Manus of the Admiralty Islands, for instance, make a mystery of sex which borders on the morbid. They surround it with secrecy and shame, and it is not surprising to find that frigidity among married women is common.

The more normal attitude prevails among the Trobrianders described by Malinowski, among many African tribes and among a number of American and Indian peoples. Looking upon sex as a natural, delightful and precious human proclivity, such peoples take it for granted that children and even infants should display sexual interests and impulses. By observation and from the talk of older children and adults, quite young children soon become fully acquainted with the facts of sex and procreation. Courtship, marriage and sexual relations frequently figure in their play, and they begin to have more or less serious love affairs at adolescence. In many of these societies it is the custom to have special club-houses where the youths and maidens meet at night, free from the supervision of their parents, to carry on their experiments in love-making. There is nothing binding about these juvenile liaisons, but, as Malinowski points out, they frequently ripen into the lasting bonds of marriage.

It should be stressed, again, that not all primitive peoples permit such sexual freedom to the young. The Manus would be shocked at the idea and the people of Bulae in the Solomon Islands keep boys rigidly separated from all contact with the opposite sex from an early age until their attainment of manhood. Again, the freedom to experiment does not imply the shameless flaunting of sex or unrestricted licence. Lovers maintain their privacy even in a club-house and infringements of modesty in behaviour and apparel are severely frowned upon. Among the Tallensi of the Gold Coast women go naked until the birth of their first child; but they are taught from childhood to sit and walk and stand in such a way as not to expose the private parts.

II. ATTITUDE TO SEX IN EDUCATION AND MARRIAGE

In primitive society the sexual education of the young is not always left to their own curiosity and enterprise. In Dahomey, as in many other parts of Africa, girls receive regular tuition in matters of sex from specially appointed women, as well as in the duties and responsibilities of marriage. In very many primitive societies, when a girl reaches the age of puberty she is initiated into the status of womanhood by special rites and ceremonies. Her fecundity, the

most vital fact in her life, may be held to depend on the due and proper performance of these rites. Hence they often abound with sexual symbolism and include periods of direct or indirect instruction in sexual knowledge and marital duties. Boys, too, are ritually initiated into manhood in many tribes, both in Africa and elsewhere, and the theme of sex is often prominent in these ceremonies.

Whatever the view taken about the sexual experiences of unmarried youth may be, marriage introduces a significant and far-reaching change in the individual's sex life among all primitive peoples. The simpler peoples as a rule realise plainly a point which our sexual ethics have not yet fully recognised. It is that sex and marriage, though indissolubly connected with each other, are nevertheless quite different things. They distinguish, more often in their institutions and customs than in so many words, between the pleasure-giving and the procreative functions of sex, between the psycho-physical gratification it affords and the social responsibilities it involves. Thus in the Trobriand Islands premarital pregnancy is as severely reprobated as premarital sexual freedom is readily tolerated. In many African tribes, as for example the Bantu of South Africa, unmarried girls and their lovers practise a modified form of sex relationship to avoid the heinous misdemeanour of prenuptial pregnancy.

Marriage, as these examples suggest, is the essential pre-requisite for bringing children into the world. Modern research has shown that this rule holds in almost every known primitive society. The exceptions are due to peculiar circumstances. As with us, marriage establishes more or less permanent sexual ties between the partners and legally sanctioned sexual rights over each other. But the idea that its primary function is to legitimize sexual relations would be derided by an African or a Melanesian. Sexual motives enter into marriage, both in the choice of a mate and the marital relationship among primitive peoples; but they have not that overwhelming significance to which they have grown in our culture. The European conception of romantic love as the all-sufficient starting point and the firmest foundation for a happy marriage has no counterpart in the ideas of most primitive folk. This does not mean that they have no standards of physical beauty or show no sexual preferences, nor does it mean that they are incapable of the kind of lasting heterosexual attachments which we call love. On the contrary. The point is that they do not regard marriage as the culmination of being in love, or love as the supreme justification of marriage. In their values the social aspect of marriage looms largest; that is, its effect on the

social status of the partners and its significance as the starting point of the family.

In primitive society, as a rule, marriage is eagerly desired by both sexes, even where premarital sexual gratification is unrestricted. For marriage marks the attainment of full adult status. In many societies a man is not legally and economically his own master until he marries, sometimes not even then but only when he has established a family. In societies like the Zulu, or Masai, of East Africa, which had an elaborate military organisation, warriors were not allowed to marry lest they be distracted from warlike pursuits, and the cares and interests of home and family undermine military discipline. They were allowed to marry only when they emerged from the warrior grade. Marriage indicated their emancipation from the rigid discipline of youth and with parenthood they entered into the grade of elders.

Marriage brings about even greater changes in the status of a woman. She is, in many cultures, legally under her husband's authority, but this is never as absolute as that of her parents. She has precise rights which her husband can be compelled to yield to. She becomes, at first in a minor degree, perhaps, but gradually more completely, the mistress of her own home with a definite voice in its affairs.

There are also a number of more commonplace and practical but equally strong motives for marriage in simpler societies. Among many African peoples, including the Tallensi, the unit of subsistence is the household, and the division of productive labour is such that men's work and women's work are complementary and indispensable each to the other. I knew several cases of young Tallensi men who were desperate for a wife not because they were "sex-starved," but because they could not feed themselves properly or carry on their economic activities adequately without a wife's help. They courted every eligible girl in the neighbourhood; and it is interesting to note that in the ardour of this entirely licit, socially approved quest, they seemed to have no time at all for sexual diversions. It is very rare for a physically and mentally normal man to remain a bachelor all his life and an "old maid" would be regarded as almost a monstrosity in such a society.

This emphasis on the social implications of marriage explains many of its most widespread features. We know of primitive societies in which both pre-marital and extra-marital sexual relations are considered to be nobody's business but that of the individuals concerned, provided that they are not breaking a moral or ritual rule. We know

of no society in which a marriage can be concluded without public cognisance or something analogous to a legal formality. It may amount to nothing more than the couple's openly setting up house together and thenceforward being accepted as man and wife; or it may involve elaborate ceremonies, feasts, and economic transactions. The end achieved is the same.

This is also the main reason why parents very often have the dominant voice in the selection of a spouse for a son or daughter. Infant or child betrothal of both spouses or, more generally, of the wife is one device safeguarding the control parents exercise on their children's choice of a mate, or the right of one man to several wives. Where demographic facts, polygyny, or the preferential rights of older men to wives leads to strong competition for wives, child betrothal is a method of ensuring wives for the young men. It is often claimed that it enables a girl to become gradually adapted to the new household and to the new social relationships which will be her main interest for the rest of her life.

Usually we find that infant or child betrothal is not irrevocable. Loopholes are left for either party to escape, for human idiosyncrasies are liable to wreck the best laid plans. Individual differences in personality are as pronounced among primitive peoples as among ourselves. Law and custom may back up a father's right to dispose of his daughter's hand or to arrange his son's marriage; but if the girl, on reaching a marriageable age, takes a dislike to her prospective husband and refuses him obstinately, her father may at length have to give in. This often happens among the Tallensi, for example.

Other prudential motives concerned with property, rank or political advantage enter into primitive marriage as frequently as they do into the matrimonial arrangements of some sections of our society, and reinforce the control exercised by parents and elders. But the main reason for this lies in the structure of the family and the way in which marriage affects this structure. To begin with, the right to decide about their marriages is often the strongest sanction of a parent's authority over his or her children. It implies, however, a correlative obligation on the parent's part to provide a spouse for a child. Thus it helps to hold together parent and child just at the time when the latter is most apt to break away from the family.

III. METHODS OF STABILISING MARRIAGE

Again, marriage in primitive society creates a new set of contractual, moral and personal relationships not only between the spouses but also between their respective kinsfolk, including both

their lineal and their collateral kin—parents and brothers and sisters, as well as uncles, aunts, cousins and more remote relatives. Paradoxically, marriage, the essential starting-point of the family, is also its chief dismemberer. Sometimes it separates one or both spouses physically from their families of birth. It always creates new emotional ties and social and economic obligations which run counter to the ties and obligations they have as a son or a daughter. Hence a common feature of primitive marriage customs is their recognition of the element of strain and tension in the marital relationship, at least in the beginning. It is often easy to see how these customs give expression in a conventional and symbolic form to such tensions and so ease them.

Through their ties with husband and wife, respectively, the kinsmen of the partners are also involved in this relationship of strain and tension. The woman's kin see her pulled towards her husband's side, the man's kin see him drawn into his wife's sphere of loyalties. There is always a latent hostility between the two groups, enhanced, very often, by the fact that they are bound to belong to mutually exclusive social groups.

These tensions due to the breaches caused in the pattern of ties and loyalties built up around the primary human relationships of parent to child and brother to brother or sister are the basis of the in-law avoidance customs so widespread among primitive peoples. The mother-in-law bogey, often enough the arch-wrecker of married happiness in civilised countries as well as the subject of music-hall ribaldry, is a stern reality to an Australian or African native. He is compelled by custom to avoid all direct contact with her. Similar if not stronger taboos regulate the relations between daughter-in-law and father-in-law, or between the two sets of parents-in-law. These tensions appear most conspicuously in the sphere of sexual relations, the most exclusive and personal bond between spouses. Generally speaking, sexual intercourse between parent-in-law and child-in-law constitutes a moral offence of the utmost gravity in primitive society.

Here should be mentioned, also, an extremely widespread and much-debated custom, the payment of bride-price. It consists, generally, in the handing over of a stipulated or customary payment in goods, livestock, etc., by the groom's kinsmen to the bride's at or before the marriage. It is utterly wrong to regard this as the purchase of a wife. Very often, for instance, these marriage payments cannot be used for ordinary economic purposes but must be reserved to get wives for members of the family which has lost daughters by marriage. The bride-price is really a legal instrument, establishing

the legality of the marriage and the legitimacy of offspring that may result from it. Above all, it helps to ensure the stability of marriage, since it must, as a rule, be returned on divorce. A woman can appeal to her relatives for support in the assertion of her matrimonial rights on the grounds that they have benefited by her bride-price, and it is the legal bulwark of a husband's rights and privileges. It is not surprising, in view of its important moral and legal functions, that the bride-price has, in most African societies, survived the attacks of both European culture and Christian missions.

It must not be concluded from what has been said before that marriage in primitive society is free of snares, pitfalls and perturbations. To marry in haste and repent at leisure is no uncommon experience in Africa, India or Melanesia. The neglected wife, the deserted husband, the inevitable triangle all have their place in the drama of primitive life. No student of a primitive society can avoid for very long coming across the problem of extra-marital sexual relations. It is too complex a problem to deal with here. The view taken of adultery in a particular society depends not only on the legal conditions attaching to marriage, but also on the sexual ethics, the ideas concerning kinship, the psychology of family life and the religious values prevailing in the society.

In a great many primitive cultures only sexual intercourse with a married woman is considered to be adultery. The woman's husband is wronged and has remedies that vary from culture to culture. It may be merely the right to inflict condign punishment on the culprit if he catches him in the act; or, as in many parts of Africa, he can claim material compensation for the infringement of his exclusive sexual rights over his wife. Thus the Ashanti of West Africa think of adultery as a kind of theft. The Tallensi, however, like some other peoples, add to this legal evaluation of adultery the idea that the woman is committing a sinful act which might cause supernatural disasters to fall on her husband and children. In spite of this, adultery is not, as a rule, considered to be a reason for divorcing a wife.

The adultery of a husband is usually in a different category. The wife has, for the most part, no legal redress, and it becomes a matter of moral censure only if the man's paramour is a relative by descent or marriage who is sexually taboo to him or if his act infringes other social or ritual restrictions. We know of societies in which women readily tolerate their husbands' intrigues if they are kept quiet, especially during periods when under tribal law sexual continence is compulsory for a wife—for example, if she is nursing an infant.

But in other primitive societies a husband's infidelity arouses violent jealousy in his wife and she will make his life a misery in revenge. This touches upon intricate psychological problems beyond our scope. We can sum up by saying that it is, usually, not the fact of sexual intercourse outside wedlock which primitive peoples censure or penalise, but the infringement of one person's sexual rights by another, or the incidental breach of social and religious rules.

If adultery seldom wrecks a marriage in primitive society, many other causes do. Divorce is an accepted institution in most simpler cultures though it varies enormously in frequency and consequences from one to another. The husband alone, or the wife or both spouses may have the right to initiate divorce. Parents and guardians, being involved in the larger network of relationships established by marriage, often have as strong a voice in divorce as they have in marriage. So also the grounds and the motives of divorce vary tremendously. Barrenness, sterility or impotence is held by many primitive peoples to be strong grounds for divorce. A lazy wife or one suspected of witchcraft will soon be divorced in Africa. Corporal ill-treatment may, though it often does not, lead a woman to leave her husband. In any case, divorce very rarely carries a stigma or prevents remarriage.

Of the many motives for marriage in a primitive society none is so important as the desire for children. Apart from any deeper psychological factors that may be involved, children are a vital necessity in the simpler societies, for their whole culture must be carried in the hearts and minds of living men. Otherwise it will perish. Besides, in a subsistence economy the only insurance against privation in old age is to have children who will support one.

The getting and rearing of children is the prime function of the family in primitive society. Marriage lays the foundation of the family, but the family does not properly come into existence until a child is born. Only then have the parents a common interest, a common emotional focus and an object of common responsibilities. Thus the family in primitive society consists essentially of father, mother and child. This unit, the core of the social structure of any of the simpler peoples, we call the elementary family. Modern research has established that it is a universal feature of human society. Fifty years ago a different view was common amongst the anthropologists of the time. It was thought that in the earliest human societies and in their surviving representatives, people like the Australian aborigines, the family did not exist. But this fallacy no longer persists except in the writing of some Marxists. It was due to

wrong ideas about the nature of the clan, which I shall explain in a moment.

To rear children means that they have to be fed and clothed and especially, educated, taught the knowledge, skills, and values which will equip them to be satisfactory members of their society. All these responsibilities fall on the parents in a primitive society. Thus the primitive family is of necessity a unit of economic co-operation, a fact to which I have already drawn attention. It must also have some degree of stability, which means that its members must be bound to one another by definite rights and duties, by sentiment and interest. Out of this arises a set of moral relationships holding between members of the family.

This, in broad terms, is the elementary family in almost any primitive society. But how does this picture square with that widely-advertised primitive institution of polygamy, or the less well-known but equally important custom of polyandry?

IV. POLYGYNY AND POLYANDRY

Let us look first at polygamy, or more accurately, polygyny. As is well known, in a vast number of primitive societies men are permitted to have more than one wife simultaneously. The wives of some African chiefs run into hundreds, and among the Tallensi, who are a typical polygynous society, I knew a man who had eighty. But this was exceptional. In such societies it is usually only the older men who have many wives. Young men rarely have more than one or two. The important point, however, is this: No matter how many wives a man has, every wife represents a separate marriage entered into by one man and one woman. Polygyny means serial marriage. The wives of a polygynist are graded in order of seniority, the oldest being the head of the household and having superior status to the rest. But every wife has her own quarters, reserved to herself and her own children only, and her precise share in the scheme of economic collaboration of the whole household as well as in the resources at its disposal. Every child has, therefore, only one father and one mother. Thus the polygynous family consists, really, of a cluster of elementary families with a common centre in the shape of a single husband and father. Sharing the work and play, the joys and sorrows of the common household, the wives of a polygynist nevertheless, never lose their individual social identity. They are prone, also, to watch one another jealously lest one be favoured unduly by their husband, and this tends to produce quarrels and animosities between them. A polygynist has to watch his step carefully in dealing

with his wives. Among the children of a polygynist there is a clear distinction both in custom and in sentiment between full brothers and sisters and half brothers and sisters, the former always standing together more firmly than the latter.

Polyandry is less common than polygyny. Where we find it, as among the Todas of India, it is usually a group of brothers or cousins who have a single wife or several wives in common. This is only one of a number of rights and duties which the brothers have in common. Their access to their wife or wives is not indiscriminate but is precisely regulated by custom, and every child born is ceremonially allotted to one man as its recognised father. This is irrespective of who is the child's physiological father. The polyandrous family is the obverse of the polygynous family and its core likewise, is the elementary family of father, mother, and child.

Why polygyny and polyandry are practised by mankind cannot be fully explained as yet. Under the influence of Christianity and of Western civilisation primitive peoples give up a great many of their old customs and beliefs. They cling most tenaciously to polygyny, openly or covertly, and this is a prolific source of maladjustment to them in the new conditions.

As we have seen, neither polygyny nor polyandry obliterate the fundamental fact of parenthood, that every child has only one true father and one true mother. Co-wives of a man may assist one another in caring for their children and often show great devotion in rearing the children of a deceased co-wife. But primitive people generally recognise that a child is best cared for by its own mother and that its physiological ties with its mother are unique.

A child's physiological mother is also its legal, socially-acknowledged mother, unless, as happens in some societies, it is legally adopted by another woman. Physiological fatherhood and legal fatherhood are not always co-terminous in this way. In primitive society the emphasis is chiefly on the latter. It is one of the fundamental principles of primitive social organisation that every child must have a socially-acknowledged—as we should say, legal—father in order to occupy its proper place in society. This has been called the Principle of Legitimacy by Malinowski and is the basis of the objection to premarital pregnancy which is found in most primitive societies. They put it in the form that a child cannot be properly reared without a father. What they mean is that a child without a socially-acknowledged father is socially handicapped.

This is most vividly brought out among people like the Trobriand Islanders and several Australian tribes. Primitive peoples have no

scientific knowledge of human physiology. A great many of them have discovered by empirical observation that conception occurs as a result of sexual intercourse. They know that it cannot occur without the participation of a male, though they are as ignorant as our mediæval forbears were of the exact process of fertilisation. The Trobrianders and Australians, however, believe that the male makes no contribution whatever to the conception of a child. Yet the Principle of Legitimacy is most emphatically held by them. On the other hand, it is equally firmly maintained by a people like the Tallensi, who know perfectly well what is the male's rôle in conception. Thus an adulterine child is legally and socially its mother's husband's child, not her lover's, and it has the same rights as any other child of its socially-acknowledged parents.

But the Principle of Legitimacy can be clearly understood only in relation to one of the most striking features of primitive society, the dominant part played by kinship in their social organisation. For the great mass of people in our society only the immediate family circle plays a decisive part in settling the social rôle and status of the individual. Most of us hardly know our collateral relatives beyond our parents' brothers and sisters and their children, or our lineal relatives beyond our grandparents. With few exceptions primitive peoples take account of a much wider range of relatives. It is essential for the conduct of their social life. The simpler the society the more its existence hinges on the organised co-operation of its members. This is achieved by the wide extent of the kinship ties recognised.

The closest personal and social bond known in primitive society is that which unites two full brothers or sisters. Growing up in the same elementary family and being of the same sex they have had the same education, have shared play and work since childhood, and continue throughout life to have a deep interest in each other's welfare. In particular, they have a deep interest in each other's children, which they indicate by speaking of them as "my children." Though his greatest concern is, naturally, with his own children, a man has similar rights and duties in relation to his brother's children as he has towards his own. If his brother dies, for instance, he will become their guardian. Thus from childhood a man's children learn to behave towards their father's brother in a similar way that they behave towards their own father. They speak of him as "our father," distinguishing him clearly, however, from their true father in practice and by means of circumlocutions. Thus if you belonged to a primitive society you would call several men "father" and, following on logically, you would call all their wives "mother," their

children "brothers and sisters," their grandchildren "sons and daughters." Moreover the same logic applies to your children and grandchildren. Two men whose grandfathers were brothers may therefore call each other "brother" and the children of one will call the other "father." And the same rules hold on the mother's side of the family. This manner of classifying relatives is not merely a matter of words. Each kind of relationship implies definite rights and duties, as well as emotional ties and sentiments, which function with greatest intensity and precision in relation to the closest relatives of a category and diminish in proportion to the distance of actual blood-relationship.

This system of classificatory kinship is generally more extensively developed on one side of the family than on the other. It depends on the principle of descent recognised in the society. In primitive society a person's social position is very largely determined by descent. It determines whom he will inherit property from or will succeed in office, what women he may marry, what religious observances he must comply with, and numerous other significant details of his life.

Obviously two main possibilities exist—either descent through the father (patriliny) may be stressed or descent through the mother (matriliny). Some societies lay the emphasis on patriliny for most legal, economic and religious purposes and attach only secondary importance to matriliny. Others have the reverse arrangement. In a patrilineal society the father has full control over his children, exercises discipline over them, transmits to them his property, his religious observances and his functions in society. In a matrilineal society it is not the mother but her brother who has this relationship with his sisters' children. He has the power and authority associated with the father in patrilineal societies and the children's own father becomes more like a devoted friend united to them by emotional ties only. The psychological consequences of such a situation have been brilliantly analysed by Malinowski.

The recognition of a line of descent in a primitive society is not limited to the immediate family, as in civilised society, but is usually carried back a number of generations. Thus we find a whole group of people claiming relationship with one another because they are all the descendants in the direct male line (or female line) of a single common ancestor or ancestress. This common ancestor may be so remote that he has become a mythical figure and many intervening generations have been lost count of. In any case, such a group of people is called a clan—a patrilineal clan if its members trace

descent in the male line, a matrilineal clan if they have a common female line of descent. Members of a clan may live together in the same place or they may be widely scattered and hardly know of one another's existence. They will nevertheless call one another brothers and sisters if they are of the same generation, they will all have the same clan name and, probably, certain religious observances in common, and they will stand together in defence of one another's interests. Whichever parent's clan a person may belong to by descent, he has important ties with the clan of the other parent. This is the basis of the Principle of Legitimacy. For through his legal father a child acquires his clan membership in a patrilineal society, and his ties with the father's clan in a matrilineal society. On these kinship ties he will rely, throughout his life, for all manner of co-operation and support.

V. KINSHIP AND BANNED MARRIAGES

The most significant feature of a clan organisation, however, is the rule of exogamy. Its commonest form is to prohibit marriage between members of the same clan. Frequently this implies the corollary that sexual relations between members of a clan are illicit or sinful, but a number of societies do not hold this view. The rule of exogamy is fundamentally a marriage bar not a sexual ban, but these two components of adult sex life inevitably react on each other.

Many explanations have been suggested for this custom, none of them entirely satisfactory. It has two obvious advantages. Firstly, it is the strongest sanction of the unity of the clan; for marriage, as we have seen, creates tensions which would split the clan into independent, if not hostile, subdivisions. Secondly, it forges ties of kinship between members of different clans and so expands the horizon of social co-operation. It should be noted, also, that exogamy does not mean the prohibition of marriage between blood-relatives. In many societies the preferred form of marriage is with a cross-cousin (mother's brother's or father's sister's child) who, though very closely related by blood belongs to a different clan. It would be absurd, therefore, to suggest that exogamy is an "instinctive" eugenic measure.

Primitive people themselves usually represent the rule of exogamy as an extension of the incest taboo, corresponding to the extension of the terms "brother" and "sister" to members of the same clan. A consideration of this momentous social institution brings us back to our starting point, the problem of the relation of sex to family life.

It is certainly the most complex of all the unsolved problems of human sexual life in its bearing on social organisation.

The taboo against incest is as universal as the family and has its roots in the structure of the family. Stated broadly, the incest taboo prohibits sexual relations between all members of the same family except those who are partners by marriage. Fundamentally, therefore, it bans sexual relations between parent and child or between brother and sister. Breach of the rule is one of the gravest moral offences and religious transgressions known in primitive society. As among ourselves, it is sometimes also regarded as a crime liable to the severest penalties. It is held in such awe in some primitive societies that the most onerous restrictions are imposed on any contact, however innocent, between brother and sister from infancy on.

The theory, held by Westermarck and others, that the incest taboo is due to an innate aversion to sexual intercourse arising out of long and intimate association from childhood is not tenable. If anything, the taboo could be interpreted to imply the need for strong social repression of the opposite tendencies. Malinowski has a more fruitful theory, the gist of which is that incestuous sexual relations would completely undermine the whole set of emotional relationships on which the stability of the family depends, hence they are banished from the family circle by stringent taboos. A theory of this type implicitly accepts the fact that sexual wishes are inherently directed towards close members of the family. But these wishes conflict with the ties of tenderness and affection between parent and child and between brother and sister which grow out of the social relationships involved in the nurture of children. They are incompatible, also, with the mutual obligations which bind members of the family. They endanger parental authority and filial respect and the solidarity of brothers and sisters. Hence the incest taboo is erected as the moral insulator of the family against the anarchic potentialities of sex. Herein lies the great and fateful paradox of man's procreative life, and therefore, perhaps of his very existence: that sex which is the germ of the family and thus of the physical and social continuity of any human society is at the same time the most dangerous foe of the family.

PART II.
SEX AND SOCIETY

CHAPTER FIVE

PARENTHOOD

By B. D. HENDY

M.A.

I. UNDERSTANDING PARENTHOOD

LOOKING at life as a whole, we see people approaching it from two widely different points of view. Some approach it scientifically, determined to make the best use of available knowledge and confident that the results of their endeavours will turn out more or less as they planned. Others approach it as an adventure, a mystery; they live by faith, rather than by knowledge; they attempt no accurate forecasting of events, and are prepared to abide by what turns up.

Those who strive to equip themselves as parents would be wise to make use of both approaches. They should not despise the accumulated wisdom and experience of the countless generations of parents which have gone before them; there are general principles based on experience which few would dispute. This chapter is an attempt to give expression to some of them, to put forward what has been well tried and found to work. But it should not be assumed that any such guidance will give them a real idea of what it is like to be a parent. Words can do little justice to the fundamental experiences of life, for life is bigger and deeper than knowledge or words, and those who take a part in life commit themselves to joys and pains that are individual and personal and real, beyond the power of thought to express.

Let us recognize, then, at the beginning, the limited value of *talking* about parenthood. Those who have not been parents lack the vital experience which would qualify them to talk about it. And those who have had the experience often lack the facility of expression to make their experience live to others. Some have had experiences so poignant as to numb in them all power of self-expression—griefs and psychic wounds not to be told in the open light of day.

Civilized man has strayed far from the instinctive basis of parenthood and is liable to approach it from a so-called matter-of-fact point of view: that is, he aims to look at it scientifically, intellectually, and self-consciously. In so doing he merely demonstrates how far he has strayed from reality, and how much his so-called facts are facts of the head and not of the whole man.

Those who decide *before* marriage that they will have no children (or many children) are being more than indiscreet; though if they have decided to *marry* with this outlook, it were better for them not to have children, for their marriage is unlikely to be a success unless it finds a new basis for its continuance. This attitude is treating life as man's plaything, obedient to his pleasure, rather than as a reality so profound that he must approach it with reverence and direct all his being, heart and soul as well as mind, to its understanding.

Parenthood is the normal consummation of sex life, the Alpha and Omega of it; for sex life begins its development in the first activities of the new-born child, and can reach no higher point than that at which the now grown-up individual is instrumental in bringing a new life into the world. Psycho-analysts know that the child is indeed father to the man. For instance, an infant which has undergone severe privations during breast feeding is likely to develop an unhappy pattern in its sex life when it grows up. If we wish to produce a generation of sexually normal and happy people, our first responsibility is to understand the fundamentals of normal mothercraft and parenthood. The Battle of Waterloo is said to have been won on the playing fields of Eton; many ding-dong battles against sexual difficulties in adolescents and adults could have been won quite easily in the nursery, when the main reaction patterns of the individual, in sex and character, were being formed. So the beginning of a right understanding of sex lies in an understanding of parenthood, that is, an understanding of the natures and needs of children.

The Needs of the Child

There is a curious paradox in our first attitude towards the new-born child. All normal parents regard a baby with a wonder and reverence akin to worship; but all parents recognize that the actual needs of the infant are simple, physical, tedious and messy. Yet no one should assume that love for the infant in any sentimental sense can take the place of careful washing of its "nappies" or of the sacrifice of one's social pleasures in order to be available for breast feeding at all costs. Neither should they conclude that because the baby is a purely physical problem, the issues at stake are any the less profound.

The worship of the baby springs from our inmost being, for we see with the inner eye of our intuition the wonders that are to unfold. So may a gardener tenderly watering an ungainly brown root be aware of the beauty of the tree or flower that is to come; so equally may he be aware of the deformity in the flower that would ensue from even a day's neglect or carelessness. The needs of the child are

at first purely animal; but the care of the child on this level is more sacramental than any other human activity, for it is highly charged with possibilities of growth and beauty, not only physical (these in the case of the gardener are his full reward) but also emotional, intellectual and spiritual. How much greater is the reward of those who till human ground and raise the flower of manhood and womanhood!

As the child grows he becomes increasingly capable on the physical level, able to feed himself, to control his exertions and to use his limbs; but as he becomes more independent in these ways his dependence on the parents (on both parents now) becomes in other ways greater. He is now emotionally dependent; he looks to his mother and father for reassurance and security to give him confidence in all the new enterprises which he is undertaking. Man's memory for this phase of his life is (mercifully or unmercifully) all too short; it is difficult for him in after-life to appreciate the exquisite charms and terrors of quite new experiences such as a child faces for the first time. Only the genius of the artist, the writer or the poet preserves them for most of us. He has the courage to re-create the experiences of childhood, as Robert Louis Stevenson, Walter de la Mare, Lewis Carroll, G. K. Chesterton, A. A. Milne and others have done; the lesser man shrinks from his early memories and is content to repress them and to be satisfied with what he is now. Thereby he may lose all effective contact with his own children and prove unsympathetic to their emotional crises and needs.

Given security, encouragement and the love that is the basis of normal family life, the child becomes more and more self-reliant; but in doing so he develops an increasing thirst for information, which is necessary to him that he may equip himself to meet life more adequately. The parents must now be prepared to answer questions; if they do so, a new intellectual bond between them and the child partly replaces the old bonds of physical need and emotional dependence. A critical point in the life of the parent is now reached, the point at which it has to be admitted that the child no longer looks to his parents alone, but has need of other people and other surroundings. School life, school learning and school friends occupy much of his attention; sacrifices are required of the parents, who must provide the means for his education and entrust their child to other hands. Even if the State provides the education, there is still the feeling that one has lost something of one's child; perhaps it is still more true in this case, for one has not had the same freedom of choice in selecting a school to send him to.

Parents are "Mediators of Reality"

The earlier school years are primarily intellectual and practical; mastery of the natural world is occupying all the child's attention. But when he reaches the age of eleven or twelve there is a subtle change, foreshadowing puberty and adolescence. The child becomes still more strange to those at home and incomprehensible to himself; he no longer belongs even to himself—still less to those who have nurtured him; for the creative mystery of sex has begun to possess him, and threatens to overwhelm him. Now his need of help and understanding is greater than ever before, but it cannot be met along the old lines. He is a new kind of person, and he needs a new kind of parent; not merely one who can enlighten him about the physical facts of sex, but one who understands the mysteries of sex and the mysteries beyond sex—the mysteries of losing oneself in order to find oneself, and being part of a whole that is far too big to be self-consciously mastered and admits of no other attitude than humility and reverent contemplation.

The task of the parents, then, is ever changing. Parents are mediators of reality to the child on gradually ascending levels; and while in the beginning their task is exacting and prosaic, as time goes on it becomes increasingly subtle and romantic. Parental duty is satisfied for many by the provision of the necessities of life and by surrounding the child with an atmosphere of security and love. That may be said to be the natural normal ideal of parenthood. But happy are those who have, in addition, qualified themselves to help the child to think clearly, and who can make him aware, too, of the worlds of the imagination and of the spirit.

The Child's Need of Confidence

So far we have spoken of the child's development as if it were a happy, tranquil and uninterrupted growth: but everybody knows that this is not the case. Growth is not easy, and is attended by many shocks, storms, and privations. That is true of people of all ages; but it is especially true of children. When we are faced with things as they really are instead of with things as we want them to be, our inner reactions are often volcanic; we suffer a kind of explosive shock, the relief for which is sought in an outburst of passion. That is unfortunate both for ourselves and for the onlookers; it hurts us, and it hurts them. We minimize our own inner shock by exploding outwardly; the explosion arouses in the onlooker a sympathetic realization of what is going on in us, and that hurts him; he defends

himself instinctively against the hurt, and explodes back at us, or at any rate regards us with antagonism, or develops a habit of avoiding us. Unhappy people easily become unpopular in this way, which greatly complicates the unhappiness they are feeling, and often prevents them from working it out successfully. On the contrary, anyone who has learned how to suffer and master shocks of this kind can be of great help to others in the emotional crises of their lives. The capacity to receive the emotional outbursts of others without setting up any defence against them, that is, *without taking them personally* as an attack upon ourselves, is a valuable achievement, and smooths the path of life for all those with whom we come in contact.

Children are least of all to be blamed for the quite involuntary outbursts of unreasonableness to which they are subject; for they have not had the time and experience that their parents have had, in which either to master these experiences or to find defences against them. For, make no mistake, man finds it much more comfortable to devise for himself retreats out of suffering and frustration and bewilderment than courageously to endure them. It is easier to go and unburden one's soul to a friend, than to face out a difference of viewpoint with an opponent; it is easier to drown one's sorrows in drink than to accept them for what they are. But a child has not yet developed either the mind or the resources to defend himself in this way; and if his first attempts to obtain passionate relief are foiled, he has no alternative but to resort to yet more desperate and determined ways of expressing himself. It is at this point that *bad* people are so easily made—that is people whose suffering has been rejected rather than received by their fellow men, and who in their disillusionment and in self-defence turn against them.

Miss E. M. Delafield has pointed out that parents may expect to suffer at the hands of their children. One of their tasks is to act as a kind of buffer between a child and the hard facts of life—not to shield him from them altogether, but to smooth them out and regulate them to what the child is actually able to achieve at the point of growth which he has reached. It may seem like ingratitude or viciousness in a child to hit out at somebody when hard pressed by circumstances; actually it is simple necessity. This necessity is not likely to be abused if the child is aware of parental understanding; if it is clear that this is being abused, then correction may be needed, but it is better to err on the side of tolerance and forgiveness. It is very shattering to our confidence to realize how utterly helpless we sometimes are in the face of circumstance; we cannot hit back at

circumstance, and it is reassuring to find that there is still something we can do and somebody we can hit.

Children have great need of confidence; it is essential to their growth, and we should do all we can to restore it, even at the cost of being assailed by them in the process. We are of no use to them at these times if we become either aggressive or anxious; to frighten them will kill confidence; to be anxious will undermine it and suggest that the situation is as bad as it seems. If we react in these ways we make it only too plain that we are still children ourselves and unfit to take on the responsibilities of parenthood.

One possibility at these times of crisis is the development of temporary and unexplained illness in the child, say a feverish attack or an attack of sickness. Or there may be a relapse into childish weaknesses such as wetting the bed or thumb-sucking, or the development of some sort of habit spasm like a jerking of the head or of a limb. These are, in a queer way, aids to the mastery of circumstance, and we should not busy ourselves too much to prevent them or to cut them short. Our main aim should be to understand, if possible, what crisis it is that is being faced; for the rest, if the symptom is permitted to run its course with careful but unobtrusive nursing and with the minimum of attention drawn to it, it will usually disappear in a short space of time. The essential thing is to be unanxious.

Parenthood as a Creative Trust

One of the most difficult things for parents to realize is that the child does not belong to them. This is, in fact, true of all human relationships: possession of one human being by another is contrary to all laws of nature or of human personality. It is true that some will always be dependent upon others who are older or wiser or stronger than they are; but it is an unforgivable and dastardly crime for any to take advantage of this situation by abusing the power entrusted to them through the weakness of others and exerting this power to their own advantage. The freedom of the individual is the one thing in the world worth fighting for; and the abuse of power is the only sin really worth condemning. If all parents and all people in authority could avoid the abuse of the powers vested in them, most of the other crimes and mistakes in the world would admit of easy correction and cure.

Nearly all parents fall into this error of treating the child as their own property, however much in theory they may claim to give due respect to his own personality and wishes. We ostentatiously respect his wishes when it suits our own ends, and ride rough-shod over

them when it is not convenient for us to listen and to adapt ourselves. The ideal parent seeks no gain for himself other than the joy of seeing the child develop naturally and normally into the full flower of his health and personality.

II. MOTHER AND CHILD

Parenthood is a full-time job for a woman, in a more intimate way than it can ever be for a man. Her whole nature and physique are designed for it; she gets more pleasure from it and has a correspondingly greater responsibility in it and a greater possibility of making mistakes; her mistakes, when she does make them, are more serious. Just as her joys are greater, so also are her sufferings and sacrifices.

Her greatest mistake derives from her power to enjoy motherhood too much and to subordinate the child to her own pleasure in caring for him. Anybody with a wide experience of other people and their families knows of instances where children are being unfairly retained by the mother, even right up into adult life; sometimes she frankly dominates them; more often she surrounds them with a cloak of maternal solicitude. It is very difficult, especially for children, to find the right answer to the plea: "I'm doing this *because I love you.*" We are all sufficiently children to like handing over the fight against life's difficulties to anyone who will do it for us; and, for this reason, love is a very subtle bribe.

I have already pointed out how vitally important to our later development are our own first experiences of life, and how the foundations of normality or abnormality, both in sex life and in our whole character and philosophy of life, are laid in the nursery. Physical experiences come first in the order of our development; the emotional and mental development which follows is to some extent determined by the success or failure of these, though of course it is not wholly determined in this way. Mary Everest Boole, discussing problems of education in science and mathematics, asserts that every process of thought depends on some preceding physical experience; she would say that our grasp of the laws of mechanics depends on our experience of the actual weights and movements of things and that a boy who is mastering ball games or learning gymnastics is better equipped to understand mechanics than one who is trying to learn solely from books or blackboard. This remains true throughout life; the new physical experiences of sex life and of bearing a child, bring into being new modes of thought and new

attitudes to life which the unmarried or childless can with difficulty achieve.

Importance of Breast-Feeding

Returning to the mother and child, it is certain that a mother cannot understand too clearly how much depends on the right management of breast-feeding, nursing, weaning, sleep, play and the training of her baby in habits of cleanliness. Many women still realize these facts instinctively, and seem born to be mothers; but there are others who have to feel their way more carefully and who would like further enlightenment. Infant welfare centres exist now in most districts and are glad to help them; and there are also books which deal with this aspect of parenthood more fully than a chapter like this can hope to do.

Every woman who can possibly do so should feed her own child at the breast. There are a few who cannot do this because of ill-health or poor development of the breasts; others are so placed that their own survival and that of the baby depends on their going back to work as soon as possible and handing over their baby to somebody else's care. In matters of ill-health, one must abide by a doctor's advice; and where the mother is also the wage-earner, she must bow to necessity, though it is to be hoped that projected legislation will protect mother and child against this serious misfortune. It is not simply that mother's milk is the ideal food for an infant; the whole experience of being nursed at the breast is profoundly satisfying and reassuring to the baby and seems vital to its well-being, both at the time and in later life. Medical observation shows that the death rate and the incidence of illness among infants separated from their mothers, as for example in orphanages and rescue homes, is far higher than it is under normal home conditions; and medical psychologists would agree that there is an equally heavy toll of unhappiness, sometimes lifelong, among those who survive.

Breast-feeding may, for a variety of reasons, be difficult to establish; but much can be done by perseverance and by suitable treatment and advice from a doctor or midwife or infant welfare nurse. Where breast-feeding is not wholly satisfactory, supplementary bottle feeds after some of the breast feeds may in some cases enable the child to be satisfied while retaining the advantages of breast milk and of normal suckling. Where it is clear that the needs of the infant cannot be completely satisfied, more damage may be done by persisting in breast-feeding than by accepting the situation and switching

over to bottle feeds. Even in this case the infant should not be deprived of the security of being nursed in the mother's arms and against her body while being fed; because one aspect of nursing has failed, that is no reason why the whole programme should be abandoned. To be held securely and warmly is an important part of a baby's welfare; and the artificial feeding should imitate nature as closely as possible. In the babies' ward of a certain hospital, a woman doctor nearly halved the death rate by ensuring that infants, when lying in their cots or when being carried about the ward by nurses, were securely and rather firmly rolled in a shawl or blanket, and that the nurses in the ward were women specially picked for their "comfortable" and maternal qualities.

Next to unsatisfactory breast-feeding, one of the most important causes of psychological trouble in later life is mismanagement of weaning. All transitions in a child's life should be gradual and so spread out as to give him a chance to master the experience as he goes along. He should be protected as far as possible from *sudden* happenings, such as sudden loud noises, being dropped (his own later falls, incurred in making his own adventures, do not seem to matter in the same way, though a very early fall downstairs may shake his confidence badly for a time), or being suddenly deprived of what has to him been a vital necessity.

The Child's Inability to Adapt

Children have extremely little power to adapt themselves to new things, whether it be to a change of procedure in feeding or a change of environment; if the two should happen to coincide, as when sudden weaning coincides with the arrival of a new baby or with the child being handed over to the care of a new person instead of his mother, perhaps even in a fresh house, a state of acute bewilderment and painful anxiety is set up which may last for years and may act as an unconscious barrier against the mastery of new changes which may face him in later life. When these later changes come, he may find himself quite unaccountably unable to think about them and quite paralysed in his initiative and power to act—in fact, bewildered and shocked and deprived of the normal sense of continuity in his life. Weaning, then, should wherever possible be gradual and partial; it can be spread over a month or more, one feed at a time being withdrawn and replaced by spoon feeding or drinking from a mug. Tolerance should be shown towards the apparent intolerance of the child at these times, for this intolerance is, in part at any rate, an

expression of his anxiety and inability to comprehend what is to his parents such a simple and obvious and necessary change.

Patience and tolerance are the watchwords most needed by every parent; it is so necessary to observe the child with minute and sympathetic care (though not so as to make him feel that he is a museum piece, or to arouse a sympathetic anxiety in him about himself!). One should be guided by what one sees to be actually going on rather than by any preconceptions, whether these be based on tradition or prejudice or even on modern scientific and psychological textbooks on child management.

In dealing with children there is no substitute whatever for careful observation; one can only generalize about them to a limited extent; for the rest one must recognize that they are so completely individualistic that it is never safe to assume that any two of them will behave alike, even in the most common situations. Every children's physician knows how strange are the intolerances which some children show towards even ordinary articles of diet; it is hardly exaggerating to say that a child may, in certain circumstances, waste away on a diet of milk and yet thrive on a diet of raw starch or meat, which to most other children would be sheer poison. These are not spoilt or mismanaged children, and one has no option but to be guided by their actual reactions and to order their lives accordingly.

In the matter of emotional reaction and psychological behaviour, children are no less individual, as every observant parent soon comes to realize. They develop the most inexplicable patterns of behaviour and the most irrational terrors. It is only rarely that one can discover a real and satisfactory explanation of these, and it is hopeless indeed to expect the child himself to provide an explanation, especially at the time of the terror. For one thing he has not the command of language and ideas to render his own imaginings into words with any facility; and for another, any facility that he may have is banished for the time being by the terror which he is facing.

It is a sound rule, when a child has lost control of himself in any situation, whether it be a nursery quarrel or a night terror, to remove him if possible from the scene of the disturbance and provide him with other and less painful surroundings in which to regain his balance. That will help a great deal in the immediate treatment of the trouble; as regards discovering the cause, it is a good plan to keep one's ears open, for example, at bath time or on similar occasions, when in the course of play he will make casual remarks or ask

questions which, on reflection by the parent, are found to yield valuable clues.

Training in regular habits and in cleanliness is an important part of the relationship between mother and child, and plays a vital part in character development. Good habit formation is of the utmost value in after life; but it is well to know what will in fact conduce to good habit formation and what will not. The keynotes are simple repetition and regularity, and absence of emotion, compulsion or anxiety. This applies to breast feeds, washing, bed time and getting-up time, meals, being put on the chamber for bowel relief, or going to the lavatory after breakfast. The best way to approach these procedures is to treat them quite simply as matters of course rather than as matters of urgency.

Mothers should realize that although regularity is in the main desirable it is not a matter of life and death; and even if through illness or a temporary intractability of the child a habit pattern is broken for once, that does not spell failure, for the pattern can easily be resumed when the crisis is over. On the other hand, to try to compel a child by emotion or force to carry out a regular habit at a time when he is unable to do so or when he is emotionally upset may wreck the pattern for a very long time. You may lead a horse to the water but you cannot make him drink, and likewise you may put a child to the breast regularly, and should do so, but you cannot invariably make him hungry; you can put him on the chamber, but you cannot insist that he shall perform and have a motion.

Freedom and Discipline

Habit formation consists in repeating the right conditions, but not in insisting on performance or being disappointed if it is not forthcoming. Although good habits are, socially speaking, a great convenience and make for smooth running of organized life, yet Nature is more complex and adaptable than Society; she is in fact wiser and cannot be compelled beyond a certain point. There are temporary exceptions to every rule and every habit; and this may be particularly true during the years when adaptation to life is being learnt and habits are being formed. In our zeal for regularity and dependability, let us therefore leave room for some intelligent flexibility.

Where parents find themselves worrying unduly about the habits of their children ("Johnny never finishes his meals properly". . . . "I can't get him to bed at the right time") it is fair to assume that more is wrong with the parents than with the child, and that they

are being too anxious to civilize their offspring; nothing is easier than to abuse one's power over a child in the attempt to get good results quickly; and nothing is more certain than that, if one attempts it, he will quite instinctively react in protest and be more difficult to manage. Nature endows the growing child with very sound instincts of self-protection against this danger of being reduced to an automaton or a nonentity by well-meaning attempts at education.

In one's anxiety to have well-behaved children, one is apt to forget all the other issues of childhood which are educationally and psychologically just as important. I have alluded to the safeguarding of the child's instincts, which so often stand him in better stead than routine behaviour ever could, providing a more accurate adaptation to circumstances, and preventing breakdown and illness; and I have hinted also at the need to preserve his individual freedom of action so far as this does not seriously affect the safety or well-being of other people. I shall touch further on this latter point when we come to discuss discipline more fully.

But there is another point which has been already discussed and which is worthy of repetition here. Physical experiences and curiosity about them are natural to a child, and should not be crowded out too much in the interests of habit formation and good behaviour. That is to say, children should (sometimes at any rate) be allowed to play with their food as well as to eat it, and to linger at the breast even when they are obviously not sucking and feeding. It is natural that their first observations and reflections should centre round those things which are for the time being most vital to them; every real lesson in life is learnt in the same way! A boy who is not interested in subtracting one from two takes the liveliest interest in the subtraction of one of his two sweets! The power to make a mathematical abstraction of this experience follows in due course—if the memory of the experience has not been unbearably painful; if it has, his mental powers of subtraction may be very slow in developing.

It is natural, too, that children should be interested in and derive pleasure from their own excretory acts and the organs concerned. When they are being trained in more adult standards of behaviour, these natural interests should not be too rigorously discouraged at first; and above all, they should not be stigmatized as being naughty. The impression should rather be given that one curbs these interests when in polite society, and that grown-ups and children play an interesting game known as manners, without any prejudice to the

actual rightness or wrongness of playing with food or talking about "wee-wee." And care should be taken that in proportion as interest in these things is diverted, the child should be given new materials on to which the interest can, without offence, be transferred. Thus playing with plasticine and similar materials, making mud pies, and playing with sand and water, can advantageously replace the play with food or excreta; and water games, such as sailing boats in the bath, squirting and paddling, will form a substitute for the pleasure taken in doing "wee-wee," and will be a stepping stone towards other and more mature interests.

It has been already pointed out that normal sex life in the adult may be intimately bound up with normal breast feeding in the child; it may not be easy for those unfamiliar with medical psychology to see why this should be so, and one must ask them to take the statement on trust, as representing the findings of those who have had to treat sexual disorders. But it is easier to see a connection between suppression of interest in the body and the excretory organs and the later development of prudery and false modesty in sex matters. The two sets of organs, the excretory and the sexual, are such near neighbours that the activities of the one are closely bound up in the workings of the other; and an anxiety about the one must inevitably affect the other.

The right management of the affairs of the body and the wise and not over-zealous cultivation of habit formation in the child by the parents will be rewarded in many ways as time goes on. The child will be easier to get on with, will learn more readily and derive greater enjoyment from life, and will grow up sexually normal and free from serious character defects.

Emotional Links Between Mother and Child

Turning now from the management of the physical affairs of childhood, let us consider the emotional link between mother and child, the love or sympathy that exists between them. This is a very striking feature of infancy and early life, so striking that some have not hesitated to describe it as almost telepathic. A mother seems to know instinctively when anything is wrong with her child, and although she may be deeply asleep to every other sound, will wake immediately at the slightest cry of the baby. And, what is equally important, a child is tremendously responsive to the mood of his parents, and especially to the mood of the mother. It is not necessary that she should say anything for this to be felt; the quality of her milk, the odour of her body, the way in which she handles the child,

the expression on her face, and many other little signs convey to him an atmosphere either of safety and love or of anxiety and fear. It even seems at times as though the child is aware of this atmosphere when the parent is not in the room or in the house. Though opinions may be divided as to the effect on the child of shocks to the mother before his birth, there is no question of the effect on him of the emotional background in the home after birth and during the whole of infancy, childhood and adolescence. Care should therefore be taken that the emotional life of the parents, especially in the presence of the child, is as tranquil as possible.

Some parents make too much of this sympathy between the members of the family by trying to foster it artificially in the child and worrying as to whether the child does in fact love them or not. It can be taken for granted that unless something has gone seriously wrong this family tie of love and sympathy does exist and that the solicitude which the parent feels for the child is fully matched by the trust with which the child looks to the parent. If this is not so, then the parents must look to themselves for the reason rather than attempting to change the child; to trouble him with such a problem is to undermine still further the confidence which he should feel in them.

Dependence Must Grow Less

It should not be forgotten, either, that as the child grows up there is a natural loosening of this tie of sympathy or responsiveness between him and the parent, as his need of the parent becomes less and less. So much has been said by psychologists (especially by amateur psychologists) about abnormal attitudes of dependence on others in adult life that it has almost become the fashion to despise any relationship between two people which is not free and equal and in which one partner is for the time being dependent on the other. It need hardly be said that such relationships of elder and younger, teacher and taught, protector and protected, wise and less wise, will always be necessary at some points in everybody's life, whether in childhood or later, and are entirely normal and honourable if not abused by either party to them. In fact it may even be a virtue that we should know when to abandon our independence and self-sufficiency and become children again; we all need to go back to school from time to time to learn some new lessons which life has to teach us, and we can save ourselves much unnecessary suffering and bitter experience by doing so. But the psychologists feel so keenly about persistent dependence on others because they come across so

many instances in which parents (especially mothers) have fostered affection and encouraged dependence in their children to such an abnormal extent that it has become an ingrained habit of mind and one from which the children cannot shake themselves free. And while the properly-controlled and understood maternal instinct brings the most vital of all contributions to the growth of the child, the uncontrolled instincts of the mother can work greater damage than almost anything else in the world.

Sign of the Wise Parent

It is difficult to say which causes greater damage, unnatural withholding of a parent's love or unnatural exercise of it. Those who have never adequately known such love grow up feeling anxious, depressed and outcast; they cannot recognize allegiance to a family or a society and they provide a large percentage of the social problems (criminality, delinquency, prostitution, sexual perversion, and so on) with which civilization has to contend. It is hardly surprising that they often show themselves morose, depressed, antagonistic or ungrateful, since they have had no experience of what love means; those who have attempted the reclamation into society of these sufferers know what uphill work it is and what a high quality of love and patient perseverance against odds is required of them. It is a depressing thought that most of this unhappiness in the outcast and this loving labour on the part of the social or religious workers could have been avoided if some parent had realized more deeply the importance of her (or his) task.

Those who have been over-mothered do not provide the rebels against society but the sheep. They it is who are unable to break away from home and unable to have minds of their own; they always do as they are told, and they always look to somebody else for guidance and take their opinions at second hand. In normal times they are a load on other people, a social dead-weight; they are, in times of emergency, dangerous because, like sheep, they easily take panic.

The wise parent is the one who knows how to be present when needed and how to let go of her children when the need is no longer present. The mother who cannot do this is one who has never learnt how to control her own instincts, who has no real interests outside the home, or who is turning to her children to fulfil needs which her husband or family have failed to satisfy. Nothing is more distressing than to watch a mother who does not believe that her child can possibly do anything without her help.

As soon as the child is capable of activity of his own at all, the mother must begin to learn how to stand aside and let him make experiments and undertake adventures unaided. There will be plenty of things that he cannot yet do alone, but in these attempts at mastery of his own limbs and activities, her place will be in the background, unconcernedly waiting for the moment (if any) at which failure occurs and help is needed. But she must sternly curb in herself the so ready impulse to murmur: "Let me help you, darling," when the darling is really doing quite well and, even if he is not yet succeeding in his aim, is gaining a wealth of valuable experience through making the attempt. We may take it as a sound maxim that maternal solicitude needs no encouragement in the natural normal woman, but that the art of retiring gracefully is difficult for her to achieve and should be one of her main endeavours. A wise mother knows how to be effective through remaining in the background; such a woman runs much less risk of being forgotten by her growing family than the ubiquitous sort who insists on very obviously running everything.

The work of a mother is not limited to the actual personal care of children, but includes the equally important art of home-making. As a wife she will naturally wish to do this for her husband; as a woman she will like to do it for herself, for every woman likes to be surrounded by nice things and nice people; as the mother of school children and young people in their teens, she will do it for their sake, too. Every child wants to be proud of his home and comfortable in it; and every child wants to be able to bring his friends home and to know that they will enjoy the same welcome that he does. Backgrounds play a very large part in the formation of character and in normality of development; even when children do not obviously notice the pictures and furniture or whether the house is kept cheerful and tidy or the food attractively prepared, these things make an indelible impression on their growing minds and help to shape their own attitude to life.

The ability of a woman to keep open house to her children's and husband's friends (as well as to her own) is a very good test of her maturity of development. And it prevents the unfortunate split which otherwise so easily develops between home and school, or home and the children's personal and private lives. An Englishman's home may be his castle and defence against the unkindnesses of the larger world, but it should not have the drawbridge up when this is not strictly necessary.

III. SEXUAL DEVELOPMENT OF CHILDREN

Besides the primary need of every child for its parents which is based on the need for security and diminishes gradually as the child grows older, there is a secondary need of a different kind, which we may call sexual in that it reflects the sexual development of the child. As the reader will have gathered from earlier chapters, sexual development is, from the psychological point of view, regarded as having two separate phases, separated by a quiescent or latent period. The first phase occurs before the age of six years, the second after the onset of puberty; and the school years up to the age of twelve or thirteen constitute the latent period.

During the two periods of sexual activity and development, there is a special tie between a boy and his mother, a tendency for the boy to prefer his mother to his father, and a corresponding tendency for the mother to favour her son in preference to her daughter. During the latent period, however, the boy's interests swing over very strongly to his father, and there is a tendency for him to imitate daddy and even to scorn the company of women and girls. A girl, on the other hand, tends to identify herself with her mother right up to adolescence, first of all through childhood need of love and reassurance, and secondly through imitation and comradeship as in the case of the boy and his father. There may be a phase of active interest in her father before the age of six, but this is not usually so pronounced as the attraction between mother and son, probably because the earlier stages of sex development are less obvious in girls than in boys; a girl tends to remain latent in her sex development until roused by some deep love when she reaches maturity, but the unconscious and unseen changes which go on in her when a child may be none the less significant.

Mother-Child Relationship

Permanent and unhealthy attachment of a boy to the mother image, and maybe to the mother herself, is especially likely to occur if the link between mother and son has been too much emphasized at the susceptible ages to which I have referred. This may occur in the case of mothers who have been left widows or who are separated from their husbands, whether by divorce or estrangement, or even by long absences if the husband is a traveller or a sailor. In such cases the pent-up sexual instincts of the mother may be quite unconsciously transferred to the boy; naturally enough, she finds herself loving him more than she did before; and unless she is very wise

and alive to the dangers of the situation, she may not attempt to curb this excessive love of hers which helps her to feel happier and causes her to devote more attention to his comfort and welfare than is really good for his health of mind.

She does not usually reveal in any way the sexual nature of the tension in herself; but the emotion is transferred and goes to reinforce her maternal instincts, which are sufficiently difficult for a woman to regulate even under normal conditions. The end-result of it all is a son who is devoted to his mother and tied to her apron strings, incapable of acting without consulting her, unwilling to leave home and marry because of the duty he owes to his mother, and liable, if he does go so far as to fall in love, to marry a woman much older than himself who is prepared to go on treating him in the same way and will prevent him from ever reaching the independence of a grown man.

Where a girl child is concerned, the most probable complication of the mother-child relationship is an accentuation of the rivalry and jealousy which are always liable to be present under the surface. A girl can easily become jealous of the favouritism shown to her brother, which, she can easily see, is due to nothing else than the fact that he is a boy and not a girl. So it behoves mothers, in the interests of their children, to control as far as possible the natural but dangerous tendency to reveal their sexual preferences and inclinations towards their offspring.

One word here of general advice; never insult a child's intelligence or intuition by assuming that he doesn't notice or understand what is going on in the home, or that he does not see through to the real meaning of what you are doing. Believe me, he understands your actions and moods far better than you understand them yourself, and is affected by his understanding, even though he cannot put it into words. He understands them instinctively, whereas you, in the process of growing up, have probably developed all kinds of indirect thinking (some would even call it dishonest thinking) which has served your convenience at times and now serves only to conceal your motives and the meanings of your actions from yourself.

Do not say, or even look, in a child's presence anything of which you would not want him to be aware. Do not whisper, or speak in a subdued voice in the hope that he won't hear; do not use words which you think he won't understand, or talk a foreign language in his presence so as to hide something from him. By doing so, you will only make him more curious and suspicious, and he will begin to lose his trust in you; and you will certainly not deceive him as to

the fundamental meaning of what you are saying. No, be thorough in this matter, and hold your peace about such things until the child is at school or in bed and the grown-ups can talk freely without harming the growing mind in any way. It needs a lot of self-control, but it is worth it. And don't assume that because he is asleep in the same room he can't hear; he may not be asleep at all, or he may pick up the general sense of the conversation, its pleasantness or unpleasantness, even in his sleep.

Father and Child

To the popular mind, fatherhood can never be quite as important as motherhood; nevertheless, fathers are very important people and deserve much more than passing mention. At first mothers are all-important so far as the child is concerned; and at this point the main function of a father is to see that mother is kept happy. From one point of view, this is the most important contribution he makes to the family life at any time; and it is an essential one. No unhappy woman can ever be an ideal mother; her unhappiness is bound to be communicated to the children in a million little ways. And the confidence and inspiration she needs for the task in front of her will be derived from the love relationship between her and her man. If he can keep that flourishing, then he is a wise man and a good father at the same time.

So it will be seen that much of the work of a father is indirect and does not operate through direct contact with the children. He is to his wife what she is to the children; he provides for her, gives her security, encouragement, confidence and the assurance of love; she grows in this atmosphere as the children grow in hers, and becomes a fuller, more maturely-minded woman, with greater gifts to hand on to her children. Of course, the harmony of the relationship between the two parents is a joint responsibility which cannot be thrown entirely on to the shoulders of the father; and homes can become unhappy through the folly or blindness of either. Nevertheless, there is much general truth in the point of view which I have just put forward.

Desirable Qualities in a Father

Where the mother is sexually unsatisfied, she may tend to make the mistake already mentioned of displacing her sex instinct and its energy into the excessive exercise of her maternal zeal. This can be obviated if her husband will take the trouble to be a good lover and to make himself as fully acquainted as possible with the arts of love

and the technique of successful sex life. Quite apart from the joy which he will thereby give his wife, and the benefits he will confer on his children, he will reap his own reward in the increased happiness and comfort of his home! Fathers who are too busy or too indifferent to do this will find their policy to be a very short-sighted one; incidentally they will be psychologically lop-sided people instead of charming and likeable human beings. Those who do not see things in this way should not have married at all, for they have no fundamental interest in marriage or parenthood; however, it is never too late to begin to acquire it.

The popular view of a father is apt to centre round his authority; but it is doubtful whether this is his most valuable quality. I should be inclined to rate more highly his detachment, the power he has of representing the outside world to those within the home. This is of immense value; and he should never compromise this quality of his by letting himself become a mere home bird, content all the time with his slippers and his pipe by the fireside. If he does this, he will in time forfeit the respect of his family and the authority which he should properly hold, for overmuch familiarity will breed contempt. Let him, therefore, before he becomes a husband or a father, make sure that he can hold his own as a man in the world of men, the world of which Kipling writes with such a sure touch; and after that, let him try to hold the golden mean between overmuch love of his work and freedom, and overmuch devotion to his home. He should stand as the bridge between the two, and have a foot in both worlds. For this reason a man can never be wholly anything, and his nature will always be diverse and many-sided; and it is this many-sidedness which woman will sometimes stigmatize as unfaithfulness or fickleness, not necessarily towards her but towards life.

We all tend to value more those things which we do not know too well or which only seldom come within our ken; and the authority of the father derives very largely from the fact that he is away from home for a large part of every day. There is always something of the unknown about him, and he commands attention (quite unfairly, as some women would think!) simply because he is a novelty and a welcome change from the ever-present mother, and because the children do not see enough of him to find him out in all his weaknesses; (most people can behave themselves creditably when necessary if they don't have to keep it up all the time!). All the same, whatever be the real truth about father's authority, it comes in very useful, as every mother will agree, and puts an end to many impasses in the home. But a father should recognize how much his position is due

to his fortunate absences rather than to his imposing presence, and should not take himself too seriously. If he does, and yields to the temptation to throw his weight about, he will be lost, and his authority will have little real value, for he will have come to rely on power rather than on wisdom—and all true authority is based on wisdom and insight.

The Father as Embodiment of Freedom

It is part of a father's job to see, as his children get older, that they come to know the meaning of freedom and detachment and adventure. He should be a fund of knowledge, an organizer of expeditions and excursions, and one who brings interesting people and things into the home. He should be the foil and counterpart to his wife, who, by his influence rather than by his direct criticism, ensures that she shall not become too fussy or immersed in the details of the home and that she shall not draw her children into a net woven out of such preoccupations. In this sort of way, he is an authority to her as well as to the children; he can teach them both, young and old, how to be carefree and adventurous as well as careful and compassionate, while learning his own lesson of compassion and responsibility and faithfulness in return.

There is in every successful father something slightly (very slightly) wicked, an engaging twinkle in the eye which announces to his family and to the world at large that he never takes anything, least of all himself, entirely seriously, and recognizes, at the right and wise moment, an exception to every rule. He will aid and abet the healthy tendency in the child to break away from the home atmosphere in search of self-reliance and adventure, and will foster individuality just as his wife will foster affection and loyalty. In this joint atmosphere most of the needs of the growing child will be met in so far as the home can meet them; the rest will be the concern of the school and of the child's playfellows. Of course, there will sometimes be clashes between points of view so widely separated as that of the father and mother; but these should as far as possible be settled by amicable discussion and agreement, out of earshot of the children. If each sees clearly how essential is the part played by the other, it should be possible to come to an understanding of that whole joint undertaking of parenthood in which they are seeking to harmonize themselves and their efforts.

The father occupies a specially important place in a boy's life during the years between six and thirteen, when he is, if all has gone well, a hero and comrade to his son and a model to be imitated. If

the father fails to step into this position, the attraction of the son towards his own sex, which is normal in boyhood and early adolescence, will be unnaturally prolonged and may even lead to a permanent bias in favour of love for men in preference to love for women. The man is, in some of these cases, still searching for the happy normal relationship which he should have had with his father and which would have done so much towards building up in him the true character of manhood. One might say that, in a manner of speaking, the boy of school age serves an apprenticeship to his father and his schoolmasters, as a girl does towards her mother and teachers.

The place of a father in his daughter's life comes late, and is not fully reached until adolescence. When this point is reached, the relationship is one with immense potentialities for good and ill; and there is hardly in human psychology any other crisis of development at once so beautiful and so difficult. For at this point the girl is beginning to realize herself in two quite different ways, which are so closely intertwined as to be almost indistinguishable. She is beginning to experience the stirrings of her sex life and the first dawns of love for a man; and the first object of her immature devotion is her father, who stands as it were in the position of a trustee for that which is to come; he is the recipient of it, yet it is no property of his. Yet if he makes a false step or proves himself unworthy of it, he may wreck the future love-life of his daughter; many women have turned in bitterness from men and ended their lives unmarried as a result of having, say, a drunken father when they were in their teens, whom it was impossible for them to love.

One also, of course, meets the situation in which a daughter fails to leave home and marry because of an abnormally strong and often unconscious attachment to her father, based on an unrecognized sexual bond between them. As in the case of a similar attachment between mother and son, this may be due to the fact that the father has been disappointed in marriage and has turned from a cold and unresponsive wife to the attentions which his daughter is only too ready to give him.

Girls' Need for Platonic Friendship

The other change which is coming over the adolescent girl is that she is beginning to *reflect*, to become capable of detached thought; and in order to bring this side of her nature to fruition she needs the friendship of men (in the true Platonic sense, as distinct from sexual love) and their intellectual co-operation; failing to find this, she may

have difficulty in coming to know herself properly and be unable as a woman to find the right balance between her feminine impulses and her reason. We have seen already how important it is to her children that she should become a reasonable, open-minded and balanced person; and it is, in addition, a source of deep grief to herself if she should fail to find herself in this way. Yet the work is one she cannot carry out unaided; and no one is better fitted to help her with it by his comradeship than is her father. Some of the predilection of certain women for priests and men whom they cannot marry is due to this need for a friend who is *not* involved in their sex life; and priests would be saved a lot of work if fathers were alive to the full meaning of their adolescent daughters' love for them.

IV. FAMILY RELATIONSHIPS

Effect of Children on Parents

So far we have mainly discussed the effects on the developing child of different attitudes in the father and mother. But there is a law in mechanics and in Nature which says that: "Action and reaction are equal and opposite"; and the same is true in human relationships. Children help to make their parents just as parents help to make their children; equally there are many ways in which neither can influence the other, however hard they try; Nature has arranged that in some things we are all like Topsy, who "just growed," lest the power of man over child (or of child over man) should be too great.

Children are a blessing to their parents, as tradition has always taught; that is to say, they bring gifts to us which may be unrecognized but are none the less real. Our worship of them creates a new spirit in us which can hardly be described, but which is the essence of religion and brings renewal of life in the same way that falling in love or enjoying friendship or the beauty of nature brings renewal. But children are more intimate and real than any of these other experiences and touch deeper chords, as poets like Wordsworth and Swinburne have shown us.

Psychologically we could express this truth by saying that they break down our reserves and pull us out of the ruts we are apt to get into; they are unconventional, innocent, refreshing and unexpected. Life offers few greater delights than the spontaneous and unexpected sayings of children, which parents treasure and love to repeat. Ridicule may be poured sometimes on the fond parent, every word and action of whose child is a gem of great price; yet he is nearer the truth than those who are too grown-up to be interested in children or to let themselves be refreshed in this way. Few poems could sur-

pass the remark of the small girl watching a glorious red sunset, who turned to her parents and said: "If I were the sun, wouldn't I set!"

One rather unexpected result that children may sometimes have on their parents is to act as unconscious reminders of the parents' own childhood; if the childhood of the parent contained severe sufferings or shocks, these may be unconsciously re-animated in such a way as to cause inexplicable behaviour or feelings in the parent, or acute anxiety. This is due to what is known as unconscious association of ideas and feelings, and may in some extreme cases even be responsible for nervous breakdown. Or a mother may have unaccountable feelings of hatred for her child until she realizes how strong was her jealousy of her own baby sister when she herself was young. When parents find themselves behaving unaccountably towards their children, for example with unnecessary harshness or anxiety, they should bear in mind the possibility of some such explanation and may even benefit by asking their own parents for recollections of their behaviour and welfare when young. Some very troublesome traits in themselves can be tracked down and cut short in this way if they will give the matter serious thought.

Brothers and Sisters

Large families are out of fashion nowadays, and in many ways this is a great pity. I am not considering the problem from the sociological point of view nor am I concerned here to discuss rising and falling populations. But purely from the point of view of the family itself and the welfare of the children, it is good that there should be brothers and sisters and that the child should grow up in the midst of other children. Kenneth Grahame, in *The Golden Age*, has painted a picture of the two worlds, that of the children and that of the grown-ups, and has shown how difficult it is for the one to understand the other.

Children whose first years are spent almost entirely with grown-ups lose something of their birthright. They try to follow in the steps of their elders, but they are so little successful that they must inevitably feel a sense of failure; and they lose sight of their own proper world of childhood in which they might have had joy and confidence. They become precocious and self-conscious, and are liable to grow up into little prigs; when they finally go to school they are strangers to their fellows and cannot fit into the school life and society. They are either reserved and miserable, or superior and insufferable; they may be so cocksure in their sense of belonging to the grown-up camp that they adopt an air of moral and intellectual superiority and

despise the simple fun and vulgar ways of other children. Needless to say, if they take this line they are regarded as enemies by all right-thinking children and are "sent to Coventry" or mercilessly persecuted after the manner of the herd. They are very apt to console themselves for all this and score a temporary and second-rate triumph by swatting hard at their books and getting academic distinction and the favour of their teachers; but all this only confirms them in their abnormal position. Later on they will have a hard struggle to fit into normal society as equals and without self-consciousness; and many nervous breakdowns can be largely attributed to such difficulties.

There is no better way of learning give-and-take than as a child among children. Such an exercise is almost impossible between a child and his parents; how can one learn what is fair by comparison with a grown-up who has all the advantages and who is equally in a superior position whether he is defeating one or condescending to one? The inevitable defeats in quarrels can be accepted by a child from one of his equals, however much he may bellow about them at the time. Of course he will bellow, but that is not always a signal for the parents to intervene unless physical injury is imminent or the odds are overwhelmingly in favour of one side.

Leave children to fight out their own battles as far as possible, and hew out of their experiences a rough code of justice; it may have flaws, but it will be more real and lasting than any ready-made article handed out to them by their seniors. Let them have a real life of their own and a world of their own, and do not try to supervise it. Where possible, they should have a room of their own in which to play, or a shed in the garden; when they are old enough they should be allowed to go out together and play away from the house. If these things are possible they will become physically free, strong, spontaneous and graceful in movement; in their minds they will show a corresponding freedom and liveliness and will retain the priceless gift of imagination, which will carry them much further than dull reason alone ever would; in manners they will be natural and unaffected, frank and genuine, and they will keep their sense of humour.

The Only Child

Not all parents can have as many children as they would like, for a variety of reasons; but the children they have can be saved from the disease of only-childism if a little thought is given to the problem and if the importance of the issue is realized. Free mixing with

neighbours' children can be arranged, and other children can be allowed to know that they are welcome in the house at any time without invitation (subject, of course, to mother's convenience sometimes). Parents can take it in turns to look after neighbours' and friends' children as well as their own, even when the children are quite small; in this way both mothers and children will gain, the mothers by being able to get out more for rest and recreation, the children by meeting their fellows.

Properly-run crèches, nursery schools and kindergartens offer another solution to the problem. Children as young as two and a half years old will often adapt very happily to this sort of life, at any rate for part of the day; it takes the place of the nursery life they might have had at home, and has the advantage of being supervised unobtrusively by skilled workers who know the mind of the child. The life of a nursery school is a very good preparation for the more highly-organized school life which follows; it helps to prevent the anxieties which sometimes occur when a child goes straight from a sheltered home to the big, strange world of a large school, with its noise and rough-and-tumble and the puzzling impersonality of its life. Like weaning, the transition from home to the outside world needs careful management; both represent stages in the difficult but all-important separation of the child from the mother.

It has been found by psychologists that a child's attitude to life can be profoundly affected by its position in the family. It is possible to recognize definite character traits associated with being an only child, an eldest child, a youngest child or a middle child. Only children are often spoilt and selfish (and it is unfair to lay on them all the blame for this); eldest children may belong too much to the parents' world, and are often too serious and responsible and lacking in a sense of humour; youngest children may suffer from feelings of inferiority, or they may be spoilt and favoured, since the parents tend to keep them as babies when they ought to be growing up. (I speak of the disadvantages of these positions, but of course they all have their corresponding advantages; it depends on how you are looking at it.)

Character formation is also affected by other variations in the pattern of the family, such as the total number of children, and the predominance of boys or girls. Two children of opposite sex will tend to be good friends, though between any pair of children there is always liable to be acute jealousy for the favour of one of the parents. Three children form rather an unstable group; there may be a union of any two, with the third as odd man out. One boy in a

family of girls may get on better with men than with women later on; he has no illusions left about women, and may have had difficulty in holding his own against their more positive emotional life. These are mere examples; endless different situations are possible, but it is surprising how large a part the family pattern plays in moulding one's attitude to life.

Knowing how sensitive children are to separation from the mother, parents should be aware of how much the arrival of a new baby will mean to a child of one, two, three or four years old. Even if great care is taken, serious anxiety or jealousy cannot always be avoided and may be difficult to manage. The most difficult age is two; and parents who have another child at this point should take care that the first child is not unwittingly neglected and suddenly displaced from his position of king baby. He should be made to feel that he belongs to his mother and father just as much as ever, and a little extra nursing sometimes may be justifiable in order to dispel his anxieties.

It is especially unfortunate if other changes happen at the same time as the arrival of the baby and get associated with it in his mind—for example, if his cot is suddenly taken over and appropriated for the stranger. If his cot is needed, he should be moved to his new sleeping quarters well in advance, and thus accustomed to one change at a time. He should not, if it can be avoided, carry through life the memory that the fateful night of his brother's arrival was spent with the unpleasant people next door who regarded him as an unwelcome nuisance; it hardly gives him a chance to think kindly of his lovely baby brother if this has been the case.

V. FREEDOM AND DISCIPLINE IN THE FAMILY

Most parents are troubled over their duty to their children in the matter of discipline and compulsion, and it is difficult for them to find sound guiding principles. In theory, at any rate, most people nowadays believe in the maximum of freedom for their children that is compatible with the child's well-being. An intelligent solution of the problem is sought, and there is little heard of such former beliefs as "Of course the parents are right," "A child's first duty is obedience," "Children should be seen and not heard," "Spare the rod and spoil the child." It is beginning to be realized that a child has rights, and none the less because he is in no position to insist on them; looked at from this point of view, the position of the child is an unenviable one. Yet many modern parents have an uncomfortable feeling that in granting the child his freedom they have

sent him from the frying pan into the fire, and that he is still less fitted to manage his own life than they were to manage it for him.

The whole problem is far from simple, and cannot be solved by a few sweeping generalizations. A great deal depends on the age of the child. To throw on a very young child the burden of making most of his own decisions and choices is manifestly absurd; he cannot be expected to decide what clothes he wants to wear to-day or what he would like to eat. If he is expected to do so, he will be in the sad position of the little girl (in *Punch*) who asked her progressive teacher: "Please, Miss, *must* I do exactly what I want?" The burden of constant decisions based on uncertain data is one which no young mind should be asked to carry; the simple choices involved in his own games will be quite enough to go on with. If his parents burden him further, he will lose confidence in their power to look after him and will become anxious and unsettled. Some of the rowdy and extreme behaviour of children brought up under systems of free self-discipline is due to this anxiety.

Some so-called freedom for children would be more fittingly called haphazardness or sentimentality. If the child can be left to his own devices, it saves one the trouble of thinking things out carefully—but one has to do some very hard thinking in the long run, to put right the mischief caused. Or sentimentality may say: "My parents and teachers were very strict with me; I'll see that my children don't suffer like that." It is the word "suffer" which throws one into error, and causes one to be over-indulgent; if one merely said, "I will try to be wiser," there would be more restraint in one's attitude, and less of a wild dash from one extreme to another.

Freedom should be given to children gradually, and in little things at first, as they begin to show the ability to use it. And a distinction should be made between two sorts of freedom, the freedom of a child within his own world and his freedom in the world of the adults. We have already seen that he should have the maximum of freedom with his fellows and in his play, and the minimum of interference from his parents. If that is granted, there is much less likelihood of friction in those affairs in which he must fit in with the rest of the household. He will most probably accept the judgment of his elders in the main, and will be glad to be spared the onus of making further decisions.

Of course, there will be friction when his own wishes and convenience conflict with those of the adults. The parents must be strictly fair in these matters; they must not presume on their position as parents to ride rough shod over their children's wishes, irrespec-

tive of normal give-and-take; they must be willing to concede points to him, and to require concessions from him, where only the convenience of each is involved. Where bigger issues come in, as in matters of health, and where the child is clearly in no position to understand the real meaning of the situation, implicit obedience must be required of him, and failure to obey must bring its punishment or correction. Cheerful obedience is more than can always be expected at first, and he should not be punished for protesting or crying or sulking but only for actually failing to do what is required of him. Reasonable time should, where possible, be allowed for him to overcome his inward struggles and make up his mind to accept necessity, and he should not too hastily be deemed to have disobeyed when a few seconds more might have brought his assent.

Punishment of Children

When punishment is necessary it should be given immediately, while its connection with the offence is still obvious. Children's memories are extremely short, and a punishment saved until the evening or the next day is completely wasted; so far as the child is concerned, he feels that his disobedience went unpunished, and that in the evening he got smacked quite unjustly when he had done no wrong at all. The nature of the punishment is to be carefully considered, and should not be out of proportion to the offence. In most families trouble is saved by adopting some little convention of punishment, if it is understood by the child as such; the old plan of making him stand in the corner for awhile or sending him out of the room may be useful; and a ritual such as a smack on the hand or on the seat may serve its purpose if it can be temperately given and without either undue heat or calculated cruelty.

Corporal punishment is best avoided altogether if one is in any doubt about the matter. It should never be used by those whose own feelings are roused and who gain relief from giving it or get any satisfaction out of it. Only those are fitted to use it who can say quite truthfully (to themselves and *not* to the child!) that it hurts them more than it hurts the child. Nevertheless, one feels that some lessons could be more quickly learnt in this way than in any other, and some problems of obedience more quickly disposed of, if parents had the self-control to use it wisely. It certainly causes far less harm to a child than is caused by constant nagging or moralizing; far better a quick punishment than a lingering impression in the child's mind that he is a naughty boy. Constant criticism and preaching at

him will only cause him to feel inferior and unloved; they are forms of mental cruelty that go deeper and last longer than a physical pain.

Home and School

Co-operation between home and school is essential if the best results are to be obtained in discipline and in education. Many movements and tendencies can now be observed which are working towards that end, such as the organization at schools of "open days" for parents when they are encouraged to visit the school and meet the teachers, or the formation of joint discussion groups of parents and teachers. Such movements help to counteract the rather natural jealousy and proprietary feeling which both parents and teachers are apt to feel about their work and about the young people under their care. Parents may behave unfairly towards the school in either of two ways. Sometimes they delegate to the school all responsibility for discipline and sound training and expect the teacher to undertake all the punishment that is necessary: their attitude is, "Well, that's what they are paid to do; why should we do their work for them?" Such a point of view overlooks the fact that no teacher can give to individual children all the personal attention which they need for the training of character; the size of classes and the demands of the academic and other work make that impossible. Teachers can often do little more than maintain the level of corporate discipline that is needed for class work; even in this their task is made difficult by the laxity of discipline in the home.

Fundamentally the responsibility for a child rests with its parents; and while it is healthy and in the interests both of child and parent that some of it should be delegated to the teachers, this delegation does not justify parents in shelving their own part of the work. Neither are they justified in so abusing their own authority that they undermine that of the teacher and question his right to inflict necessary punishment. No school can be carried on without discipline, and education is jeopardised at the outset if parents will not trust teachers in this matter and credit them with the same goodwill towards children which they themselves feel. Of course, teachers can sometimes be just as arbitrary and jealous as parents, for they are only human; and where there is reason to suspect real abuse of authority, the head of the school should of course be consulted and his help sought, for the welfare of other children besides one's own is at stake. Equally, parents should not feel resentful or regard it as interference if they are approached by teachers who feel anxious about the behaviour or progress of their child. Teachers can from

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their own position sometimes detect early disorders which may not be apparent to those at home, such as difficulty in mixing with other children or an incipient physical defect.

Unreasonable Demands on Children

Intimately connected with the question of discipline is the whole problem of what the parents expect of the child. It is not enough to consider how we should behave towards him when he fails to fit in with our requirements; we must ask ourselves whether the demands which we make on him are fair and reasonable, and whether they can possibly be fulfilled. Often we shall have to admit that we were mistaken in treating him as we did, and that his disobedience was due to genuine misunderstanding on his part (or on ours) or even to sheer inability to do as we asked.

One of the commonest mistakes which we make is that of being over-rational with him. We are apt to treat him as if he were a little adult who thought as we did and acted according to the same standards. In other words, we fail to understand the child mind; we cannot realize how different it is from our own, and we cannot remember our own childhood sufficiently clearly to put ourselves in his position. It must be confessed, with shame, that we often burden him with our own shortcomings, and punish him for failing to live up to a standard which we cannot ourselves maintain. How many parents are really as unselfish as they expect their children to be?

In any case, we probably under-estimate the terrors of imagination and the difficulties of living in a world which is nine-tenths still undiscovered. We forget that the power to reason clearly is still largely unformed; we forget that his interests and needs are quite different from ours, which means that his standards are different, too. What to us is merely playing with dirt, to him is discovering what earth feels like, a new and even thrilling experience, and playing imaginative games which help his mind and imagination to unfold and lose their terrors; he is also at the same time learning to use his hands and to model. When it seems to us that he is being cruel to the cat by poking it, he may only be using his curiosity to find out what this fluffy creature really is, how much it is alive, and how it behaves. The cat often understands better than we do and is amazingly tolerant of his experiments, suffering indignities that she would not tolerate from the grown-ups.

Some of the unreasonable demands we make of our children spring from our pride in them, our wish that they should do us credit in the eyes of the world. Of course it is rather embarrassing if the neighbour's child is always clean and tidy and has perfect table

manners, while our own rushes about until he looks like a scarecrow and cannot conceal his zest for food and his high spirits at the table. But does it really matter? There are many years ahead in which the finer points of conduct can be mastered, whereas the things which he is doing now can never again be done with the same appropriateness. One cannot put the outer facings of brick and stone on to a building before the foundations have been laid and the steel girders put in.

A child can be badly handicapped if we are too ambitious for him and too keen that he should succeed, perhaps in some pursuit which we have chosen because we like it and not because he shows any real aptitude for it. Very often we transfer to him our own unfulfilled dreams, and hope that he will become the engineer or the musician that we always longed to be; this is unfortunate if his real love is for farming or the sea. It is terribly tempting to us to unburden our own problems on to children in this and dozens of other ways; we just do not realize that we are doing it. They become the butts for our impatience, the recipients of our surplus emotions, the proxies by which we hope to achieve all the virtue and success that has never been ours through our own efforts. Small wonder that the cynic said: "Parents are the last people who ought to have children."

These errors can only be avoided by realizing that our children do not belong to us. Parenthood is its own reward, and the only satisfactions we may look forward to are those of knowing that we have given our utmost to the task and of seeing our children, if all goes well, grow up healthy and happy. Even so, there are many aspects of parenthood which are difficult to face unless we have a belief or a philosophy of life adequate to them, blows, griefs and tragedies which try the faith of man to the utmost. It is for this reason that I end, as I began this section, with the reflection that the life which operates through sex and parenthood is greater than man's science alone can prepare him to face; when his knowledge and calculation fail him he is driven back upon his fortitude and his power to accept, though in pain, the things which he cannot alter.

No one can understand why some people are born infirm in body or mind; although the science of eugenics may offer us clues and show us in time how to prevent some of these things, there will always be parents who have to carry the heavy load of their own disappointment, of caring for one who will always be to some extent a responsibility, and of watching their child's uphill struggle against a healthy and perhaps indifferent or cruel world. But it may be worth while to observe that those, whether parents or children, who weather this difficult test emerge with a quality of manhood or

womanhood in them which is unique, a depth of character far more beautiful than anything which can be produced as a result of a merely healthy or normal or successful life.

The Child in Charge of his Own Destiny

And so we are left wondering whether, in spite of all our attempts (of which such a book as this is representative) to find and preserve a normal and healthy way of life, normality may be not the only thing, and whether the real test of a man and a parent may be his attitude at the times when things go wrong. He may have to accept childlessness or bereavement; or there may be ingratitude and lack of filial affection amounting even to the bitterest cruelty. Since children are meant to be free, and have been born to grow up into free will and the full stature of manhood, they are even free to choose the wrong, and we may be impotent to prevent them.

This is a grief of old age, and usually comes, if it does, when our children are children no more. We may comfort ourselves sometimes with the thought that the wrong may be less wrong than it seems to us. Temperaments vary widely, children do not always take after us, and one man's standards will always differ from another's; perhaps even at this late hour we are in danger of denying our child the right to be himself, responsible only to his Maker, and in charge of his own destiny. Also, mankind as a whole marches on; nothing can obliterate the gap that separates one generation from another, and every son or daughter is in some things a stranger to the old folks. Yet sometimes the breach is healed, and by what? By a baby. When sons in their turn become fathers, and mothers meet with daughters by the side of the cot that houses a grandchild, they cannot but realize that in spite of their individual differences they are all equal in the presence of a child and responsive to the mystery which brings about the appearance of the new life; to this mystery parents are no more, and no less, than acolytes or attendants.

IV. THE SOCIAL IMPORTANCE OF THE FAMILY

Apart from its direct value to those who are members of it, the family may be seen to have a wider significance for human society as a whole. Anthropological research goes to show that there are interesting correspondences between the kind of family life that is found in any particular tribe or nation and the kind of social organization and tribal temperament that co-exists with it. For instance, it is the custom in one tribe for babies to be suckled for two years, and the characteristics of the tribe are contentment and a love of peace; another tribe separates the infants from the breast much

earlier than is customary in Europe, and is found to be very warlike.

We have seen that unhappiness in the home may lead to criminality, delinquency or perversion in its members, and this will bring about an unstable and insecure state of affairs in society. One is led to wonder whether any researches into social or economic problems are likely to bear lasting fruits that do not also try to account for the characteristics of the people themselves who are causing the problems and of the other people who are responsible for formulating public policy and launching social and economic schemes. The whole conduct of our business life, and of our more altruistic associations, such as those for social service, missionary effort, and national government, will be based ultimately on the characters of the leaders and of the rank and file who give their support; and these characters are formed, in the main, in our homes and families.

Most of the important character traits are formed before the age of seven years, and are difficult to alter after that age. From this point of view, it would appear that a right understanding of parenthood and child welfare might claim priority over all other human activities. Money spent on dissemination of such knowledge would yield far quicker and more lasting results than the same money spent on armaments, peace campaigns, mental hospitals, police or prisons; and expenditure on education of the right kind should likewise have our support. The prevention of war and the building of a new society must begin in the nursery; otherwise we shall waste our endeavours trying to stem an evil that is already a *fait accompli*.

Many factors are at work nowadays which tend to divert attention from the family and make it a more loosely-knit affair liable to disintegration. Rapid transport has destroyed the tendency for families to be associated with a particular village or district, which was formerly an important factor in their stability. Decline in religious belief has either caused or been due to a loosening of the family tie. An increase in the available pleasures and recreations, and a massing of large populations in cities, has contributed to the same state of affairs.

Perhaps it is impossible to put the clock back or reverse these tendencies directly; that may not matter if we can regain our devotion to the family itself and to the honourable estate of parenthood—not the old-fashioned blind devotion which could brook no departure from family tradition or the *status quo* and made no allowance for our progressive evolution, but a well-informed and sympathetic attempt to understand the one who is the keystone and growing point of every family—not the patriarch or the matriarch but the child himself.

CHAPTER SIX

SEX EDUCATION IN THE HOME

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I. FOUNDATIONS OF SEX EDUCATION

To the majority of normal men and women, the most interesting thing about this world of ours is that it contains people of the other sex. The difference between men and women, in the way they look at things, the way their minds work, their likes, dislikes, powers and limitations, adds enormously to the variety and interest of life in a way that is obvious to the most casual observer. But much deeper than this, Nature has implanted in men and women a sex instinct which is one of the most powerful forces in the whole of life. Above all things, Nature is concerned that the race shall be carried on, and to this end men and women must be attracted towards each other and led to bring about this desirable result. Hence the immensely strong, compelling force of the sex urge. But Nature, concerned only with the carrying on of the race, has made no provision for the different sets of circumstances which present themselves as the higher levels of the animal kingdom are reached and intelligence comes more into play.

Ever since man rose above the purely animal level and began to live in groups and communities, he has found it necessary to take cognizance of this powerful sex instinct, and to lay down rules for its conscious regulation. It is so important, and so powerful, that it cannot be allowed to run riot, or any orderly form of civilized life would be impossible.

On the other hand, this powerful creative urge is capable of many forms of expression besides the obvious one of producing children. Art, music, literature, architecture are all outlets for the sex instinct, and much of the beauty and colourfulness to be found in the world can be traced directly or indirectly to the workings of this creative urge, curbed and guided into socially useful channels. This is a fascinating subject, but we need not consider it further here, as it is dealt with at greater length elsewhere in this book. All that is needful is to stress once more the overwhelming force and importance of sex in life, and in the light of that conclusion to consider the question of sex education.

It would seem obvious that in a matter of such importance all possible care should be taken and no trouble spared to ensure that every boy and girl should grow up to manhood or womanhood safeguarded by thorough and adequate knowledge. Perhaps in an ideal state of society this will be, but it is very far from being the case at present, and a vast amount of misery and unhappiness results. In fact it might almost be said that there are very few adult persons to-day, even among those who have escaped the more obvious tragedies, who have not had to contend with some difficulties, inhibitions or maladjustments in the realm of sex, due to faulty sex education or to lack of any such education.

Unfortunately, the very fact that so many parents have themselves grown up with a warped and distorted outlook on sex makes it difficult for them to give good, sane sex education to their children. And so the vicious circle goes on, though there are signs now that a generation of young parents is appearing which is really anxious to educate its children properly in this most important respect, and is doing so with a considerable measure of success.

Importance of Home Atmosphere

Parents must first think the matter out thoroughly for themselves—if possible the mother and father should do this together—and then make a coherent plan, based on certain large, fundamental principles, to cover the whole period of the child's life from infancy to maturity. The alternative, to leave the child to pick up sex knowledge for himself, with the possible assistance of a few meagre scraps of information grudgingly given, is to court almost certain disaster.

There are still plenty of parents to be found who say airily: "Oh, well, they'll pick it all up soon enough. I don't need to bother." True, the majority of children will pick up a certain amount of knowledge, but it will be garbled, twisted, distorted, incomplete knowledge, probably acquired in thoroughly undesirable ways and from thoroughly undesirable sources. There are plenty of people about, both among older children and adults, who are only too ready to pass on to the uninitiated the products of their own ignorant minds on sex matters. Knowledge so acquired will almost inevitably be mixed up with a lot of uncleanness, and so from the start the whole subject of sex will be degraded for the child. Instead of being regarded as something natural and beautiful, it becomes a subject for giggles and dirty jokes. From the very beginning the child learns to associate sex with shame and furtiveness, mystery and a morbid curiosity. How can a

right attitude to sex in later life possibly be built on such foundations as these?

Before going on to deal with direct teaching of sex and with the questions that children ask, it will be well to consider first the foundations of sex education, for the matter goes deeper than the mere giving of information about physical facts. Many vital aspects of sex education are dealt with indirectly, often unconsciously, by parents and those in charge of children.

In the first place, the home atmosphere is of the utmost importance. If the general relationship between the parents and the child is one of friendly trust and co-operation, the ground is well prepared for frankness and confidence in matters of sex. But if the child is conscious of lack of sympathy and understanding in his everyday dealings with his parents, he will probably never even approach them with any of the questions which perplex him. If questions on all subjects are welcomed and answered as frankly and adequately as possible, questions on sex matters will be asked just like questions on other matters.

The importance of a frank and simple attitude to sex in the home from the child's earliest years can hardly be overstressed. It is immeasurably more valuable if both parents are united in their desire and agreed upon their plan to help the child to a right attitude to sex, and are both equally willing to deal with questions or to take part in discussions.

This brings us immediately to what is probably the most vital single factor in the whole situation—the relationship between the parents. From this relationship the child unconsciously absorbs his earliest and most deep-seated ideas about the relationship between the sexes. ("He" throughout should be understood to refer to either boy or girl.) A child who has grown up with a living example before him of sex at its best and fullest in a marriage relationship which is based on love, comradeship and mutual respect, growing deeper and richer as the years pass, has learned a lesson which neither books nor lectures can so successfully teach him in later life. The contrary is, unfortunately, also true. A child who lives in the midst of quarrelling and bitterness must inevitably grow up with a distorted view of sex and marriage which may, and probably will, affect the whole of his life.

Effect of Broken Homes

In this connection it is worth while mentioning a very common belief that strained relations between the parents can be kept from

the children. One hears it said: "Oh, we never quarrel in front of the children"; or, "Jack and I don't hit it off, but of course the children know nothing about it." This is a complete delusion. Children are extraordinarily sensitive to the atmosphere around them, and it is practically impossible to deceive them in such matters. They often suffer a great deal of unhappiness by reason of a situation of this kind, for one of the primary needs of children is for a feeling of love and complete security in the home background. This is one of the few points on which all psychologists will be found to agree. Without this feeling of security the child cannot develop in the best possible way, and security is impossible if there is discord, even concealed discord, between the two most important people in the child's small world.

There is striking proof of the harmful results which lack of harmony in the home may have on the child's development. Something like 39,000 children and young people come before the juvenile courts of this country in the course of a year, and long experience has shown that at least three-quarters of these come from broken homes. They may be homes in which the parents have been divorced or separated, or merely homes in which there is lack of harmony between them, but in either case the child has suffered from the lack of a secure and stable background. The consequences can be, and often are, disastrous.

Another of the ways in which a child's sex education is indirectly affected by the atmosphere and relationships in the home, is found in the happiness or otherwise of the relationship between mother and son and between father and daughter. A child's first experience of a relationship with a person of the opposite sex is with its father or mother as the case may be. If this relationship is a happy and affectionate one the way is made easier to a successful approach to the opposite sex when adult life is reached. With a boy, the relationship with his mother is particularly important up to the age of about nine or ten. After this stage his main interests are centred in his father and his boy friends, until in later adolescence the time comes for him to begin seeking a mate of the opposite sex. With a girl the case is rather different. Her early interests are centred in her mother, then they turn to friends of her own age and sex, until in her teens she is particularly attracted towards her father. If at this time she is able to have a really sympathetic and friendly relationship with him, she in her turn will have been greatly helped towards a happy and easy adjustment to sex and marriage later on.

This brief outline must not be taken to mean that these particular attractions towards one or other parent at different stages of the child's life must necessarily mean a turning *away* from the other parent or any lessening of affection. They are perfectly natural stages of development which affect every child to a greater or less degree, and parents can make the child's progress easier by recognizing the stages as they appear and trying to fulfil the child's particular needs. A hurt or jealous attitude towards the child's varying interests may cause him a good deal of unhappiness and actually retard his right and natural development.

There is one small point to be stressed, already mentioned in Dr. Hendy's excellent summary on pp. 186, 206, which may have far-reaching consequences in the field of sex education: training babies and small children in habits of cleanliness. A considerable period of time—usually two or three years—must pass before the baby can be relied upon to have complete control of bladder and bowel, and every mother knows how wearying is the constant labour involved in washing and changing and generally coping with the situation. It is all too common for the mother to resort to smacks and cross looks and expressions of disgust such as "naughty" and "dirty," in an attempt to train the child to cleanliness. This is a great mistake. Such reproofs, unimportant as they may seem, tend to make the child associate disgust and naughtiness with perfectly natural bodily functions—which are in any case quite beyond his control in babyhood.

Another question which may arise in babyhood is that of the child sleeping in the parents' bedroom, and sometimes even sharing the same bed. Either should be avoided whenever possible. Often a little ingenuity can find a way out. A child's crib, for example, may be put in the parents' bedroom in the early part of the evening, and carried into another room (well-aired and with windows opened) when the parents go to bed. All sort of fears and shocks of a sexual nature are experienced by young children sharing a room with adults, particularly when sexual intercourse occurs. Though not understood by the child at the time, the subconscious fear persists, and may give rise to considerable difficulty in sex matters later on. In an age when overcrowding is all too common in both urban and rural areas, it may not always be possible to achieve this separation, but a forward step will have been taken when all parents realize the existence of

the problem and are ready to make use of every opportunity of dealing with it.

So much, then, for the various ways in which the foundations of sex education are laid. It will be seen that the process is often unconscious. We must now consider the actual teaching to be given to children about sex, and the way in which their questions can be answered. The chief problems which parents have to consider are those of what teaching should be given, and how, when, and by whom. We have already put forward the reasons for giving children adequate teaching about sex, but even parents who are fully convinced of the need often find difficulty in dealing with the practical details of sex education.

II. HOW TO TELL CHILDREN THE FACTS

As to *who* is to give the necessary information, there can be little doubt that, at any rate while the child is young, the parents are the best people. They are in the closest association with the child, they are loved and trusted by him, and they are constantly called upon to answer hundreds of other questions about ordinary, everyday matters. This applies more particularly to mothers, who during the child's earliest years are constantly on the spot; it is almost invariably the mother who has the best opportunity of answering the very young child's questions about sex. The ideal state of affairs is for the father to be equally ready and accessible, and for the whole subject to be regarded as a perfectly natural family one whenever the occasion arises. Parents who neglect or refuse the opportunity of teaching their children the facts about sex, are deliberately throwing away what might be another link of sympathy and affection between the generations. Surely it is right that teaching on this intimate and personal matter should come from those who are in the most intimate and personal relationship with the child?

This emphasis on the intimate and personal nature of sex teaching is not meant to imply that the teaching should be at all tinged with emotion or sentimentality. Far from it. The teaching given to young children should be as a matter of fact and unemotional as possible. All that the child needs is to have his curiosity satisfied, quite simply, but truthfully and adequately. Those are the main essentials—strict truthfulness, so that the child learns nothing which he will have to unlearn afterwards, and as much information as he needs to satisfy his immediate curiosity, but not more than he is fully able to understand.

How to Answer Questions

Some parents are in doubt as to when it is wise to begin to give information. In most cases the answer is quite simple—whenever the child first asks a question. (Some children never do ask questions; they will be considered later.) Many quite young children, even of three or four, ask questions about where the baby comes from, and so on, and often parents hesitate to answer so soon. But if a child is old enough and intelligent enough to ask a question, he is old enough to have it answered. In fact, it is essential that it should be answered if undue curiosity is to be prevented, and the setting up of an entirely wrong attitude to sex subjects. True, the answer will have to be very simple, but curiosity will have been satisfied, and the child will return naturally and confidently for more information when he happens to want it. No artificial barriers will have been set up between him and his parents on this subject.

The cabbage patch, the gooseberry bush, and the doctor's black bag are not so popular nowadays as they were a generation ago, as answers to children's questions, but fibs and fairy stories are still all too common, and so are evasions and putting off—"Oh, I'll tell you when you're older." Nothing is safe which leaves the child's natural curiosity unsatisfied, or which gives him the impression that there is something queer and different about sex matters. He is quick to realize that his mother (or father) is embarrassed by certain questions, and is unwilling to talk about them, and this soon begins to build up in his mind that feeling of shame and guilt in association with sex which we have already discussed.

This attitude will, of course, be implanted still more strongly if the child's perfectly natural questions are met with scolding or reproaches, and he is told that they are naughty, or rude, or nasty. This will probably simplify matters for the parents by putting an end to all further questions, but the child's simple and natural approach to sex will have been poisoned and real damage may have been done.

Parents who reply to a child's questions with lies or evasions must also reflect that they cannot hope to get away with it for very long. The child is bound sooner or later to discover the falsity of what has been told him, and his trust and confidence in his parents can never be quite the same again. On the other hand, if the child has found that he can absolutely rely upon his parents, he will feel able to come back for further information whenever he feels the need of it,

and thus will be saved from having to ferret about in all manner of unsavoury holes and corners to satisfy his legitimate curiosity.

Parents sometimes talk about putting ideas into a child's head or of the beauty of innocence. Actually there are very few children whose curiosity is not aroused at one time or another about the subjects of birth and sex, though not all children manage to ask questions about them. Parents cannot keep their children for ever sheltered from the outside world, and they cannot tell what undesirable associates or circumstances children are going to meet outside their own home. The best possible defence for the child against dirty talk and unpleasant discoveries lies in the possession of accurate knowledge beforehand. All the possible thrill of guilty secrets is removed, and the child's attitude to those who are anxious to pass on their own shamed and muddled ideas is likely to be: "I know all about that, because my daddy told me, and I don't think it's a bit funny." These are the actual words of one small boy, on being enlightened by an older schoolfellow.

Child's Natural Approach to Sex

We have considered already the difficulties which many parents find in handling the subject of sex with their children, on account of the wrong upbringing which they themselves have had in these matters. It is a real help if parents can face up to these difficulties and realize, not only the fact of their existence, and the reason *why* they exist, but also that the difficulties belong to their own minds and not to the minds of the children. Children accept a simple presentation of facts with perfect naturalness, and normally attach no particular importance to any question they have asked unless the grown-up person's embarrassment or hesitancy causes them to do so. A child approaches every subject with a perfectly open mind, and until difficulties are put into that mind from outside his approach to sex is absolutely simple and uncomplicated. This fact comes as a surprise and a great relief to many parents who are trying to give their children a better chance than they themselves have had. Having prepared themselves for a task of great difficulty they find to their immense relief that it is not nearly as difficult and painful as they expected.

In this connection it is well to remember the importance of getting in first, before other people have had a chance to start the child's thought off in the wrong direction. Hence the necessity for answering the child's first questions as soon as they are asked, and not putting off the giving of information.

Many parents used to think that a talk to a boy or girl round about the age of fourteen was all that was necessary, and for this they somehow screwed up their courage. Actually, however, this is a most difficult age to begin tackling the business of sex education. Among the many physical and mental changes which are taking place round about this age, one of the most important is the gradual awakening of the sex instinct in its adult form, now for the first time beginning to play an important part in the life of the growing boy or girl. This dawning consciousness of sex makes it quite impossible for the adolescent to accept sex teaching in the same simple, casual way as the young child. It has, for the first time, become a personal matter, in a way quite different from the cheerful and detached interest of the little child.

Other storms and stresses of development press upon the child at this time, and it is only adding to his burdens to attempt to begin sex teaching at such a time. If, by any chance, it is the child's first contact with sex knowledge, the shock is far too great. If, which is far more likely, he has acquired knowledge from other sources, he may suffer agonies of embarrassment from being approached by one of his parents at such a particularly self-conscious moment.

There can be no doubt whatever that for the good of both child and parent, all the essential *facts* should be known before the beginning of adolescence, that is to say, by the time the child is eleven or twelve. This good foundation can then be used for the building up of more definitely *moral* teaching, which can be understood and appreciated by the adolescent because it is one of the needs of his particular stage, but which is wasted on the younger child.

What knowledge, then, do children need to have at different ages, and how can it be given so that the child will easily understand it?

III. WHAT TO TEACH BEFORE ADOLESCENCE

The first question that is asked by a young child is usually concerned with the arrival of a new baby. It may be caused by the birth of a baby brother or sister, or the arrival of a baby in the house of a relative or friend or neighbour, or sometimes merely by the child's curiosity as to where he himself came from. Usually the question comes out quite naturally and simply, as just one of the innumerable questions small children ask every day of their lives. If it is answered equally naturally and simply the child's curiosity is satisfied, his mind is set at rest for the time being, and the subject drops—it may be for months or even years.

All that a young child needs to be told at this stage is that the baby comes from the body of its mother, and that she takes care of it and keeps it safe and warm all the while it is growing, until it is big enough and strong enough to be born and come and live in the world with us, as the little new baby we can see in the cot. In some such simple words as these the general idea can be given, and even a very young child can understand it. It is, after all, so very simple. Children are used to seeing mothers taking care of babies; it is the most natural thing in the world to them, so what could be more natural than that mothers should take care of babies *before* they are born as well as afterwards? Moreover, the explanation is true, the child has had no wrong ideas put into his mind, and an excellent foundation has been laid, to which further knowledge can be added later on as and when the child wants it.

It is interesting to note that quite often the child will entirely forget what has been told him, and will come back later on with precisely the same question. This shows how little impression the information makes on him, and is a convincing answer to those people who think that children must necessarily attach the same significance to questions of this type as adults do.

What is Being a Father?

Let us suppose that, as so often happens, for a time the matter rests at this point. About the age of seven or eight or nine further interest often begins to arise. It is quite impossible to give anything even approaching exact age limits for any particular questions or interests, as children vary enormously. It is only possible to say that a large number of children *do* in fact ask similar questions at roughly similar ages. Even this can only be taken as an indication of probability.

Broadly speaking, it can be said that with many children the next question to arise is that of fatherhood. This is a perfectly natural development of the child's knowledge and interest, but many parents find it difficult to decide how to deal with it. Again, one perfectly simple idea is all that the child really needs. A good deal of help can often be gained at this stage, if parents will avail themselves of it, from the work that the child does at school. Nearly all children nowadays do a certain amount of nature study or biology, and from this most of them have grasped the fact that every living thing (with the exception of a few very simple forms of life consisting only of a single cell) has to have a mother and a father. The one simple fact that must be made clear at this stage is that every

new life, whether plant, bird, animal or human, begins from the joining together of a father-seed and a mother-seed. In the case of the human baby the father-seed and the mother-seed join together inside the body of the mother, and from this tiny beginning the new baby grows and develops until in nine months it is ready to be born.

There are several points to be noted about the teaching of this general idea. In the first place, it will be readily seen how well it links on to the earlier teaching. The child first learns that the baby comes from the body of its mother, and later learns how and why it starts to grow.

Second, some people object to the use of the words father-seed and mother-seed in this connection. It is quite true that botanically they are not strictly accurate, since the seed is really the result of the fusing together of the living particles from the male and from the female. But for general use, to convey a simple idea to a child who has not had and is not likely to have in the near future any specialized scientific training, they do very well. They are easily understood by any child, and the general idea conveyed is clear and correct. For those who wish to give more scientific names, it is easy to explain how tiny living particles, called sperms, are manufactured in the father's body, and tiny eggs, called ova, are present in the mother's body. When a sperm joins with an egg (ovum) inside the mother's body, a new life begins to grow. Both the sperm and the ovum are too small to be seen with the naked eye.

How Conception Takes Place

Third, parents often fear to tackle this particular stage of sex education because they are afraid that the child will not be satisfied with the information already given, but will want to go further and find out how the father-seed and the mother-seed join together. It is, in fact, highly probable that an intelligent child *will* want the whole matter explained to his satisfaction. If he has been brought up with a natural and wholesome attitude to the facts of sex, he can be told and will accept these further facts without difficulty. Since, in any case, the child has to have this knowledge at some time or other, is it not better that he should receive it, decently told, from those whom he loves and respects, than that he should be left to pick it up from dubious and unpleasant sources a little later? Reflection on these lines may help parents to screw up courage to do a job which may seem difficult, even at considerable cost to themselves, because it is so very well worth doing. Very few worthwhile things in this life can be achieved without cost!

What, then, is the answer to the child who possesses an inquiring mind and presses for further details on the subject of fatherhood? The same rule as before can be our guide—tell the truth, in a way that the child can understand. Explain that there is a special part of the father's body where the father-seeds, or sperms, are made and stored, and an organ called the penis specially adapted for putting them safely inside the body of the mother. For the mother's part, there is a special small opening by which the sperms can enter in order to come in contact with the eggs or ova. Obviously this information will have to be presented slightly differently to a boy and to a girl, since each is more familiar with his or her own body. The telling is made very much easier if boys and girls have been allowed from babyhood to play together freely at bedtime and bath time, and are naturally and easily familiar with the differences between their bodies.

It is undesirable to allow sex teaching of young children to become emotional or sentimental, but at this stage it can be pointed out to the child, quite simply, that this joining together of the sperm and the ovum, which results usually in the birth of a baby, is a very important and wonderful event. It should only take place when a man and a woman love each other very much and have married and decided to spend the rest of their lives together. Then there is a home ready for the new baby, and two parents to love it and care for it. There is no need to stress the opposite side of the picture unless the child happens to have come up against an example of an illegitimate baby, or of a girl who has got into trouble. Even then it is much better to dwell on the fact that the baby is missing a lot of happiness, and the joy of home and family, and to avoid talking of sin and punishment. We want the child's thoughts of sex to be beautiful and happy ones for as long as possible.

One word of warning is necessary about the explanation of fatherhood in terms of father-seeds and mother-seeds. Some parents, especially those with a little scientific knowledge, jump at the opportunity of explaining the facts of human reproduction with the help of facts about plants and animals. Quite often the result is that the child receives a long lecture on the fertilization of plants by pollen, and the production of young fish from spawn. Sometimes the talk may include the fertilization of eggs to produce chickens, but in any case the parent is apt to assume that the child will carry on the idea for himself, and grasp the principles of human reproduction simply from their likeness to the same process in other creatures. It is quite unsafe to assume any such thing. Children are very literal, and are

apt to receive any information at its surface value and no more. Many a parent who protests: "But I told Mary (or Tommy) all about it!" is amazed to discover that Mary or Tommy has entirely missed the point of the whole conversation, and has remained completely ignorant of the main facts it was intended to convey.

The biological approach to sex is a good and useful one for the parent with a sufficient amount of knowledge, provided that care is taken to see that the information is carried far enough and the facts of human reproduction are clearly explained. The other danger in this particular method of teaching is that the whole story may be kept too much on the animal plane, and the child left with the impression that human mating is a mere bodily process exactly the same as in animals. This is not going to be helpful in the creation of that right attitude towards sex in later life of which we have already spoken. There is in human sex relationships an element of love, of tenderness, of emotional and spiritual values, which makes them entirely different from sex relationship among animals; and some recognition of this fact must be made in teaching children. Some sensitive children have an instinctive understanding of it for themselves, and are quite distressed by too crude a biological presentation of the facts.

The Process of Birth

Another question which is often asked as the child begins to understand how the baby grows inside the mother's body is: "How does it get out?" This is quite often asked much earlier, by the little child who wants to know where the baby comes from, but the answer in either case, is much the same, except that an older child is able to take in rather more detail. The child can be told that the baby grows inside the mother's body in a special bag, called the uterus or womb, set low in the body in a very safe place. This bag, which is usually only about two inches in size, is so wonderfully made that it can increase in size as the baby grows. At last, after about nine months, a day comes when the baby is fully developed, and then the sides of the bag begin to squeeze and press, until gradually the baby has been squeezed out through the special opening in the mother's body which also expands. We call this being born. After the baby has been born both the uterus (the bag) and the opening through which the baby is born return to their usual size.

Naturally this will be put in its simplest form for the small child. In any case the child is likely to ask further questions if he is not satisfied, so that he himself should be our guide in deciding how

much information to give. Children vary very much in the way they react to this particular piece of information, and parents must be guided by their knowledge of the individual child. A sensitive child (particularly a girl) is often anxious to know whether it hurt her mother very much when she was born, and is very distressed to hear that this was so. For such a child the pain aspect must be glossed over, and the child told how glad and happy her mother was when her baby was born and she could hold her in her arms. On the other hand it is often valuable for an older boy to know that his mother went through a great deal of pain in order to bring him into the world—though the knowledge will do more good if it is left to the boy's own imagination and not laboured too much by the parent.

Co-operation Between Home and School

Mention has already been made of the nature study and biology work which the child does at school. The importance of biology in education has only recently been realized, and great strides are being made in this direction. More teaching is being given in schools, and teachers are being better trained to give it. If parents will take the trouble to find out what their children are learning at school in this subject, and to discuss with the teacher how the home teaching on sex can best be linked on, very helpful and valuable results should be achieved.

There is considerable difference of opinion among educational authorities as to the value of giving class instruction on the facts of sex. In some schools it has been done, and done most successfully, in the form of a carefully graded course of general biology, with the facts of human physiology, including reproduction, in their right place and proportion. In some cases this has been carried out by the science teacher, and in some cases by a specialist from outside, but in any case the skill and personality of the teacher seem to be the most important factors. Many interesting experiments are taking place in this field, and different methods are being tried out in different types of school, with the encouragement of the Board of Education. The Board has itself published a most interesting and helpful pamphlet on Sex Education in Schools and Youth Organizations, and all local education authorities are becoming alive to the need for tackling the problem.

In any case, no matter how good the scientific instruction on sex at school may be, it cannot compete in importance with the general attitude to the subject at home. As we have already stressed, mere knowledge of facts is only a part (though of course it is a very impor-

tant part) of sex education. A person's attitude to sex in later life is almost always coloured by the circumstances in which he first received his knowledge. Thus the importance of early home training can hardly be over-emphasized.

Having dealt with what may be roughly described as the first two stages in the sex education of children, we come now to the consideration of what special teaching is necessary as adolescence approaches. It has already been emphasized that this is the wrong time at which to begin sex teaching, but adolescence has special needs of its own which can—and must—be dealt with.

IV. FACTS TO BE TAUGHT DURING ADOLESCENCE

In the first place, some explanation of the bodily changes which are going to take place at this time should, without fail, be given to growing boys and girls *before* they actually occur. It can be a cause of great alarm and shock if these discoveries are made before boys and girls have been in any way prepared for them.

Parents who are on the watch for them can easily notice the signs of approaching maturity. Some development of the breasts and growth of hair under the arms and between the thighs in girls, and a similar growth of hair together with the breaking of the voice in boys all point to the change from childhood to womanhood or manhood. As soon as these changes begin to appear, or sooner if the child asks questions or if circumstances make it desirable, the parent should take an opportunity of telling the child of the other changes that will presently occur, and their meaning. This is not a case in which it is safe to wait for questions, as the child frequently has no inkling of what is happening, and so has no reason for asking any questions on this particular point.

As far as girls are concerned, the chief matter to be explained is the onset of the monthly period. Mothers will do well to refresh their own minds on this particular subject in good time, so that they are prepared to put the knowledge in an interesting and helpful way when the time comes. A detailed description of the female sex organs and their function will be found on p. 92 and plate, but a full description such as that is obviously too difficult for a young girl. What can be explained is that her body is now beginning to develop from a child's to a woman's (a process which takes quite a number of years to complete), and certain very important changes are taking place. One of these changes concerns the uterus, or the special bag she has in her body to take care of a baby if she should ever have one. In order to prepare it for its work later on, and to

keep it strong and healthy, an extra supply of blood passes once every four weeks through the lining of the uterus, all ready to nourish the baby if the ovum which has passed into the uterus from the ovary should have joined with the sperm. If this has not happened, the extra blood is not needed, and the whole lining of the uterus, together with the unfertilized ovum, passes gradually out of the body over a period of four to five days. The uterus is left fresh and clean, and the lining begins gradually to renew itself again. Presently another ovum is sent out from the ovary to the uterus, and at the end of about twenty-eight days the whole process occurs again.

The girl can be greatly helped in her adjustment to this considerable bodily change if it can be put to her in this way, as something which has real value in preparing her for the future, and not as an unfortunate nuisance which must just be endured. It is very important to stress the fact that the monthly period is a perfectly normal occurrence and not an illness. It is, in fact, a sign of healthy growth and development, and an indication that the girl will be able to have children of her own when she marries and has a home later on (see p. 93). Most adolescent girls have a dawning interest in homes and children, and this positive approach makes a much greater appeal than a merely negative one.

This approach also leads naturally to the importance of looking after her body carefully and keeping it clean and healthy. The old idea that washing and bathing at the time of the period is injurious is passing, mercifully, but it still appears occasionally and cannot be too strongly condemned. The mother should teach her daughter that special attention to local cleanliness is important at these times, and, if possible, a daily warm bath should be taken.

Age of Menstruation

There is no reason why the girl should not live a perfectly normal life during her periods, though very strenuous physical exercise is probably better avoided during the first two days. She should not suffer pain or inconvenience to any great extent, and if this does occur it is best to consult a doctor, as it can often be relieved quite easily. Similarly, a doctor should be consulted if the periods do not soon become regular. During the first year or two they are often irregular, as the girl's body has not completely settled down to its new routine, but this phase should pass. The girl should be trained from the start to record the dates on which her periods occur.

It is difficult to give any definite rule as to the age when menstruation (or the setting in of the monthly period) is likely to begin. Girls vary very much in this as in other points of development. Some girls arrive at puberty as early as ten or twelve years old, while others may go to sixteen or seventeen before a period occurs. Mothers sometimes become worried if a girl is past the age when they think her periods should have begun, and nothing has happened. If the girl is perfectly healthy in all other respects, eats and sleeps well, has a good colour, and is happy at home, at school or at work, there is probably nothing to worry about. There is no harm in consulting a doctor, so that the mother can be reassured. Also it is possible that the periods are being delayed through a slight degree of anæmia, and the doctor can deal with this condition.

There are certain common hygienic and other precautions which should be simply taught to young girls of this age, as they will naturally now be going about more freely alone. They should know that it is unwise to use towels or drinking cups in any public place; that they should never sit down on the seat of a public lavatory, but avoid bringing the skin into contact with it; that in travelling about they should ask questions only of such people as railway officials, policemen or postmen, and that in no circumstances should they consent to go anywhere with anyone they do not know. It is quite possible to teach these elementary rules without frightening a girl or causing her to be suspicious. Most girls of this age have already realized that there are good and bad people in the world, and that it is neither safe nor desirable to risk associating with the latter. They will probably not be so fully aware of the extent to which germs of illness can be picked up anywhere through lack of proper care.

Information for Boys

The needs of the boy are rather different at this age. He, too, is going to pass through considerable bodily changes, but they are somewhat less clearly defined than the girl's, and boys on the whole tend to mature a year or two later than girls. If an average age for puberty in girls can be taken at twelve or thirteen, that for boys is thirteen or fourteen, though, as with girls, there are wide variations.

The boy, too, needs an explanation of the changes which are about to occur in his body. He, too, is developing from childhood to adulthood, and important changes are taking place in his reproductive organs. At the age of puberty the boy's body begins to

manufacture sperms, and he is capable of becoming a father. (For a more detailed explanation of the physical changes see pp. 84 to 92 inclusive.) The sperms live in a thick whitish liquid, and sometimes a little of this liquid escapes during sleep from the penis. This, like menstruation in the girl, is a perfectly natural occurrence and nothing to worry about. Normally all the fluid manufactured can be absorbed by the body, but if there happens to be a surplus it is got rid of in this way. These emissions (night-losses or wet dreams, as they are sometimes called) are often a great worry to boys if they have not been properly explained, and it should be emphasized that they are perfectly natural and healthy.

These night-losses are often accompanied by dreams about sexual matters, and some boys become unduly preoccupied with sex at this stage in their lives. The boy has a difficult task in adjusting himself to this strong new instinct which is beginning to work within him, but he can be greatly helped by certain practical measures. Late or rich suppers, drinking before going to bed, over-heavy bedclothes, should all be avoided, while open windows at night, and a cold bath in the morning are steps in the right direction. The boy should also be advised to sleep on his side whenever possible, and to avoid lying in bed in a drowsy condition when he wakes in the morning.

It is much better that the father should talk to the adolescent boy than that it should be left to the mother. Sex-consciousness makes many boys of this age very shy of talking of such things with a woman, even their mother, and a father can introduce a man-to-man element into the conversation which makes a great appeal to the adolescent boy. Also the boy feels that his father has himself passed through all these experiences, and really knows what he is talking about. Of course, no hard and fast rule can be laid down, as individual children vary so much, but speaking generally this is a man's job, and the boy's natural reticences should be respected.

It is at this stage of the boy's life that he is most likely to fall into a habit of masturbation, or handling the sex organs to produce pleasurable sensations. (A detailed discussion of this subject will be found on pp. 265 to 267 inclusive. The most important point to stress in relation to sex education is that on no account should the boy be frightened by being told that disease or even insanity will result from this practice. This is entirely untrue, and the fear set up in the boy's mind may do untold harm. The boy should also not be given the idea that he is wicked to have fallen into the habit. Any association of guilt or shame with the sex organs is bound to have disastrous results, as we have seen.

The boy can be told that although the physical consequences of the habit are not usually serious, it does tend to cause fatigue and to make him less able to do well in school work or in games. Also he nearly always has a guilty conscience about the habit, which causes unhappiness and lack of confidence in himself. He can best be helped by sympathy, by reassurance that he will certainly be able to overcome the habit in time, and by being given plenty of interesting occupation for body and mind, particularly in ways that give scope for real creative work.

It is a good thing for a boy to be told something about menstruation in girls, in order that he may avoid making awkward comments if a girl is unable to swim on some occasions, or is a little off colour for a day or two. If he has been properly taught in childhood he will by now be in possession of all the essential facts of birth and reproduction, so that the knowledge of menstruation can be readily linked on to what he already knows. It is also good for him to reflect that women have heavier physical burdens to carry than men, on account of their work of carrying on the race, and that it is up to him to show them consideration and respect. There is much to be said for a little old-fashioned chivalry, even in these days of so-called sex equality!

In addition to the physical changes of adolescence, very rapid and far-reaching mental and spiritual changes are taking place. Mentally and emotionally the growing boys and girls are altering and developing. When we consider what a vast amount of change takes place in such a relatively short time, and what a strain the boy or girl is under in trying to adjust to these new conditions, we cannot wonder that children are often moody and difficult during these years. They belong to two worlds, the world of childhood and the world of adult life, but they are not completely at home in either, and their outlook and behaviour tend to alternate uneasily between the two. Their moods, similarly, swing violently from depression and a feeling of being a complete failure, to wild high spirits and a feeling of being on top of the world.

This instability makes them difficult to handle, and bears out what we have said earlier, that this is the worst possible time at which to *begin* teaching the facts of sex. Boys and girls have plenty to do at this stage to adjust themselves to the awakening sex within themselves—they do not want it thrust at them, as it were, from outside. Rather they need to be withdrawn from contact with sex as far as possible, for a time, and relieved from pressure until their

personal adjustments are made and they are more ready to face the next stage.

When Sexes Draw Apart

An interesting example of the way this works out in practice is given by the behaviour of boys and girls themselves, both at home and in such places as co-educational schools, where they are given every freedom to work and play together as much as they want to. Just before the age of puberty there is a perfectly natural and spontaneous drawing apart of the two sexes. Boys and girls between the ages of (roughly speaking) eleven and fourteen have usually not much use for each other. This seems to be a universal practice. Separate gangs of boys and girls on the street corners, as well as separation among children in more fortunate circumstances, all seem to bear it out. It is as if Nature herself draws the sexes apart at this stage, that each may concentrate for a time on its own development, ready for the next, and all-important, stage of choosing a mate and carrying on the race.

The importance of this stage of withdrawal so far as sex education is concerned is rather a negative one. Parents must recognize it as it appears, and leave the child free to follow the guidance of his or her own perfectly sound instincts. Sometimes well-meaning but misguided people do a great deal of harm by attempting to force boys and girls into an intimacy which they do not desire and cannot cope with. The parents feel that they are being very broad-minded and advanced, but actually they may do real harm in this way, and add to the difficulties which the boys and girls are already facing.

It must of course be understood that a strict artificial separation may be just as bad, particularly anything which gives the boy or girl a feeling of guilt about any association with the opposite sex. The safest plan at this age seems to be to leave boys and girls to follow their own paths. Their development proceeds at differing rates, and their needs vary widely. Quite soon a new and heightened interest in each other develops naturally and spontaneously as the main period of adolescence begins.

V. THE CHILD WHO DOES NOT ASK QUESTIONS

It may be well, at this point, to pause and consider the child who does not at any of the stages so far discussed ask any questions at all. Parents differ in their attitude to such a child. Some are only too thankful that they have not been called upon to answer any questions, and feel that they have no further duty in the matter.

Some are convinced that their children have never felt any interest or curiosity about sex matters, and talk about the beauty of such innocence. Some are quite genuinely perplexed as to what they should do, and feel that it is not safe to leave the whole matter to chance by doing nothing.

There are in fact a number of reasons why children do not ask questions. In a very, very small minority of cases the child may really be entirely incurious about the whole matter, but the number of such children is far smaller than parents believe. It is practically impossible for a reasonably intelligent, observant child not to be struck by the phenomena of birth and sex at some time or other, and to wonder about it all with a healthy curiosity. The child may not ask questions at home because it has already got hold of some garbled knowledge from a schoolfellow or an older person, and has already gained the impression that the subject is taboo. Children who discuss these things among themselves in secret invariably have the idea that there is something rude or nasty about it all, and that makes many children feel such shyness and self-consciousness about it that they cannot bring themselves to mention it at home, although they may be very anxious to obtain some accurate knowledge from a source that they can trust.

The idea of the taboo on sex subjects may be given, quite unwittingly, by the mother herself. Excessively strict training in cleanliness in early infancy, prudery with regard to any mention of bodily matters, great emphasis on covering up the body quickly when the child is naked, and a suggestion that there is something very wrong and indecent about the human body altogether, all combine to build up in the child's mind a barrier of shyness which will prevent him from coming to his mother with any intimate questions which puzzle him. This is particularly likely to be the case, as such a parent will probably be very careful to hush up any mention of birth or reproduction which may tend to arise in the family circle, thereby increasing the impression in the child's mind that no help is likely to be forthcoming from home.

Even if no policy of hush-hush has been deliberately adopted, there are a number of children who are by nature too shy and reserved to ask the questions they would really like to ask, when once the period of early childhood is passed. What, then, can be done about these children who do not ask questions?

First, it must be understood that there is nothing intrinsically delightful or beautiful about the so-called state of innocence, in so far as it means merely lack of knowledge. Ignorance is dangerous

and wrong, and not beautiful at all. Innocence, if it means the child's natural and healthy attitude to his own body and his easy and natural acceptance of the simple facts of sex, is beautiful. Moreover, it is the foundation of a right attitude to sex in later life, which is a tremendously important factor in the making of happiness and success.

If, then, parents have accepted the view that it is not necessarily a good thing that their child asks no questions, and if they are ready to believe that it probably does *not* mean that the child has never thought or wondered about sex, they will have to come to the conclusion that something must be done about it. The problem is not quite so straightforward as that of answering children's questions as soon as they are asked.

How to Introduce the Subject of Sex

Parents often wonder *when* they ought to tackle the subject with a child who does not spontaneously ask questions, and it is a little difficult to decide. Certainly the rule of telling all the facts before puberty still holds good, and is, if anything, more important with these children, who may already have mental difficulties about the whole matter owing to the way in which they have picked up their knowledge. It is very much better if the first fundamental facts can be taught in early childhood, but if parents have waited in vain for questions, and that time has passed, it would seem safe to say that by seven or eight years old some opening should be made. Since the child has not provided an opening by asking questions, the parent must make the opening instead.

This can be done quite casually, with reference to a new baby that has arrived, or to something which arises from a book or newspaper or in conversation. And then the facts can be simply told, as described previously. It is important that the child should be given all the information that he wants, particularly as he may be considerably confused in mind owing to incorrect or partly understood information from other sources. It is also very important to keep the whole thing on a friendly, unemotional, matter-of-fact level, and above all to avoid any suggestion of guilt or blame because the child may have been talking of these matters to others. It is best not to inquire into the child's earlier experiences, but merely to say: "I dare say you have heard something about this already, but perhaps I can make it clearer."

The great importance of a direct talk to the child is that the taboo is lifted, and the child no longer feels that this is a deeply mysterious

subject about which his mother will not speak. This is often an enormous relief to a sensitive child, who may be suffering a good deal from a feeling of guilt at doing something which he feels is deceitful, but which he feels unable to avoid. Some children also, are greatly relieved at receiving the true facts, as distorted facts about sex can be very alarming to a child's mind.

It should also be suggested that the parent will be glad to answer any further questions at any time, because it cannot be expected that all the harm which may have been done by the child's earlier associations will necessarily be immediately undone by one talk from the parent. Much good may be done, and at any rate some steps taken towards undoing the harm. Complete and matter-of-fact knowledge cannot fail to go a long way towards dispelling morbid curiosity, and the very fact that the child's mother has shown her readiness to talk simply and calmly about the subject dispels some of the clouds of shame and mystery which have accumulated round it in the child's mind.

Another problem which sometimes worries parents is how to prevent the child who has been fully informed from passing on his information to children whose parents are less enlightened. Such parents are often very annoyed to find that another child has given their own child the information they have so strenuously withheld. This is, of course, an entirely artificial situation, and one which will not arise in a more enlightened state of society when all children are given proper sex education. At present, however, it can give rise to quite tiresome complications among friends and neighbours.

It really seems a pity, when we are trying to give children a perfectly natural and simple outlook on sex matters, to have to say anything at all which suggests secrecy. Probably the best method of dealing with the problem is to say to the child that these are home subjects, which belong rather specially to mummy and daddy and himself, and it is better not to talk about them to other people or other children. It can be repeated that mummy and daddy are always ready to tell him anything he wants to know. Most children respond quite readily to this suggestion, and it is a better way of handling the matter than by making an absolute prohibition or treating it as a very deep and solemn secret.

Helpful Literature

Parents who find a real difficulty in discussing sex matters with their children can gain some help from various good pamphlets specially prepared to give boys and girls the necessary knowledge in

a clear and wholesome way. Such pamphlets, for boys and girls of different ages, can be obtained from the Central Council for Health Education, Tavistock House North, Tavistock Square, London, W.C.1, and from various other bodies. With these at hand there is no excuse for any parent who allows his children to go out into the world without the protection of adequate knowledge. But pamphlets alone are a poor solution of the problem. Much more depends on the parents' attitude to the whole matter; and on the attitude which can be built up in the mind of the child. A pamphlet can be given to a child, or, better still, read with him, but it must be given personally and not left about in the hope that the child will find it and read it secretly. And a definite invitation should be given to the child to come and ask about anything that he does not understand, or anything further that he wants to know. This may or may not lead to real confidence from the child, but at any rate the parent has made clear his own position, broken the spell of silence, and left the door open for further developments.

This brief digression has served as a useful halting place between the education of the boy or girl up to adolescence, and the education of the young adolescent up to manhood or womanhood. There is such a marked change in the whole mentality of the boy and the girl at this stage that the whole character of sex education must change as well.

VI. GUIDING THE YOUNG ADULT

It will have been seen that education up to adolescence is mainly a process of imparting facts and of inculcating a natural and wholesome attitude towards the whole subject of sex. It cannot be repeated too often that all the necessary facts should have been taught before adolescence, so that they can be accepted easily and without an emotional content. After puberty, the problem becomes mainly one of educating the emotions, of developing ideals and a sense of responsibility. It is not the facts which are important now, but the young person's application of the facts to his or her own life. This kind of education is obviously much more difficult than mere imparting of facts and answering of questions, and many parents stop short at this point. They feel that they have done all that can be expected of them when they have taught the facts of sex.

Adequate knowledge of the facts is, of course, essential, for no sound sex ethic can be built up unless it is founded on such knowledge. But knowledge of facts alone will not necessarily lead any young man or woman in the right path nor prove a defence in a

moment of sudden temptation. A certain attitude to the facts has first to be built up.

It has been emphasized many times in these pages that it is most important, in all our teaching of children, to avoid associating any feeling of guilt with the thought of sex in the child's mind. This is more than ever important in adolescence, when sex begins to loom large on the horizon of the growing boy and girl. Old-fashioned mothers of daughters, for example, used to be very anxious to keep their daughters safely at home, and give them the idea that it was the height of wickedness even to look at a boy. This kind of thing not only sets up quite unnecessary feelings of guilt, but also attaches a quite unnecessary glamour to the forbidden object. Such treatment is much less usual nowadays, when boys and girls normally have a good deal of freedom in their movements and in their friendships. But many parents still look disapprovingly at their children's friendships, and find it difficult to believe in the possibility of natural, healthy and friendly relationships between young people of different sexes. Once again it is the handicap of their own upbringing which holds them back.

What we have to teach our growing boys and girls is that it is right and natural for them to be interested in each other, right and natural for them to want to have friendships, but that the possession of all this freedom entails certain responsibilities. Let us by all means give them every facility for healthy work and play together. Evening classes, clubs, societies, rambles and cycling excursions are all excellent institutions, and there is need of far more facilities of this kind. The more young people can mix together openly and healthily, with plenty of fun and interesting occupation, the less will they be driven to clandestine meetings and secret love affairs.

Parents who can and will let their children bring home their friends, and who encourage all sorts of occupations and amusements, are helping the adolescent's development in the best possible way. An unobtrusive eye can be kept on new acquaintances, and undesirable friendships are much more likely to lapse quietly when the new friend is seen in home surroundings and is unconsciously measured by home standards and found wanting. Active complaint by the parents is far more likely to cement an undesirable friendship than to end it.

Adolescent Experiments in Emotion

As for responsibilities, both boys and girls in adolescence are reaching an age when responsibility is welcomed, if it can be pointed

out in the right way. Boys, full of their new-found manhood, can be taught that gentleness to girls and women is a mark of strength, not of weakness, and it is up to them, with their greater strength, not to do anything to hurt those whom it is their privilege to protect and care for. Girls, too, have a great responsibility. Only too often a girl can be seen leading a boy on, just for fun. She will see how far she can persuade him to go, and then draw back with righteous indignation and offended dignity. Girls can be made to understand that this kind of behaviour is both unfair and dangerous. A boy's feelings are aroused more quickly than a girl's, and are more difficult to control, and such behaviour is merely playing with fire and is quite unworthy of intelligent and thoughtful people. No boy will continue to respect a girl who behaves in this way, and it merely shows that she is not ready to be trusted with her newly-gained freedom.

Both boys and girls can understand something of the differences between the sexes, and how they are not equal but complementary to each other. The more they can understand of their own and each other's complicated emotional states, the less likely they are to be carried into real difficulties by their feelings. The masculine desire to show off by means of physical prowess or rainbow-hued socks, pull-overs and ties, and the feminine desire to attract by means of pretty frocks and coquettish ways, are neither wrong nor funny, but perfectly natural manifestations of a developing sex instinct. Like other good things, they are best used in moderation and not carried to excess. The intense interest in the other sex, and the strong feelings aroused by contact with them, are also perfectly natural, but are not to be allowed an absolutely free hand. Sex is a bad master if a good servant.

Adolescence is a time of experiment in new emotional situations. Nature has ordained it so, and nothing that we can do will alter this law of life. But it is better that young people should realize this, and it should be clear that these friendships and partnerships are not likely to be life-partnerships. Ultimately they will want to form a life-partnership, with its responsibilities of home and children, and for that they will want to reserve all that is best of themselves and their powers. Hence not too much of their best and deepest should be given away in these earlier experiments. Always within there should be the consciousness of a great future awaiting them with the partner of their maturer choice.

Adolescence is the time for the development of ideals. Heroic and splendid conduct of all kinds inspires a longing to do likewise, and ideals of service and sacrifice secure ready and eager followers. For the first time in the life of the boy or girl such abstract ideals as

unselfishness and self-sacrifice make a real appeal. Now is the time to put high standards of conduct before the adolescent mind, and now is the time to teach a high and positive sex standard. The negative attitude of "Thou shalt not" makes no particular appeal, but the positive picture of sex as a fine and immensely important part of life, to be controlled and used for the fulfilment and enrichment of life when manhood and womanhood are reached, can play a considerable part in building up the character of the adolescent. If this idea has been firmly grasped it will prevent the dissipation of too much emotional effort in adolescent adventures, and more particularly it will set the tone of those adventures in a way that will do nothing to mar the prospects of that future partnership.

Hindrances to Self-Control

Adolescent friendships and emotional experiments are extremely valuable, for through them both boys and girls gain the experience which will enable them to select wisely when the time comes for the choice of a life partner. Young people who have had no opportunities of meeting and mixing freely with the opposite sex are likely to be carried off their feet later on by the first person who comes along and shows signs of being interested in them. Experience is valuable, but that does not mean that sex need be cheapened or carried to excess in the gaining of experience. Young people should frankly face the fact that petting parties, and in fact much physical contact of any kind, only lead to passionate feelings and no satisfaction, and may make self-control very difficult. In this connection it is interesting to note that in nine cases out of ten it is the girl who sets the pace in a relationship of this sort, and she should clearly understand her responsibilities in this direction.

There is no need to deal here with the very important question of sex relations before marriage, as that is dealt with elsewhere in this volume. Parents need to think seriously about this question, and to be prepared to discuss it with their sons and daughters if occasion arises. In any case some positive advice on this matter would have to be included in the building up of a sound sex ideal for the older adolescent.

One question which frequently bothers parents is whether or not they shall give their young people any information about venereal disease. Some people maintain that the subject is so horrible and so terrifying that it is quite unsuitable for mention to young people at all. There is an element of truth in this point of view, but it is more than offset by the dangers of ignorance. Out of the many thousands

of new cases of venereal disease which come into clinics every year, more than three-quarters are between the ages of nineteen and twenty-three. These are staggering figures, and there is no doubt at all that ignorance is the strongest factor favouring the spread of venereal disease and militating against its conquest.

We cannot keep our children with us all their lives, and when they leave the shelter of home they will encounter dangers and temptations of which we shall know nothing. Dare we take the responsibility of letting them face these dangers in ignorance of facts, just because the facts are unpleasant? It is quite unnecessary to stress the horrors of venereal disease in talking to young people, but they should at any rate know that such diseases exist, that they are spread almost entirely by sex relations with an infected person, and that their consequences may be blindness, deafness, paralysis, sterility, or even death.

It is always advisable to put in a word about the importance of early diagnosis and treatment if infection is suspected. Parents naturally always assume that their own children could never be in need of that particular knowledge, but as a piece of public enlightenment, the more people who understand that fundamental fact, the better.

VII. MORAL STANDARDS FOR YOUNG PEOPLE TO-DAY

Young people to-day are facing a much more difficult state of affairs than was the case a generation ago. They have far more freedom of choice and action. They work and play together, choose their friends, regulate their own comings and goings, to an extent which was unthought of when their parents were young. This freedom, this frank and open association of young people of both sexes, is in the main an excellent thing. It is far more healthy than surface respectability and underhand affairs, but it has its own difficulties.

There is everywhere to-day much artificial stimulation of sex emotions. Cinemas, books, newspapers, all take sex as their central theme and blazon it in glaring colours on their posters and advertisements. All too often it is the worst and not the best side of sex which is so displayed and exploited. Hardly a newspaper advertisement of a toilet soap or a patent food can be found which does not make use of the sex theme as an inducement. A community suddenly released from the taboo on sex matters, thinks, talks and argues about sex to an altogether abnormal extent. It is a natural reaction from the dark ages of repression, but that does not make it any easier for these young people who have been born into this reaction.

Another very important factor in the problem is the trend of public opinion among the young people themselves. To a large extent this has favoured looseness of sex morality. In many places of business, factories, and so on, promiscuous sex relations are definitely the fashion, and when there is a strong public opinion setting the tone in this way it is extremely hard for a boy or girl to make a stand against it. It would of course be a gross exaggeration to portray this state of affairs as universal, but it is sufficiently common to make it a factor to be reckoned with.

Young people should also realize that people are differently equipped by Nature in regard to sex. Some are much more highly sexed than others, and a course of conduct which is perfectly possible for one person without danger can present real hardships to another. The ideal to be put before both boys and girls is that sex should be a partnership, for mutual benefit and happiness, and that any manifestation of sex which in any way hurts or damages the other is a lowering of this ideal.

What gradually emerges from all the foregoing conclusions is that young people to-day need to be helped to build up for themselves a new moral standard. Everywhere about them they see the old strict moral standards crumbling and falling, the old taboos and prohibitions losing their force. In a way this is a good thing, for the older standards were largely a matter of negations and prohibitions, enforced by savage penalties visited on those who strayed from the narrow path—or, more accurately, on those who were found out. Young people to-day are rightly questioning the basis of the old morality, but in repudiating much that they cannot believe in, there is danger that they will be left without any moral standards at all to guide them through the tempestuous years of young manhood and womanhood.

War always makes this problem of the relationship between the sexes particularly acute. Large bodies of young men are removed from their ordinary surroundings and occupations and are herded together in barracks and camps. This segregation brings about a craving for any kind of feminine society, and an unnatural state of affairs is created between the young man and any girl he may happen to encounter in his off-duty time. For the girl there is the attraction inherent in uniform, and the feeling that men who are risking their lives for their country deserve all that can be given them. When there is danger and uncertainty as to the future, young people tend to snatch at experience while there is still time, and everywhere there is the heightening of emotional tension and the loosening of controls

which war always brings. During the war years many young couples rushed into hasty marriages for which they were ill-prepared, and many more indulged in sex relations without marriage. In time of war "Let us eat, drink and be merry, for to-morrow we die" is a very easy and popular philosophy.

Freedom Based on Stability

There is great need for a new moral standard of chastity outside marriage and faithfulness within, but based on "Thou shalt" rather than "Thou shalt not." Such a standard will only be valuable when it is accepted gladly and voluntarily by young people because they genuinely believe that it leads to the best and richest kind of life, and not because it is enforced by threats and penalties from outside. It must be based on knowledge and respect of the sexes for each other, and not on ignorance and antagonism. It will present difficulties in the carrying out, but rich rewards for those who succeed. Unlike the old morality, it will have sympathy and understanding for those who fail, but no lowering of the high level to be striven for.

It is not by any means all parents who are privileged to be able to give help to their growing sons and daughters as they pass through the stresses of adolescence. Confidence is only possible if a sympathetic relationship has been built up from childhood. Even when this is the case, the natural barrier of reserve between parent and child is sometimes too strong, and the boy or girl may find it easier to talk to an outsider about these intimate matters. If this is the case, the greatest contribution that the parent can make is to avoid feeling hurt or injured, and to wait patiently in case confidence proves easier a little later on. This does in fact often happen, as the phase of shyness passes.

Parents must also remember that confidence is a tender plant, and withers in the cold blast of criticism. They must be prepared for the adolescent to advance, and to defend hotly, views very different from their own. It does not follow that he will hold these views for long, if they are tolerantly treated, but strong opposition is only likely to cause him to embrace them more obstinately. As has been suggested before, the same argument holds good with regard to friendships. A ready welcome for friends at home, and an uncritical attitude, will help very much to strengthen the bond between the adolescent and his parents at a difficult time.

Adolescence is a time of wandering, mental and physical, of experiment, and of a general widening of horizons. The growing boy and girl have a great need for freedom, but it must be freedom against a stable background. This, too, is a contribution that parents

can make. When they have done their work, when they have given the best sex education in their power, they must *trust* their young people, in this as in other matters. They must be prepared to see them experiment, to see them make mistakes, and youth must have the comforting sense that mother and father are always there in the background, loving, trusting, ready to help in any difficulty, but never to nag or to condemn. Fortunate indeed are the parents who have succeeded in establishing this relationship. They are highly privileged if their grown-up sons and daughters will come to them and discuss their ideas and perplexities in the realm of sex. This opportunity of helping to build up a new morality for the lives of young people to-day is perhaps the greatest reward which comes to parents for the years of honest endeavour in the field of sex education.

It will be said immediately by many people that the picture of family life and family relationships painted above is a hopelessly idealized one. It is, unfortunately, true that a large majority of young people receive no help or guidance from their parents along the lines indicated, and only a very sketchy amount of sex education of any kind. These are the young people who are helpless in a world where old controls no longer operate, and where no kind of training has been given them to enable them to organize their own lives on a sound basis. Misery, disease, loose sex behaviour, unsatisfactory marriages, and broken homes are among the consequences of this absence of direction. Something must obviously be done to help these young people here and now. It is impossible to wait and hope for the arrival of a time when a real sex education, in the truest sense of the word, shall be given to every child, whatever its social condition.

Much could be done by proper courses of instruction in the upper forms of schools, in colleges and evening classes and technical institutes. Much has already been done by such bodies as the British Social Hygiene Council, the Central Council for Health Education and the Marriage Guidance Council, which arrange courses of public lectures for young adults. Here they can gain accurate knowledge of sexual anatomy and physiology, while at the same time being taught to understand something of their own emotional nature and their social and personal responsibilities in the field of sex. More work of this kind is urgently needed, and there is every indication that it is eagerly welcomed by the young people themselves. Many of them, although very sophisticated and knowledgeable on the surface, are privately very conscious of their real lack of knowledge and are very ready to respond to the right kind of teaching.

VIII. PREPARATION FOR MARRIAGE

In order that the wheel may be brought full circle, and that this study of sex education may end where it began—with the baby in the cradle — we must consider finally the question of preparation for marriage. What help can be given to young people who are thinking seriously of this step? The subject is dealt with more fully in another section, but a few suggestions relevant to the problems of parents in this connection may be usefully made here.

At the outset it must be stressed yet again that a child's or a young person's attitude to marriage depends very largely on the kind of home surroundings in which he has grown up. Having seen the best, it is very hard to be content with a second best. Another point which arises in this connection is that when the parents are themselves enjoying a happy and thoroughly satisfying relationship, they will be unlikely to adopt a strongly possessive attitude towards any of their children. It is the parent who is unsatisfied and emotionally starved in his or her own marriage relationship who is likely to try to gain emotional satisfaction from a too close and possessive relationship with one or all of the children. Such a parent may make it exceedingly difficult for the grown-up son or daughter to throw off the parental yoke and establish a satisfactory marriage relationship of his or her own. It is not uncommon for such close dependence on the parent to make the child's own marriage a complete failure, and in any case difficulties are inevitable. This too-possessive relationship is particularly common in the case of mothers of only sons. It may not be easy for parents to put themselves into the background and encourage the formation of a new and deeper relationship in which they can no longer come first, but it is of the greatest importance. They will probably be rewarded, when the transfer has been made, by the friendship and respect of their married sons and daughters, which can never be retained by force.

Again, the older adolescent is more likely to have the right attitude towards marriage and the choice of a mate if his relations with the opposite sex have all his life been natural and free. Teasing, scolding, interference with his childhood and adolescent friendships, all tend to set up a distorted attitude to association with the other sex. It is difficult for a young man (or a girl) to feel respect either for himself or for his companion if every friendship he makes and every relationship he enters upon is made the subject of ribald jokes at home. We need to make clear to ourselves, and to bring up our children to believe that marriage and the relations between the sexes are *not* a subject for more or less coarse joking. It will only be

when we treat the whole subject with the dignity and respect that it deserves, that we can expect our children to approach it with dignity and respect also.

Young people should realize at an early stage that their marriage is going to be about the most important thing which will ever happen in their lives. When they look at it in this way they will begin to realize that a pretty face or a fine muscular development is not enough to form the foundation of a life partnership. A boy must realize that in asking a girl to marry him he is in effect asking her to be the mother of his children; and if she accepts him she is accepting him as the father of hers. This is a great responsibility, yet one to which most young people respond readily if they can be brought to think about it. So often they think of marriage only as a prolonged and intensified flirtation, or as a means of obtaining a home and comfort. These are the marriages which easily fail, just because they have no solid foundation, and no real care and judgment behind them. We do not want to destroy romance and the eternal beauty of young love, but to let our young people embark on marriage with the idea that they are embarking on one long honeymoon is to do them a grievous wrong.

It is also of the utmost importance that young couples who are engaged and preparing for marriage should talk over together their views on sex questions—children, how soon to have them, their attitude to birth control, their views on sex relations, and so on. All this is an intensely private and personal matter to the young people concerned, and parents should be exceedingly careful not even to appear to be forcing a confidence in any way, but it is well to be sure, unobtrusively, that both have really adequate knowledge, access to the best literature, and that the relations between them are such that they can discuss these matters with frankness and confidence. If they cannot, it is a sure sign that something is wrong with the relationship somewhere.

The parents who have faithfully tackled the task of sex education have the satisfaction of seeing a new home started, built on solid foundations of love and trust and mutual understanding, and a new generation of children growing up who will not be tormented and frightened by sex, as in the past, but will understand it, control it and glory in it. True, there will always be some failures. No amount of knowledge or help or training will be able to prevent some people from going astray, whether from temperament or maladjustment or some other cause. But for the vast majority success would be certain.

CHAPTER SEVEN

ADOLESCENCE

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I. PRELIMINARY STAGES

THERE is some basis for the popular belief that progress from infancy to manhood or womanhood is marked by stages of seven years. On the physical side, the first of these stages is not defined by any very obvious signs, though there are indications in relation to liability to infectious diseases and in other connections that the age of seven completes a period of important physical changes involving constant adjustment, whereas the following seven years are a time of relatively steady development.

Of the building up of the mental and, particularly, of the emotional side of the child life, this general principle is even more true. Psychologists have devoted much study to the emotional phases through which a child passes in its first seven years of life, and have reached general agreement on the nature and approximate times of the remarkable changes which take place in its feelings about itself and its relation to other children and to the older people who loom so large in its little world. A working knowledge of these different phases of childhood, applied with a good seasoning of common sense, makes a parent's job not only easier, but also, infinitely more interesting.

By the age of seven, the child's course, for good or ill, is largely set. From seven till fourteen should be, emotionally, a rather steady and unexciting time before the next big step, the coming of puberty and the beginning of adolescence. It is said to be the period when artistic feeling is strongest in children, particularly about the tenth and eleventh years.

Adolescence, in dictionary language, is "the period of life between puberty and maturity." For our purposes, it may be taken, roughly, as the years of the 'teens, as maturity comes shortly thereafter, and puberty occurs at or near their beginning.

What maturity implies, in a physical and in a time sense, is common knowledge, but puberty is a less familiar term which is

explained on p. 102. Broadly stated, it means the time at which certain glands in the body begin to take their full part in growth and development, so that parenthood becomes possible.

The word glands may be confusing to some readers, who do not know that there are various kinds of glands in the body, all doing different and important jobs. There are glands in the neck region, which become swollen when there is throat trouble and in certain other conditions; and there are numerous small glands connected with perspiration and other skin processes. But the glands we are concerned with belong to a special group which—often in addition to doing other things—produce chemical substances called hormones. The chemical substances pass into the blood-stream, and their presence is essential for many bodily processes. These glands are fully described by Prof. Marshall in pp. 104 to 111 inclusive, and are illustrated in the diagram facing p. 88.

The sex glands form part of this endocrine group, though they have another important function besides that of producing the sex hormones. They assume their full activity at the age of puberty, which is usually about fourteen, although it may, in the case of girls, be as early as eleven or as late as sixteen or seventeen. There is also considerable time variation with boys.

Physical Changes at Puberty

The physical changes at puberty may be summarized as follows: The sex glands—the ovaries and testicles—do two things. They manufacture their own particular sex hormone, when they act as endocrine glands, and they also start their other important function, the production of the reproductive cells. The ovaries produce the female reproductive cell, which is called the *ovum* (plural *ova*), and the testicles produce the male reproductive cell, usually described as a sperm, this being the shortened form of the full name, *spermatozoon* (plural *spermatozoa*). The sperms—constantly being manufactured in many millions—continue to be produced till late in life, though the period varies according to the health and vigour of the individual. The ova—only one ovum a month being usually released—are normally not produced after the age of forty-five to fifty, though, here again, there are individual variations.

The sex hormones have most important effects, for it is due to them that the physical and other changes of puberty occur, which usher in the period of adolescence. In the case of the girl, the actual time of the onset of puberty in each individual is more definitely known, as it is associated with the beginning of menstruation.

If this has not started by the time the girl reaches the age of seventeen, there is no need for alarm, but a doctor should be consulted. Menstruation is a dramatic and significant function, which is fully dealt with in other sections of this book (pp. 95 to 98 inclusive, p. 224, p. 276), where the further physical changes which take place in girls at this time are also described.

There is no such dramatic happening in the case of the boy, but though the onset of puberty in him may appear to be more gradual, we have seen that the changes which take place are no less profound and important. His body becomes more angular and muscular, his voice breaks, and hair appears first in the genital region, later under the arms, then on the face, and, sometimes, on the chest. All these changes are due to the effect of the sex hormone produced in the testicles and circulated by the blood-stream to every part of the body. If, for any reason, such as accident or illness, the testicles do not provide the sex hormone, these changes do not take place. Not only so, but if the supply of this wonderful chemical substance is not fully kept up throughout life, some of the physical signs of masculinity will be modified.

On the physical side, therefore, puberty is a very important landmark in life's journey for both sexes. But there is much more than physical change. It is because parents and teachers do not always appreciate this that there is often difficulty in the early days of adolescence. The different outlook on life and on other people, the new feelings and impulses experienced, which are often summed up as the psychological changes of puberty, are quite as big a switch-over from the pre-puberty life as is the new physical equipment. They are more subtle changes, and are largely concealed, and they are therefore not noticed or realized by many older people, who readily forget their own youthful experience. Parents and others concerned with the upbringing or supervision of young people should know that, in the words of a high scientific authority: "Puberty means indeed more than the attainment of genital maturity—it changes the physiological, the anatomical and the psychological aspects of the individual."

II. THE MODERN YOUNGER GENERATION

Each generation of human beings comes into a new kind of world. There are always some changed conditions. Those born into them naturally adapt themselves more easily to them than do many of the older people, who find the new ways disconcerting and upsetting. Diaries and reminiscent writings, published over hundreds of years,

show the periodic repetition of melancholy reflections about the arrival of degenerate days, and conclusions that the quality of the new generation is not quite up to the standard of the one immediately preceding it.

While the new world has sometimes been one of relative stagnation or even of retrogression, in our times there have been great scientific advancement and new political and social conceptions. It is probably true to say that never in the world's history have there been such vast changes in both directions as those which have been witnessed recently in little more than a single generation.

Many people living to-day have a clear recollection of a world without motor cars, and can remember that the earliest of these surprising machines were preceded on the roadway by a man carrying a red flag. (There are those who regret that this excellent practice was given up.) What the effects of the coming of the motor car have been are not easy to estimate. One, however, relevant to our subject, is the influence of the motor bus in giving a common outlook to young people in town and country. In days not so long ago, lads and girls in rural areas looked forward to an occasional visit to the big town or city. This was a great event, involving much anticipation and preparation. It was probably associated with some fair or show or holiday, and stood out as something to be thought of and looked back upon for the rest of the year, when the ordinary routine of the village gave life its setting. Nowadays, a weekly, or more frequent, bus visit to the nearest big centre to see friends, to go to the pictures, to do shopping, and so on, has very largely helped to make similar the outlook of the youth of the town and of its surrounding rural areas.

An even more surprising innovation in transport—the aeroplane—has not only made the world much smaller, but also, as we have seen, has altered with devastating effect the whole character of war.

Wireless and Cinema

Wireless will probably be noted by the historian as the most significant, and, in its effects, the most far-reaching discovery of these days. For it may, I think, be said that the coming of dictatorship—so momentous a feature of our world—would not have been possible without it. The ability of one man to speak to scores or hundreds of millions of people at the same time, with the same message, and to communicate the same stimulus, particularly to his youthful audience, has probably been an essential element in the rise of the totalitarian states. In other ways, the radio has brought changes. It

has modified musical and dramatic forms and expressions, and has had a standardizing effect in various directions—good and bad. It has altered habits of reading and study; it has extended the horizon of both young and old.

Perhaps, however, the greatest of all cultural influences upon the members of the present youthful generation has been the cinema. Their elders, also, have come under its spell. Whatever may have been its other results on young people, there can be no doubt that it has brought warmth and colour and comforting, if vicarious, compensation into many dull and drab lives. It has given much lively entertainment and delight, and its technical achievements and artistic developments mark a triumph of man's genius. Educationally its possibilities are vast, though they are as yet only beginning to be explored.

There would be, no doubt, many different opinions about the effects of the commercial cinema on the adolescent, but that its influence is great few would deny. It has tended to standardize styles of clothing and hairdressing among girls; it has extended and enlivened, if it has not always enriched, the vocabulary of its devotees. It portrays attractive women, and strong, but seldom silent, men, who may be angels and heroes or vamps and gunmen; it gives intimate knowledge of beautiful mansions and ballrooms, of fashionable restaurants and night clubs, which few of the observers would, otherwise, even know about, far less visit; butlers, for example, once a small and exclusive section of humanity, known only to those in high society, are now familiar in all their majesty and occasional frailty to the humblest denizens of the East End. In some of its great achievements, the film has re-lived history as no book could ever do. Its humour is mostly primitive, so that the appeal may be wide; truthfulness to real life varies between good, bad and indifferent, though standards and technique are steadily improving.

Film stars have become the glamorous idols of multitudes of young people, and for these exalted beings to appear in any public place is for them to risk being torn limb from limb in efforts made by film fans to obtain buttons, handkerchiefs or other fragments as souvenirs, to be cherished as precious treasures. There is little doubt that the attitude to life of some film stars, and, especially, their easy transitions into and out of matrimony, have considerably modified the views of many adolescents on the validity of orthodox sex standards.

A large proportion of the pictures shown in the commercial cinema have a love interest. It is natural that this should be so. In every country and among all peoples, the drama of human love has always formed the main theme of music, poetry and folklore. In such films many onlookers find a deep if vicarious satisfaction.

Nevertheless, we have to consider whether the presentation of sex in the commercial cinema can be regarded as an adequate guide to the adolescent on a subject which each of them has to face individually at some time or other. It is no disparagement of the cinema to suggest that its presentation of sex is almost invariably one-sided. It must be so, or its patrons would not be satisfied. The appeal of the legitimate theatre—with its living actors—is less wide, and a large section of its supporters welcomes the setting out of the tragedy and disillusionment as well as of the comedy of life. The appeal of the commercial cinema is to the multitude, and its chief mission is to give entertainment and compensation. No doubt in time, if and as the standards and demands of the multitude are raised, and their need for escape from frustration and disappointment is lessened, the cinema will be able to portray life more comprehensively, and with a closer approach to reality and truth. But this development is only just beginning.

To the sophisticated adult, a one-sided presentation of sex does not matter. He or she can fill up the blanks from knowledge and experience. For the younger generation, the position is very different. In childhood and early adolescence, the developing intelligence is trying to understand the world and to sort out the relative values of things. Few at this age have ever been regular attenders at stage plays, and even if they have been, the theatre has contributed little to the analysis or solution of youthful problems. But to-day tiny children are taken by the hand to the pictures, and even before puberty many boys and girls are confirmed in the habit of attending once a week or oftener. Going to the cinema is part of the routine of life for millions of early adolescents, and the pictures contribute in great measure to the building up of the conception and philosophy of life which these young folks ultimately achieve.

How the Cinema Portrays Sex

Sex, as seen in the cinema, is in the main glamorous, passionate and triumphant. The snags are not shown. The pictures are untrue to life not so much by what they show as by what they leave out. Though by no means the only one, the cinema is probably the main source of sex stimulation of present-day adolescents and young

adults not experienced by any previous generation. A one-sided presentation is, therefore, of importance for them.

It is unnecessary and useless, even if it were justifiable, to condemn the cinema on this account, and to try to prevent young people from attending it. Certainly, greater care might be taken to see that children, even if accompanied by older people, should not be allowed to view pictures unsuitable for them. Censorship of this kind, however, is always difficult, and seldom consistent.

The cinema has come to stay. It is popular, and, as already said, it gives great pleasure and happiness to vast numbers of people, and it does so without any harmful result to them. We are concerned with its effect on the adolescent and unsophisticated. The real remedy for any possible undesirable effect on them is to see that young people do not get *all* their ideas of the place of sex in life from the pictures. If the teaching and guidance sketched out in other pages of this book are provided for the child at home and at school, and for the adolescent who has become sex conscious, these will help to supply what the pictures leave out, and ensure a more balanced view of the relation of sex to individual well-being and community welfare. The dangers of lack of self-control will be known, and it will be less necessary to introduce unpleasant realism into the pictures, which, as has been said, is not part of the present function of the commercial cinema.

III. FREEDOM OF MODERN YOUTH

The freedom enjoyed by modern youth in contrast to that allowed their parents at the same age is another factor in the present-day problem of the adolescent which is apt to be overlooked. This new liberty has not only involved the removal of restrictions in such matters as night hours, choice of recreation and amusements, and the kind of books read, but also in the selection of companions, including those of the opposite sex.

This development, though looked at askance by some of the older generation, is not to be deplored. It is healthier, and it makes for earlier growth of character and power of decision and self-control. It also dispenses with the need for subterfuges by means of which the rules and regulations of "the good old days" were frequently circumvented. Young folks are able to be more honest and natural than in the times of the heavy father and of the prolonged segregation of the sexes.

Nevertheless, freedom always brings risks. It gives the right of choice, and the power to incur danger. Here, again, knowledge of

the appropriate kind is necessary. We would not wish the new freedom to be withdrawn or restricted, even if that were possible. Rather would we wish every young person to be so equipped that freedom will be wisely used, so as to bring happiness and not disaster. Many young people who have blundered into mistakes which have affected their whole lives, and brought sorrow to their families, might not have done so if they had understood better the possible consequences of a certain line of conduct. It is a common assertion that young people to-day know all that is to be known and need no instruction. Those who are in a position to judge are well aware that this is not true of the vast majority. What is surprising, indeed, in view of the vast numbers of young folk thrown prematurely—without knowledge or guidance—into a difficult world, is not that some go wrong, but that so many seem to escape any serious consequences.

It does not follow, however, that all is well even if escape from any major physical disaster is achieved. Lack of understanding of their own make-up, and of physiological happenings, self-reproaches at perfectly natural human feelings, and ignorance of the limits of safety in sex relationships all bring fears and inner conflicts. The consequent anxieties and sense of insecurity are responsible for the emergence of many of the emotional upsets among adolescents and young adults of which doctors and psychologists are becoming increasingly aware. Freedom must be reinforced by knowledge if it is to be real freedom, and not slavery and inward strife.

Another change of some importance in the position of the adolescent is the decline in the scope and power of religious sanctions. The parents of those now in their teens were, with relatively few exceptions, brought up with a Sunday school or church connection. To-day, great numbers of children merge into adolescence without ever having been associated with any religious organization. It may be fairly argued that the fear of divinely-administered pains and penalties (which is religion in its least developed form) lacks ideal justification as a means of ensuring good conduct. Those of us who have experienced its operation, nevertheless, can vouch for its effectiveness as a check on certain kinds of behaviour. On a higher plane, and without entering into larger and more theological considerations, it can be truly said that religion—particularly by its assurance that the Power behind us is friendly and helpful—gives a balance and a meaning to life which brings confidence and provides direction. It also emphasizes the important truth that it is

often worth while to sacrifice immediate pleasure or gratification for some future goal or ideal.

The World War of 1914-1918, also, was not without influence even on those who were not born before it had run its long and depressing course. It was succeeded by disillusionment, by widespread unemployment and economic insecurity, and—later—by the increasing menace of the yet more tragic and bitter experience which in 1939 came upon us. Parents have not always been able to do their best. Many of them lost heart and faith, and the children suffered from the consequent apathy and drift.

Political and social changes of great significance which took place during the same period of time had no doubt less direct effect on the youth of democratic countries than on other of the countries more immediately concerned. The dramatic appearance and accompaniments of Communism, Fascism and Nazism, however, proved a profoundly disturbing factor to those striving to obtain a conception of an ordered and orderly world. There were relatively few converts to these doctrines in democratic countries, but their propagation and spectacular application deepened the sense of insecurity, and increased emotional tension in many of our young people.

A Splendid Generation

Yet such is the resilience and power of youthfulness that, notwithstanding all these adverse influences and difficulties, we have to-day much reason to be proud of our British adolescents. They are unquestionably better equipped physically than any previous younger generation—a tribute to our educational and social services. What they are mentally is yet to be proved, but we know that they have courage and character. They are natural and they are frank, sometimes embarrassingly so. And, despite the temptations and difficulties of the times in which they have had to grow up, most of them have been courageously equipping themselves, often under great handicaps—in some cases amounting almost to virtual prohibitions—to play an honourable part in the world. Evening schools, technical, art, commercial and secretarial colleges are again being crowded out by eager students, full of energy and hope for the future, while our playing-fields, gymnasia and swimming baths have not been able to meet demands.

When the dreaded war became a fact in 1939, with more knowledge of what it meant than had the adolescents and young adults of 1914, these eager students, both boys and girls, quietly put aside their

hopes and ambitions and recreations, and dutifully prepared to face an ordeal which had no attractions for them, but which, with few exceptions, they had not thought to try to avoid.

Emancipation of Women

Those of us who remember the previous war could observe no great difference in the young men of the last war, except that there has been less exuberance, no doubt because they knew better what they had to face. There does not seem to have been any great change in their attitude to life, or to the opposite sex.

The girls, however, are different. The emancipation of their sex, largely influenced by the women workers of the former war, and achieved, politically, at its close, is now almost complete. The last traces of Victorian prudery and primness are gone. Aids to attractiveness, biologically justified, but formerly regarded with grave suspicion, are now openly displayed by the most respectable, and are often applied before the world. The standard of taste in dressing and hairdressing is uniformly high, and in these important matters there has been a remarkable and admirable obliteration of social distinctions.

There is greater comradeship between the sexes, often without any evidence of emotional attachment, and our young women have left few spheres of activity as masculine preserves. They are doctors, lawyers, policewomen, firewomen, transport and tractor drivers, and many other things that were formerly regarded as quite outside the sphere of women's work; yet, in these, they retain their feminine qualities and charm. There is less sentimentality, but plenty of sentiment for the right person, while there is now little attempt to conceal the truth (which formerly came to the male only late in life) that men are really the romantic sex and women are the practical.

The changes in girls' ways and outlook have caused head-shaking among some Victorian survivors of both sexes, but they have given us a fine, healthy and enterprising young womanhood, with abundant capacity, and yet with tact enough to give just sufficient acknowledgment of the community position of the male as to leave him some justification for leadership. He has doubts about his sex superiority in other respects, which is probably good for him.

War inevitably compels suspension of many community activities, but it has made more urgent the task of equipping our adolescents for whatever may lie before them in the years to come. They will have lived through a period of high emotional tension, which will often have made it more difficult than at other times to exercise self-control. The caution of normal life is in war time and in its

aftermath apt to be thrown aside in an atmosphere of "Eat, drink and be merry . . ." To inner fears and a sense of insecurity, which so many are concealing, have been added the effects of a greatly-increased insecurity in the external world.

We of the older generation cannot deal with all these factors, but we can and must see that efforts are made to give physiological, psychological and social enlightenment to youth which will help it in the making of decisions, and in the avoiding of dangers of which many young people have not even heard. It is a defect in our civilization that it should be necessary to do this, and we may be sure that future generations of adolescents will be more adequately prepared. Something has already been done; educationists are now alive to the foolishness of neglecting training and guidance for the emotional side of life, and of concentrating almost entirely on the intellectual, which has much less to do with attitude and conduct than the emotional side. They are realizing that we act much more because of what we *feel* than because of what we *think*. What has been done, however, is only a beginning in meeting a great and urgent need.

Not so very long ago, it was decided by the authorities that no one in charge of a high-powered engine should be allowed to use our roads unless he or she had acquired some knowledge of the engine, and some power of controlling it, as well as familiarity with the Highway Code. Is it unreasonable to ask that our adolescents—in charge of a different kind of high-powered engine, in their instincts and feelings and creative energy, which they may use to their own or others' advantage or detriment—should also have some knowledge of the forces they have to control along the highway of life, and that they should be aware of the signs and the nature of the dangers on that road, which they, if they are to be good drivers, will have to avoid? What is surprising is that, in these days, the question should require to be asked.

Pending the inclusion of graded and adequate sex education in the curricula of all our Schools, and particularly for the benefit of adolescents, courses of lectures giving a minimum of the necessary information and guidance can now be arranged by the Health and Education Committees of Local Authorities, and many of these have been given throughout the country with excellent results. Their nature is described in following chapters. In war time, and in its following years, they have proved more than ever necessary.

There will now be considered, in more detail, the case of "The Adolescent Boy" and "The Adolescent Girl."

CHAPTER EIGHT

THE ADOLESCENT BOY

By SIR DRUMMOND SHIELDS
M.C., M.B.

I. GENERAL SURVEY

WHILE it is convenient to discuss separately the development and special problems of the boy and the girl, it must be realized that there is, in the early years of adolescence, much common ground, and a certain similarity in the way they both react to the new forces within them.

The boy's response to the physical changes depends largely on whether he has been prepared for their coming, and, if so, on the nature of the preparation. If he has been fortunate enough to have had parents able and willing to inform him, according to his capacity and questionings during childhood, about these matters; or if, in the absence of this invaluable help, or in addition to it, he is lucky enough to have been taught biology at school; and still more, if this has been linked up with some elementary human physiology, he will take the developments as a matter of course.

In the vast majority of cases, there has been no such preparation, but most boys are good mixers, and will have learned by observation of older lads during bathing parties and athletic exercises and games something of the physical changes which take place at this time. No doubt, also, there is often talk about it, with, sometimes, a passing on of weird and wonderful information.

Many sensitive lads, especially those who are not members of the more robust groups, have anxieties at this time. They may be slow in development compared with others of the same age, and they fear that something is wrong with them. Their sex organs may be small and thus appear different from those of others, and they get a feeling of inferiority and shame. Or it may happen that embarrassment arises from the opposite cause, where the development has been early, and the sex organs are larger than those of companions. In both of these cases, it is important that the boys should know beforehand that there is a wide variation in time in the appearance of puberty. Sometimes, also, one or both testicles

may not be in the proper position. (This is a matter which requires medical attention.) The point to note is that it is the being different from others that causes the sensitiveness and feeling of shame, and which makes reassurance so necessary.

Boys are secretive about imagined inferiorities of this kind, and are not likely to seek advice in proper quarters, even when it is readily accessible. It is for this reason, among many others, that a bond of confidence should be early established and be maintained between father and son, so that matters of this kind could be discussed without embarrassment. No less commendable is the objective and impersonal teaching of biology and human physiology which modern educationists are advocating as an essential part of the school curriculum, and the wise direction of such teaching to the requirements of the age and sex of those taught. From such teaching, sensitive lads and girls can obtain the comfort and assurance which will set their minds at rest.

Psychological Changes at Puberty

The psychological changes at puberty are not realized, objectively, by the boy, though some of them may cause secret, if sympathetic, amusement to his elders. Boys, unless under discipline, or having been very strictly brought up, are, before puberty, notoriously careless of their appearance. Mothers of all social grades are often scandalized, when they are entertaining company, by the bursting in of a wild-looking and dishevelled heap of humanity, with clothing torn and dirty, and hair flying all ways, whom they have to acknowledge with confusion and shame as their son.

Although it does not always happen, it is quite normal for this young man, whose former homecoming was so devastating, suddenly to develop an interest in his appearance. Clothes, collars and ties are now critically scrutinized, by himself rather than by his mother, and, greatest wonder of all, he invests some of his surplus cash in a bottle of hair cream, and his wayward locks are plastered down in a glory of sleekness and gloss. He is paying unconscious tribute to the power of the sex hormone.

Qualities of physical courage and love of adventure also begin to show themselves at this time. How the circulation throughout the body of a physical substance like the sex hormone can affect qualities related to character and spirit we do not know. But it is, nevertheless, true that with the absence or deficiency in a boy of the sex hormone, timidity and lack of virile qualities are usually associated. (There

may, of course, be other reasons for apparent timidity.) Part, at least, of the explanation is that the customary division of human nature into physical, intellectual, emotional and spiritual, while convenient for investigation and discussion, is quite arbitrary, and that the human being—boy or man, girl or woman—is a unity where all this different equipment is linked up and blended. When this process of linking up and blending is successful, we get a perfectly normal and balanced individual, sometimes described as an integrated personality. From another aspect, we can look upon physical and mental health as the result of the harmonious adjustment of all the different functions and powers of body and mind. Harmony is health and health is harmony. And when the harmony is broken or has not been reached, we have ill-health—physical or mental—because there is imperfect adjustment between one or more of the parts.

Such considerations have an important relation to the early years of adolescence. For these are years of adjustment, physical, mental and emotional, and directly affect the degree of harmony of personality finally achieved. The new powers and impulses inspire not only physical activity, but, also, the imagination. The boy now becomes, more or less, a daydreamer. He is fired with thoughts of heroic adventures. The form of these varies according to the period. In the boyhood of the older generation, Buffalo Bill and the wild West provided much of the raw material of the daydreams. Nowadays, with a more mechanically-minded younger generation, the airman and the wireless operator are more in evidence, while the call of the sea and the heroes of the football and athletic fields still exert the fascination they possessed for previous generations of boys.

The adventurous outlook of the boy is often associated with the beginnings of idealism and altruism and of the desire to be of service to his family, country, or to humanity generally. It is often a vague and confused desire. It may express itself in assurances to his mother that he will work for her and make her lot easier and happier; or it may take the form of an expressed determination to be a soldier or sailor or airman, especially if, as recently, he finds himself in a war atmosphere. Religion often makes a special appeal to a boy at this age, and he may dream of being a missionary in heathen lands. Whatever the picture is he sees himself in its centre, and if it shows his diving off a pier to save a drowning child, or carrying a woman down a fire escape, he has further pleasure in contemplating his own modest bearing as a medal is pinned on his breast.

Juvenile Delinquency

All this goes to show that wise supervision and guidance are desirable in the difficult years from fourteen to eighteen, while the physical, emotional and spiritual adjustments are going on. It is a time of instability and restlessness. During this period, school discipline on modern lines, carried out mainly by the boys themselves, which will yet leave a sense of personal freedom and of opportunity for individual self-expression, is probably the best way of developing the self-control and the team spirit which will enable a boy subsequently to fit himself into community life. When our governments are wiser, boys will not be pitchforked into industry at fourteen or even fifteen, to mix with adults (often not too careful how they speak or act before boys) and to embark on a career at a stage of development too early in most cases to ensure that the occupation is a suitable one.

Juvenile delinquency is often associated with this stage. The spirit of adventure, and the new courage and energy, demand expression and must have an outlet. If there is opportunity—with real but not too obvious supervision—for games and athletics, for romantic excursions into the wilds, for camping and for taking part in occasional spectacular displays, as well as for some mental exercise, there is little difficulty in conforming to the relatively dull routine of life in the intervals. If, however, mean streets are the only playground, and the home is crowded and has few or no facilities for alternative indoor activities, the outlet for the new energies is apt to land the youthful pioneer in the juvenile court.

These adverse conditions are now being more generally recognized, and this recognition is reflected both in recent legislation and in the administration of the law. There is, however, still room for more understanding of this stage by policemen and magistrates, as well as by parents and employers, so that natural and desirable qualities, wrongly directed, may not be mistaken for sheer devilment or inherent wickedness.

Although their value is recognized, there is not adequate realization of the tremendous community service which youth organizations provide in this connection. The Scouts, the Boys' Brigade, boys' clubs and many Church organizations give just the right kind of healthy outlet, combined with something of the ceremonial, which meets the needs of the boy at this time. Those who sacrifice much time and thought to carry on these organizations are doing fine work.

Gangsters and Idealists

Curiously enough, the first result of the functioning of the sex glands which has a bearing on sex relations is not, normally, either with boys or girls, an attraction to the opposite sex. Rather is it an increased interest in their own sex. Boys get together in groups or gangs, or they form emotional attachments to other boys, while showing indifference to or even mild contempt for girls. (The war has not altered boys in this respect but many young girls have by-passed this stage by becoming attracted to men much older than themselves. This change had begun before the last war but has been accelerated by it. Some of the reasons for this development have been discussed in a previous chapter.)

There are two possible reasons for the normal attitude. The first is that there is now a greater sex awareness, not experienced before, which leads to a certain degree of self-consciousness and of discomfort in the company of the opposite sex. Shyness and blushing are common among certain boys at this time, and these boys tend to avoid girls. Another type, from the same underlying cause, show their reaction by bravado, and by greeting girls with banter and chaff, or, it may even be, with jeers. Segregation tends to increase this kind of self-consciousness. Co-educational schools have their critics, but, at any rate, they see little of this manifestation; and, whatever degree of educational segregation is thought desirable, there should be some opportunity at this time for meeting members of the opposite sex and to share some common interest or recreation. Still more is this true of the later years of adolescence.

A more important cause of the new interest in his own sex is to be found in the boy's idealism, to which we have already referred. He realizes that he has now definitely embarked on the road to manhood, and is eager to excel in manly qualities. He becomes a hero worshipper and selects his hero according to his own ambitions. Skill in games and athletics bulks largely in most boys' interests and hopes, and so a favourite hero is the captain of the football or cricket team, or some other older boy or man who appeals in that connection. Other types of boys select other kinds of heroes. The honour of being in the hero's company is eagerly sought, his words and opinions are repeated to boys not fortunate enough to enjoy his acquaintance or friendship, and it is accounted a privilege to fetch and carry for the great man. This association is frequently a very one-sided affair, and may be entirely so; or there may be a real attachment between the hero and his admirer.

This may be a salutary experience for the younger boy. If the older boy or man is admirable, even in a limited sphere, his example gives inspiration and a standard of achievement and behaviour which is valuable at this time. It sometimes happens that the older youth or man is not so admirable as the boy thinks he is, or he may be flattered by the attentions of his worshipper, and seek to prolong them beyond the period—known as the homo-sexual stage—when it is natural for the boy to have these feelings.

The wise hero seeks to generalize his admirer's enthusiasm. If he is a team captain, he will direct it to the members of the team rather than to himself as an individual. He will recognize that it is his qualities which have created the interest, and he will assist in the development of similar qualities in the boy as he has opportunity. If he takes this line, he will be a valuable influence in the boy's normal development. Scout masters and club leaders are often the selected heroes, and they have then a great responsibility for and opportunity of seeing boys safely and beneficially through this stage. The man in charge of boys should be, himself, a balanced and satisfactorily integrated personality.

Emotional friendships between boys are also common. It is better if there is not too great disparity between their ages. Although there are certain risks, especially if there is a big age gap, these friendships often give great happiness. They may occur between all kinds of boys, but are particularly helpful in giving an opportunity for self-expression, which may be otherwise denied, to sensitive lads or non-athletic types, who do not care to join in the rough and tumble. They afford opportunity for the development of mutual interests and hobbies and help to counteract the effects of isolation. Later on, interest in the other sex will develop. This is normal and desirable and parents and older members of families should avoid making fun of calf-love episodes, which are regarded seriously by the boy and are important stages in his development. Their value can easily be spoiled by ridicule.

II. NEED FOR INSTRUCTION

Just as parental teaching and school biology are desirable to prepare a boy for the physical changes of puberty, so should some enlightenment and guidance be given between the ages of fifteen and eighteen about the place of sex in life, and its relation to the family and the community. It may be given earlier if there has been no pre-puberty instruction, but it is better to have two stages if

possible. The actual factual information should be made available before puberty. It is then received like any other information, and does not produce emotional reactions, as the state of full sex- and self-consciousness has not been reached. For that very reason, the discussion of the personal and social aspects of the subject before puberty creates little interest, and may be forgotten by the time that anxieties and difficulties arise.

We have said that the early years of adolescence are a time of instability and of physical and emotional adjustment. No one but the boy himself can make the necessary emotional adjustments. It cannot be done for him by parents or teachers or club leaders. What can and should be done is to give him knowledge about himself and to let him know that his experiences are shared by others; so that he is not left groping in the dark about something which he regards as secret and shameful, but finds himself possessed of understanding and direction, and of ability to solve his own problems. He will have to be taught something, but fathers and mothers do not always realize what a tremendous additional help is given towards emotional adjustment if the boy is living in a home where he sees in his parents an example of normal and happy sex relationship.

The Uninstructed Boy

What, then, should the adolescent boy know, and what general guidance should he have received? We have already suggested that both boys and girls should have some understanding of the high-powered engine of which they are now in charge, and of the high-way code for the road of life.

The first task will probably have to be remedial. An effort should be made to clear away from his mind any conception of sex as a secret, shameful and rather dirty subject which he may have acquired or had imposed upon him at an earlier age. It is unfortunately the case that relatively few parents of present-day adolescents have discharged their responsibility in this connection, though the number of those who are now doing so is steadily increasing. It is useless and rather unfair to blame defaulting parents, who doubtless were themselves uninstructed in childhood, and found the job too delicate and difficult for them.

The methods of sex instruction of young children are dealt with in another section of this book. If these are followed, an attitude to the subject is given which is unlikely to be seriously affected by the subsequent discovery that others regard sex as appropriate material

for coarse ribaldry and smutty stories. Any biology teaching, at school will appropriately supplement what has been done at home.

We have to face the fact, however, that our average adolescent boy has probably not been one of the lucky ones. When, as a young child, he naturally and innocently asked about a new arrival: "Where did this baby come from?" he probably dropped a bombshell to which there could be no coherent response. He had asked a question which brought a chill and foreboding to the listeners. Something approximating to the truth could have been contrived to meet any other inquiry, but this one demanded something beyond the language resources of the household. How could the ears of an innocent child be permitted to hear the indelicate facts of human creation? So he was diverted to the cabbage patch, or the gooseberry bush, or the doctor's or the nurse's bag. If he were not our average boy, and his parents moved in high society, he might have been cheerfully informed that the stork brought the baby.

He accepted what he was told, and later found that it was not true. Older companions sniggered at his innocence, and enlightened him according to their conceptions of human reproduction, in words startling and unforgettable, but soon to become familiarly associated with the topic of sex. He asked no further questions from his parents on the subject. They had lost their chance, and henceforth he picked up information here and there, accumulating what are called the facts of life, but getting them in a bad setting, and mixed up with all sorts of inaccuracies and half-truths. He may have had no biology or physiology at school to correct his erroneous ideas.

And so he has come to adolescence, and—we may hope—to the scout master or club leader. He is sex conscious, and rather afraid, perhaps, to show interest in these matters, but is keenly alert for any item of additional sex information which may come his way. While there is attraction in what is already known and in the mysteries still to be fathomed, he regards the whole subject as one for concealment and for secret reflection.

What is to be done about him? There are risks for him and others in his wrong knowledge and in his faulty attitude. Experience shows that, while it is difficult to remove the unfortunate impressions about sex which follow the kind of bad start which has been described, much can be done to modify them. The aim is two-fold. He has got to be told the true facts, and something has to be done which may help to change his attitude to the subject.

Individual or Group Teaching

This can only be achieved by his hearing something or reading something. Reading a pamphlet or a book may be very helpful if it is well written and written for lads like himself. In some cases, it is the only possible method and it is an excellent second best. When possible, however, the spoken word is to be preferred, with a suitable book or pamphlet as a supplement and confirmation. The speaker should be preferably an expert in his subject, as it has to be very much simplified, and the more simple technical matters have to be made the more the speaker has to know. He should be able to give dignity to the subject without being, himself, awe inspiring, and he must have a clear idea of his objectives.

There still lingers a preference in many quarters for the individual talk. We do not share this view when it is a question of giving information and general guidance, and believe that it is often a rationalization of the old emotional attitude of shamefaced reticence. Talks with a parent, schoolmaster, clergyman or doctor, where there is an already established bond of confidence and friendship, are, no doubt, an ideal way. The usual single interview is often perfunctory, lacking in information, and largely made up of vague warnings and of injunctions "to play the game." The boy is invariably fidgety and uncomfortable, and his mentor is often in the same case. When a boy is in difficulties or seeks enlightenment on some specific point, the position is different, and a sympathetic individual talk is all-important. But it is not the occasion or the method for communicating information which the boy has a right to have, and which should form part of his education.

The group method has been found to have many advantages. A boy in a group can regard the subject objectively, instead of as being directed at himself. The talk will be *to* him and not *at* him. And he will take from it, without discomfort, what he requires for himself. It is true that the group method does not meet the full needs of every boy, but a keen youth leader will be able to see where a supplementary private talk will be helpful.

Our average boy has gone to work at fourteen. Perhaps, at a central or other school, under a progressive local authority, he may have had a short biology course, to his great advantage. In most cases, he will have missed this, and we shall then find him as ignorant of other living creatures as he is about himself. He is now sixteen or more, with workmates of varying kinds and degrees of moral outlook and practice, and, no doubt, with some girl friends.

For his benefit some systematic introduction on the subject of sex is strongly to be advised. A short course of three talks arranged by health and education committees of local authorities and given in the evenings in institutes and local authority halls has been devised. (A similar series is available for girls.)

How systematic should it be and what knowledge and guidance should it give?

The Biological Approach

Since most boys are interested in animals, the biological approach is easy and natural. The boy will not have realized how much we have in common with other living creatures. All require food, all try to protect themselves, and all produce new creatures like themselves to form the next generation. In addition to helping to form a background for what follows, a suitable treatment of this aspect tends to inspire a feeling of kinship with other living things which is good for boys to have.

The boy learns, further, that the sex function is not an isolated activity in the body, but is related to and linked up with other important functions, such as those of the digestive, respiratory, nervous, muscular and other systems. A proper setting is thereby given.

Another advantage in viewing sex in the light of biology is that one learns how widely different are the methods of reproduction in various typical species, from the smallest one-celled creatures up to the human. This is specially important for boys, most of whom, like many of their seniors, regard sex as beginning and ending with the physical sex act. They are not concerned with anything which comes before that, and they are not personally involved in what may happen after.

Girls have a much broader conception of sex. They realize that the physical sex act, however important, is only an incident in a story which, in their case, begins with menstruation and continues through pregnancy, confinement and the nursing of the infant.

From the biological point of view, the physical act is merely a means to an end, and its method varies in different species because of considerations of convenience and efficiency; there are forms of reproduction in which there is no sex involved at all, and others where the sex act differs widely from that of the human. Making all this clear tends to emphasize nature's reason for the sex act rather than the sex act itself.

There are, also, interesting differences as well as similarities between human and animal conduct. Human beings have power to control their emotions, including those associated with sex. The adolescent can be shown that all civilized life has been built up on the capacity to control our feelings, and that we could not live happily together or travel comfortably in trains or buses if, for example, we gave way to anger when jostled or trodden upon, or when inconvenienced in other ways. The animal, as soon as it has capacity and desire for sex expression, proceeds to exercise that capacity and desire whenever it has the opportunity. It cannot do otherwise, and, therefore, cannot be criticized. Human beings, however, can exercise control over sex desire, as over other feelings, and they do exercise it. Otherwise there would be chaos and confusion.

Self-control over the sex function, it should be pointed out, is consistent with perfect health, although in adult life marriage is the natural and, for most men, the best and happiest of relationships.

It is also interesting to note that, in the ascent from the lower to the higher forms of life, the number of the offspring decreases while parental love increases, to reach its greatest development in human parenthood.

III. THE PHYSIOLOGY OF SEX

The boy is now ready to have explained to him the structure and function of the human reproductive system. He must learn something about the high-powered engine he has to control. There are still intelligent people who are apprehensive about giving this kind of information. They say that it will arouse curiosity. The curiosity, however, does not require rousing. It is already there—more or less—in every normal and healthy adolescent boy, and it is one of the points of interest about this subject how easily middle-aged and elderly men forget what they were like when they were lads. It is probably wishful thinking in an endeavour to get as near as possible to a virtuous retrospect.

The curiosity is not roused; it is satisfied, and morbid speculations about what really happens are ended. This result is much more likely to lead to a cessation of hectic interest in the subject than are continued ignorance and wondering. The members of the present younger generation are mechanically minded. They love to investigate the mysteries of motor cycle engines, and to get inside wireless sets, and it is certain that if the mechanics of reproduction are not

properly and accurately made known to them, they will speculate and devise explanations which will contain errors and a liability of risk to themselves and others. Charts are useful to lecturers in making clear the main happenings in fertilization and pregnancy.

It is important that all advisers should use scientific terms like uterus, penis, vagina, and so on. These terms have no pornographic associations, and do not arouse emotional reactions as colloquial words do. One of the difficulties of the ordinary man, who, usually at the mother's instigation, and probably for the first time, tries to speak to his boy of fifteen or sixteen about these matters, is that he knows nothing but vulgar words for these parts of the body and for these functions. He has sense enough to realize that it is difficult to give an uplift talk when using terms which have a contrary association. He feels that he will make a mess of the job, and unfortunately he often does.

If our adolescents acquire a simple scientific vocabulary of sex terms, they will be able to speak to one another, and, later, to their own children about these matters in an objective and impersonal way, and in language which will not stir up any of the feelings which these discussions commonly arouse.

Treatment of Masturbation

What to say or do about masturbation, or self-abuse, has been a great bugbear to parents and schoolmasters and youth leaders. Much harm has been done by a wrong treatment of this subject, and it is no exaggeration to say that the habit has been riveted on many boys through declarations of its wickedness, and by the indiscreet and scientifically inaccurate threatenings of the terrible things that would happen if it were persisted in.

Some degree of masturbation in early adolescence is so common as to be almost universal. It is, in the case of the average boy, a product of curiosity and immaturity, and is outgrown as other childish practices are outgrown, without the necessity of adult interference. Where it is morbidly persistent, and the lad is obviously distressed and suffering, it will be found that the habit has pathological roots, and that psychological treatment is required. What may happen with the normal boy, if unwise things are said and threatened about this practice, is that a sense of guilt is aroused, bringing with it both fascination and anxiety, and the effect is the very opposite of what was intended. To do something wicked is attractive, even though it brings fears, and the internal stimulus may be sufficient to keep the

habit going. This is one of the conditions where a deep sense of sinfulness is not helpful, but is a handicap.

On the physical side, masturbation has an effect similar to that of an equivalent amount of sexual intercourse. Apart from the fact, however, that the lad is immature, there is always a greater tendency to excess where only one person's will and convenience are concerned. The act is also fundamentally unsatisfying emotionally, and therefore tends to be repeated. It is difficult, for these reasons, and especially for a growing lad with undeveloped power of self-control, to practise this habit in moderation.

Constructive Approach Needed

Masturbation has no physical effect on the capacity for marriage and parenthood, and no influence at all on the offspring. Psychologically, however, it may have an effect on marriage capacity because of fear engendered by the belief that it has such an effect, since potency depends on a nervous mechanism which is inhibited by fear.

Some psychologists are against saying anything to boys, either privately or in public talks, about masturbation. They believe that the habit will be abandoned in the large majority of cases because it is unsatisfying and offends self-respect, or that it will adjust itself to an occasional and unharmful indulgence to meet a necessity or choice of sexual deprivation. The pathological cases, they consider, will come under notice for other reasons, and the underlying causes will then be dealt with.

While we agree that the subject should not be dealt with by a heavy hand, and need not appear to be regarded too seriously, we believe that it is unwise to neglect it entirely, since it is a good deal thought about and talked of by boys. The approach should be constructive and not negative, and the opportunity taken to give the right idea of sex relations. No suggestion of wickedness should be made. Sex at its best, it should be pointed out, is a partnership where each partner seeks the happiness of the other more than his or her own gratification, and a one-sided and purely selfish indulgence is a poor substitute for something which gives real satisfaction and happiness, and is well worth waiting for. The importance of self-control generally (with illustrations from the football and cricket field and from daily life) and of the husbanding of one's physical resources, are pointed out, and boys are advised to make ability to exercise control in this direction a matter of pride and self-respect.

Night losses, or wet dreams, as they are usually called, are often a worry to lads, and sometimes also to their parents. It should be explained that these night losses are perfectly normal and natural. Any excess of the material constantly being produced by the testicles and the other associated glands is got rid of in this way. Late suppers or the drinking of much fluid before going to bed make them more likely to happen. Sleeping on the back is to be avoided, if possible.

IV. THE INDIVIDUAL AND THE COMMUNITY

In our society there is a large gap between puberty, when sex capacity and desire begin to develop, and marriage, which morality and religion and community custom have ordained as the proper setting for physical sex expression. Hence the fact of one's personal responsibility for sex behaviour and the relation of this subject to the welfare of the community should be faced.

Sublimation, although its possibilities are often exaggerated, is an important aid in crossing the bridge of adolescence to adult and married life. It is more important that the parent and youth leader should understand its working than that the boy himself should have it described to him. Sublimation has many other ramifications than those of sex, but it is a help to some boys to know that repression of the creative instinct is not asked for from them, and that its power and resources can and should be directed into activities other than that of the physical sex act. It can then be expressed in many ways which are interesting and pleasurable to the individual, and useful or unharmed to the community.

The possible achievement of sublimation, however, lies largely with those responsible for the home, employment, and recreational conditions in which the youth is placed. If opportunities for the desirable expression of instincts, feelings and energies are provided, these will be most effective if they are used unconsciously and spontaneously. Many jobs that boys are engaged in give little chance of sublimation, and hobbies and recreations have to be utilized. The Secondary and Public School boys are usually well served in this connection, but our average boy will have less scope. What is possible in the way of sports and athletics, music, art, craftsmanship and other activities of culture and scholarship should be made available to him. Personal and social service are excellent ways of utilizing energy. Although sublimation cannot be imposed, it can be fostered by the provision of such opportunities, and by giving encouragement

in their use. It is in this connection that youth organizations do some of their best work.

Religion may be indicated as another help in crossing the gap, because—as already said—it gives direction and meaning to life. Membership of a religious organization, also, apart from purely spiritual channels, affords many opportunities of sublimation in social and personal service.

Relations with girls should be discussed with boys, and the desirability stressed, even in days of sex equality, of preserving something of chivalry in dealing with girls, not least with those who may be frivolous or foolish and easily misled. This can be naturally linked up with some words on the ideals and attitude with which a man's love for a woman should be associated; for example, with admiration and reverence for the supreme service women render to the race, and on the unselfishness of a beautiful friendship with someone *opposite* who yet shares one's interests, and who admires and is admired.

At the same time, one must point out the need of avoiding excessive sex stimulation, by personal contacts or in other ways, if sublimation and control are to be successful. It would be easier to do this effectively if the economic possibilities of marriage at a reasonable age were greater. Housing, wages, age and income barriers all make marriage difficult, with consequent unfair strain and stress on well-intentioned young men. This is a community responsibility yet to be discharged.

What is the alternative to waiting for marriage? Some boys may feel it is unreasonable to ask them to wait so long, and decide to have sex experience before marriage. Theirs is a case that has to be met. They will find, however, that one kind of strain and stress is now exchanged for others. There is anxiety to keep the irregular relations secret. There is the fear of becoming the parent of an illegitimate child, a happening which is bad for the father, worse for the girl, and worst of all for the child. Most of this adolescent group will have some knowledge about, if not of, contraceptives, and it has to be pointed out that none of these is one hundred per cent. safe. If the sex adventures are extended there is a danger, sooner or later, of infection with venereal disease. The adolescent should be told about these risks and about the cause, prevention and cure of these diseases.

No Satisfactory Alternative to Marriage

Finally it should be pointed out that from the angle of the children's welfare and of regulated community life, there is no satisfactory alternative to the marriage system. The example of Russia, which, breaking away at the beginning of the Soviet regime from orthodox marriage customs, has now largely approximated to them, owing to the bad effect on the children of a lack of parental responsibility and care, makes a great impression on the modern boy. Tell him that it is worth some sacrifice and the exercise of self-control to be able to come healthy, and with a good conscience, to be the head of a household, and an honourable and useful citizen. Considerations other than the physical for the realization of the fullest and happiest sex relationship should also be emphasized.

Such is the minimum of knowledge and guidance which our previously uninstructed adolescent of sixteen and over requires to enable him to face the modern world, if he is to grapple successfully with his emotional problems. The story of reproduction, told in simple scientific terms, does not shock the boy or turn his thoughts into undesirable channels. Rather does it impress by showing the infinite care and marvellous contrivance which has been devoted to this vital function. It arouses in him not only a sense of admiring wonder, but also a greater reverence for his own body and for those of others, and the whole subject is cleansed from association with coarseness and obscenity.

CHAPTER NINE

THE ADOLESCENT GIRL

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I. PHYSICAL DEVELOPMENTS

THE period of adolescence in the girl is usually considered to begin at about the age of twelve and to last until seventeen or eighteen, although some children reach adolescence by the age of ten or eleven, and some girls of eighteen are fully-grown women in every sense of the word. The changes which mark the period of adolescence are fundamentally due to physiological causes, but they affect the whole personality so that the mental, spiritual and emotional life as well as the physical body undergoes far-reaching changes. The physiological changes are initiated by the activity of certain endocrine glands, more particularly the pituitary and the ovaries, and, as has already been described in an earlier chapter, they are concerned with the bringing into activity of the reproductive functions. It is not necessary here to enter into details of these changes, but it is usually considered that their climax on the physical side is reached with the onset of the menstrual period.

The arrival of the first menstrual period is a crucial moment in a girl's life, and her whole future outlook on sex may be affected by the way this new experience is presented to her, and by her response to it. This response will depend partly on the make-up of the child herself and partly on her whole previous training, including the attitude of the grown-up people around her towards the subject (see pp. 224, 234).

It is essential that every girl should be prepared for this occurrence and understand something of its significance. Otherwise the natural and probably inevitable shock will be heightened by outraged feelings due to her awakening fastidiousness, and because only too often she has acquired a wrong bias in childhood, and already associates that particular part of her body with shame and unpleasantness. The more carefully a girl has been taught to value cleanliness in person and clothing, the greater the likelihood of her experiencing these emotions. In her distress—if she has not been prepared—she may

either seek to stop the flow altogether or bring about unwanted publicity in her efforts to obtain help and reassurance.

Such behaviour is liable to be met with severe rebuke, with the result that the girl feels shamed, and henceforward will tend to look upon her period as something to be dreaded and resented. In this way not only will a wrong attitude be set up towards menstruation, but what is more serious, the girl may turn with repugnance against all the happenings of sexual life. There is no doubt that some of the troubles of married life are due to a mishandling of the menstrual situation at its first onset.

An increasing number of parents and educationists are realizing these possibilities to-day, and many head-mistresses of senior and secondary schools ask the mothers of pupils entering at the age of eleven how far their daughters have received instruction about the subject and, if no instruction has been given, urge them to explain things to the children at once.

Often the girl has a dim idea that something is going to happen, but is mystified as to what it actually is. From the point of view of her future development she should have a clear idea of its significance, and be given all the help in her mother's power to come to this difficult time of her life without shock or revulsion.

Advice should always be given on the hygiene of the monthly period, since knowledge of how to behave increases the girl's confidence in her ability to deal with the new situation, and so tends to remove fear and embarrassment. Cleanliness is of the first importance. Girls who are accustomed to have a warm bath daily should take it during menstruation as regularly as at other times, unless it is forbidden in any particular case by a doctor. Even so, the daily use of warm water and soap on the parts of the body affected is essential, and in addition to being a necessary hygienic precaution, greatly increases self-respect and comfort.

Any towels used should be changed frequently so that chafing and soreness are avoided, and as a general rule the use of a means of protection that is soluble or can be burnt rather than washed is advisable. It is more sanitary and avoids much unpleasant labour. Care should be exercised in the purchase of such means of protection. If it is too expensive there is a temptation to make it last longer than is desirable, if too cheap it may cause irritation and discomfort. Chafing can be lessened by the regular use of talcum powder and perhaps of glycerine jelly or some other simple soothing remedy.

The Period a Normal Event

So far as possible the girl should live her ordinary, normal life and be no more conscious of her period than of any other bodily function. This is only possible if she is comfortable, and any one responsible for her education should help her to realize that it is worth while to spend a certain amount of money on this item of her toilet.

A tampon, that is, a plug inserted into the vagina, is not, according to general medical opinion, an advisable form of protection for unmarried girls, as it is liable to set up undesirable conditions and, because of its costliness, tends to be left in too long and may thus cause sepsis.

The monthly period, it cannot be too often emphasized, is a normal event in the life of every woman and a sign of healthy development. The epithet "unwell" so often used in connection with it is most unfortunate, as it suggests that every month a girl suffers from a minor illness. This belief is not scientifically accurate. There is little evidence to suggest that temperature, rate of pulse or blood pressure are adversely affected by the period. The discomfort so often associated with it can usually be removed by the simple hygienic methods outlined above, and if there is severe pain or bad headaches there is, in most cases, some unusual cause which should be medically treated.

It is true that the life led by many young women to-day who sit for long hours at typewriters or stand serving in shops is likely to set up congestion, thus hindering the free circulation of the blood. A great deal of menstrual pain is due to this cause. It can best be remedied by exercise. Indeed, certain exercises if persevered with before and during the period will eventually remove the cause of the trouble.

II. MENTAL AND EMOTIONAL DEVELOPMENT

As already indicated in earlier chapters, the activity of the ovaries is not confined to the production of ova. They function also as endocrine glands making a secretion which circulates throughout the body in the blood stream. The sex hormone, as this secretion is called, has a far-reaching effect on the girl's appearance and personality; because of it her figure changes and begins to display rounded curves rather than angularity, her breasts develop, her eyes shine and her hair becomes glossy. She begins in fact to display some of the charms of womanhood.

More significant still are the changes in her mental and emotional life. She experiences a desire for independence and, owing to her

developing power of discrimination, she finds herself able to distinguish between good and bad, beauty and ugliness. At a certain stage, too, she becomes conscious of herself as a being who is endowed with a mysterious power known as sex.

Whereas previously she has been interested in the special relationship existing between married couples primarily from the point of view of the necessity of both a father and mother for the production of a child, she now begins to wonder what significance this relationship has for her as an individual. It is this semi-consciousness of sex as a power that matters to *her* that makes her shy, particularly in the presence of her elders, at the mention of anything concerning her own body or personality. This shyness often shows itself in tiresome and apparently senseless giggling. These and other manifestations should not be treated harshly, for the girl must somehow cover her embarrassment and will use giggling, defiance or sulkiness according to her temperament, to mask her real feelings. These changes tend to make difficulties for the girl with her elders and more particularly with her mother.

So necessary is it to understand the reason for friction between mother and daughter at this stage that we may perhaps with advantage discuss it now.

To take first the girl's growing power of discrimination and her desire for independence; these are often new characteristics for which the mother is in no way prepared. A child of from four to six is highly suggestible, and if advantage is taken of this stage of development to instil pleasant habits and obedience, the little girl between eight and ten is usually a docile and charming companion. She is very eager to do things, extremely keen to learn all she can about life and, partly because she is at the stage when anything attaching to herself is of immense value, she is inclined to look on her mother, just because she is her mother, as perfect. A child of eight or nine, when she says "My mother told me this," is really saying "This cannot possibly be wrong because mummy is always right."

Emergence of Critical Power

Fairly early in adolescence this suggestibility gives way to the power of criticism and, since the home is the child's most familiar environment, her critical powers are likely to be used in regard to all that is customary there. She compares her mother's ways with those of the mothers of her friends; if, for example, she hears of certain privileges accorded to Betty, who lives next door, she at once

asks why she cannot have them too. She is likely to think that other people's homes are nicer than her own, and too often she will express her criticisms in language that is more direct than tactful.

Then, too, she demands more freedom, for she is no longer a little girl who obeys readily, but a person whose likes and dislikes should be respected and who should be allowed to emulate her older companions.

In the face of criticism or rebuke she is often rebellious and impertinent; in fact, she seems to have altered completely, and to her mother the change is by no means a desirable one. "I can't think what has come over her, she used to be so easy to manage and now I can't do anything with her." How often does a mother talk in this strain to her friends or to the teacher at school.

It is not always easy to explain what is actually happening, and to make the mother realize that the girl is developing qualities which in five years' time will be among her most valuable assets. The last thing any mother wants is for her daughter to be led blindly by her companions or to fall easily into habits of slackness, coarseness, or hectic living. Yet, unless the girl is encouraged to use her discrimination, that is, her critical faculty, and to experience within the safe shelter of her home a measure of independence, *with its likelihood of mistakes*, how, when she goes into the world, is she to discern what is beautiful and of good report, and to choose it in preference to what is ugly and cheap?

Surely it is within the security of her home that the girl's first experience in the use of independence may most safely be made? If this is so, then it is beyond question the task of the grown-ups to meet their young folk as equals, and in the light of the greater experience that life has brought them, to encourage them to make their choices wisely. The choices must eventually be made by the young people themselves, and the control and discipline that are inseparable from choice must be self-determined and not merely imposed.

It is important that a girl should learn the value of money. Some mothers allow their daughters to share with them the responsibilities of housekeeping; in this case the girl obtains a valuable idea of household costs which will smooth out many difficulties when she marries. Such training is also of the utmost help, and a safeguard against many dangers, to the young woman working away from home and entirely responsible for herself.

In the case of a young working girl who lives at home and contributes most of her earnings to the family to cover the cost of her

keep, it is wise for the parents so to arrange matters that she retains not only a small sum for recreation and personal luxuries, but also sufficient to cover her reasonable needs in the way of clothing and equipment, so that she may gain experience in providing these within the limits of an agreed sum.

Obviously the amount allowed must be carefully calculated, and the girl should understand clearly what it is intended to cover. It should not be so small that she cannot possibly make ends meet, nor large enough to lead to extravagance. The same principles should govern the giving of an allowance to a girl not earning her own living.

It is through making mistakes that some of life's most valuable lessons are learned, and the mistakes made by adolescents may, if some protection be given from their too devastating consequences, further the development of wisdom and understanding in later life.

Mother and Daughter Relationship

There are certain deep-seated psychological factors that account for a possible barrier arising between mother and daughter at this period. In most cases it is a temporary barrier only, but (as described by Dr. Hendy, p. 193) it may help the older woman to accept this break if she not only understands something of its nature, but appreciates its personal implications.

To the girl her mother represents achievement. She has had experience of just those things that the girl is beginning to sense as being among life's more precious gifts and towards which her whole being is drawn. Her mother deals easily and successfully with situations where the girl is only too well aware that she is likely to fail badly, and has just the poise and power the girl is painfully seeking to acquire. Subconsciously, therefore, the girl envies her mother while she criticizes her, because she realizes acutely that she is at a disadvantage when compared with her. It is this that makes her unwilling to confide in her mother as she did in childhood, although she will talk easily and incessantly to one of her girl companions and even perhaps to a trusted outsider many years her senior. In fact, the last person to whom she can talk about the many questions that are puzzling her is her mother.

The increasing jealousy with which the mother may regard her daughter—is enhanced—as has been said when her own happiness as a woman is not fully satisfied. The sight of the girl's youthful radiance will serve to remind her of her own youth, and the difference between that picture and her present condition may sometimes

be almost unbearable. Her refuge is to minimise the value of sex experience, and sometimes she may verge on cruelty in her attempt to destroy the glamour which youth throws over the whole subject. She tends to rebuke any too forward manifestation of sex on the part of the girl by dubbing it as either immodest or forward.

In these circumstances it is not surprising that a barrier should be set up but it must be understood that the nature of the barrier is nearly always hidden from the consciousness of the two people concerned and that for that very reason adjustment is difficult. If a mother has the courage to face the possibility that something of this kind may be at the root of her criticisms of her daughter she can do much to prevent a permanent estrangement.

It will be obvious that it is only when home conditions are relatively, or superficially, satisfactory that the girl will acquire such an unconscious envy of her mother and her mother's experience. There are also homes where the mother is obviously the drudge, where she is ill-treated or grossly neglected by her husband, and has become little more than a domestic or marital slave. The children are bound to realize this and envy in this case will be replaced by pity, contempt, or both. The girl, seeing her mother's suffering, is likely to regard marriage as a poor bargain which brings sorrow rather than joy and allows very little fun.

She may then decide, again more or less unconsciously, that before she is trapped she will give as good as she gets, that she will pay out as many men as she can, both for her mother in the past and herself in the future. She becomes a gold-digger; she will in her own phrase "know how to take care of herself," and she will seek to exert her power and fascination over as many men as possible, getting out of them everything she can while herself giving very little.

A fuller discussion of this attitude to sex on the girl's part will be given in a later chapter. It is mentioned here to show the far-reaching effects of the girl's home background on her emotional development and therefore ultimately on her conduct.

III. THE AWAKENING OF SPIRITUAL CONSCIOUSNESS

The satisfactory emotional development of a child may be regarded as a progress from complete egoism, that is, concentration upon self, towards altruism, which may be defined as regard for the interests of others at the expense of self. The baby girl in the same way as her brother is completely self-centred but also completely dependent. This dependence brings her into intimate contact with her mother (or whoever is taking her mother's place), and for a time

the world is for her composed entirely of baby and mother. Gradually her conception of the circle of those around her widens; her early self-centredness becomes socialized and she reaches out towards brothers, sisters and playmates, and so to other grown-ups beside her mother.

All education is an attempt to bring about the socializing of the individual. During adolescence the girl begins to realize her relation to the outside world, to apprehend that she is part of a much greater whole and that she can only express herself in so far as she makes contacts with other human beings.

She awakens for the first time to the understanding that "You" is of greater significance than "I." Hitherto, her impulses of love and affection have been called out mainly by the way people have acted towards her and her immediate circle. Now they give way to disinterested love of another for that person's own sake.

For this reason, adolescence is the period of "crushes" and "grand passions" in which the girl pours out unstintingly the whole force of her awakening sex emotion on another, usually one of her own sex. The feelings experienced at this stage of development for an outside person, who becomes an object almost of worship, are normal, but they need wise handling. The girl is ready to sacrifice her most cherished possessions, her pleasures and indeed herself for the sake of the beloved. Through this intense devotion and the sacrifice it demands she may learn to discipline her own personal desires and thus take the first steps towards adjusting herself to the claims of the community. Gradually the intense feeling aroused by the object of her love will give way to a sentiment less overwhelming, and from an adoring devotion may develop, if the older woman is wise and disinterested, a happy normal friendship.

The way is then open for the girl's interest to move towards the other sex, and she often at this stage becomes deeply attached to her father, or to a father substitute. The part of the father in the development of the adolescent girl is of the utmost importance (see p. 194, Hendy), since through him a bridge may be made between the phase of attraction to her own sex and that of the normal interest in the opposite one; if her father is happy in his married life, treating his own wife with consideration, tenderness and courtesy, the girl will grow to welcome the prospect of marriage for herself and feel she may safely allow herself to be wooed and won if only she can find a mate as nice as daddy.

This brief description of the growing girl's emotional life helps to explain her religious awakening. The child absorbs eagerly any facts

relating to spiritual matters, as every able Sunday School teacher will know; she may learn habits of religious observance and may realize God as a loving father and protector in the same way as she does her own parents, but it is in adolescence that a true spiritual awakening is most likely to arise.

Hero Worship and Religious Fervour

The uprising of creative power associated with puberty leads to a flowing outwards of the emotions, and the energy thus liberated expresses itself in an appreciation of beauty and a reaching out towards what is beyond and above one's grasp; in many instances there is an over-mastering desire to create beauty. The girl not only becomes deeply moved by poetry, drama, music, art, but also sees herself as a creator along one or more of these lines, as perhaps a Greta Garbo, a Laura Knight, or a Sybil Thorndike.

One of the most significant facts of modern life is the extent to which films and film stars have caught the imagination of the young. Much youthful hero-worship expended on them is in its essence of a religious nature. The clothes, make-up, smile, voice, manner of her favourite film star are almost slavishly imitated by the girl, and the private lives of stars have to-day an influence on the outlook and conduct of thousands of young men and women. It is useless to rail against this; only by accepting it as a fact, and by seeking to understand its cause, can we hope to modify it.

It is not surprising that at the present time young people seek entrance into a world of fantasy completely remote from reality; life is so insecure and so terrible that they must perforce find a way of escape from it. Are those who formerly used religion as this means of escape now able to seek other distractions made available by scientific development? Is it true that applied science is competing with organized religion for a hold upon the young, and will there come a time when a swing back of the pendulum will give the churches once again their opportunity?

The answers to these questions lie in the future, but however far from religious the enthusiasms of youth may appear, they would seem to originate from the same source—creative energy.

When all this has been said it is still true that this energy may take the form of a longing for the Infinite; God becomes of personal significance, someone to be worshipped and adored in His own being, and the capacity for disinterested devotion may, and often does, centre itself round the person of Jesus Christ. The girl becomes converted and eager for full membership of some religious body, often

the one in which she has been brought up. Thus if she is a Roman Catholic or Anglican attendance at early morning communion may become the most significant event in her life. Because of her chaotic emotions her religion may still be somewhat vague, and based rather on feeling than on principle, but it is not for this reason to be despised, or its manifestations made the subject of ridicule or rebuke.

If life is to have meaning, if we are to adjust ourselves to its reality, and not to be at the mercy of changing circumstances, each one of us must find his own soul. In adolescence the soul comes to birth and for this reason, though those in charge of the girl will and must use every effort to help her to relate her religious emotions to her daily life and conduct, yet this must be done with sympathy and above all with respect for the forms in which she chooses to express her religious sentiment. An imaginary scene may illustrate this point. A girl of fifteen goes fasting to early communion, experiences a sense of exaltation during the service, and makes the resolve to live henceforward as one devoted to the service of Christ. This exaltation, although she is unaware of it, induces fatigue, and she returns home somewhat exhausted to enter the ordinary humdrum atmosphere of family life. It is more than likely that a sense of disappointment follows swiftly on the exaltation and she is sharp with her younger brothers and sisters and perhaps even loses her temper. Then someone says: "Well, I don't think going to communion is much good to you if you are so cross when you come home." The girl senses the rebuke to be a just one, at any rate on the surface, and remembers with shame her good resolutions so lately made; she feels profoundly discouraged and unless she can bring some understanding of the difficulties of living up to one's belief to her aid she may eventually give up religion as being no use.

This is a real tragedy, for to lose one's faith just as it is dawning and before it has stood up to the test of experience is to run the risk of damaging one's power to think and feel deeply at all. Any girl who can sum up her awakening sense of fellowship with humanity in the love of God should be encouraged to the full. The critics of religion are apt to regard it as a refuge behind which shelter those who dare not face reality; it is worth remembering that to the saints, of whatever creed, religion has been and is an inspiration enabling those who embrace it to accept reality undismayed and unconquered.

It is not always enthusiasm for one of the so-called orthodox forms of religion that marks the spiritual awakening of youth; science, philosophy, a political creed—any of these may set alight the religious flame and the manifestation of the devotee's fervour

may even take on extravagant forms which to older people seem absurd, if not abhorrent. Yet in so far as they are a sincere attempt to live according to one's faith, they should be treated with respect. This does not mean that they should necessarily be accepted, but the integrity of the person exhibiting them should be assumed in any criticisms made.

IV. THE GIRL IN INDUSTRY

At the present time the great majority of children leave school shortly after their fifteenth birthday and almost immediately find work in factories, offices and workshops. Fifteen is young to leave the protection of home and school, and anyone who understands girls will know that the most difficult years of adolescent girlhood lie between thirteen and sixteen. It is then that the changes described above, and the instability that is consequent upon them are at their height. The difference between the girl of fifteen and her sister of nearly seventeen is most marked. It is most unfortunate that young people should be given economic independence and industrial responsibility at this particular age. Because the girl is a wage-earner she is of necessity given a freedom from parental control for which she is not ready. She claims the right to stay out late in the evening, she too often considers that her mother should wait upon her when she comes home from work, she begins to use all the devices by which young women seek to enhance their attractiveness and she is unwilling to put up with any criticism, while she fiercely resents advice.

At her work she meets older companions who seem to be experienced in the things she considers of most importance; she longs to be able to talk as freely as they do about boys and love and marriage, and she feels it is essential that she should possess a boy of her own, though actually at this stage she is much more inclined to enjoy a bit of fun with a group of boys, in company with other girls, than to walk out with one particular lad and stick to him.

It is very desirable that boys and girls of this age should be able to mix freely, but they are not ready for the closer intimacy that comes with walking out, and very often a girl acquires a reputation for flightiness because she does what is quite natural at this age, that is, tires of one boy and takes up with another every six weeks or so.

This is obviously only a general picture; there are girls who as early even as twelve become attached to some particular boy and remain interested in him until eventually the two become engaged

and marry. There are other girls who are more or less changeable in their friendships long beyond the adolescent stage, but the majority of working girls tend to settle down to serious walking-out between the ages of seventeen and eighteen, while many of them marry at twenty or twenty-one.

The Youth Movement which has developed very considerably since 1937-38 has done much to promote a fuller and more interesting life for young people between 14 and 20, and has greatly increased facilities for friendship between boys and girls who are enabled to meet freely and under good conditions for work and play. This is highly desirable and given wise leadership should contribute to the making of happy and permanent marriages.

Pursuits that involve real companionship, for example, dramatic work, social service, or literary studies help those taking part in them to get some insight into each others' temperaments, tastes and abilities and to develop the sense of fellowship that arises out of difficulties shared and overcome.

There is still, however, in some quarters a feeling on the part of those guiding the destinies of youth that the sexes are best kept apart. Even to-day there are men who try at all costs to prevent the boys under their care from having anything to do with girls, and teach them by implication if not in words that girls are the temptation of the devil. Hence it follows that when a young man and a girl become engaged they more often than not retire from the organization to which they have heretofore belonged.* To some extent this is inevitable since people, when they are very much in love, naturally want to be alone together, but it is highly dangerous that this being alone should constitute almost the sole activity of the engagement period, that just when the two young people should be seeing each other as much as possible against the background of everyday life, they withdraw almost completely from it, and so tend to form untrue ideas of each other's real character.

V. STANDARDS OF SEX BEHAVIOUR

What has just been said raises a question young women to-day frequently discuss among themselves, and one which ultimately, each must decide for herself. On what moral values does she propose to base her standards of behaviour with the opposite sex?

Fifty years ago even, young men and women were protected from

*Cf. "The Peckham Experiment" by Innes H. Pearse and Lucy H. Crocker, and published by George Allen & Unwin, Ltd. 5s. net.

each other both by social custom and by the separateness of their working lives. It was only late in the nineteenth century that girl clerks became fairly general in commercial offices and that the barriers between men and women students in universities and colleges began gradually to be broken down. It is true that in industrial areas there was throughout the century a good deal of female labour employed, but while social disasters occurred—as witness the large orphanages for illegitimate children erected in those days—the greater respect of youth for age and the stricter control exercised by parents over children, were still strong enough factors to act as a restraining influence upon the behaviour of young workers.

The fact that men and women began to work side by side gave greater opportunities for the development of friendship and many such friendships remain on what may be called a platonic level and have developed certain manners (morals) of their own. It is quite accepted, for instance, in circles where young people mix freely that the girl should contribute her share of the expenses involved in any outing. This "going dutch" enables friends to enjoy each other's company without draining the often slender resources of the man. It is also concrete evidence of the equality of man and woman, and for these reasons much to be encouraged.

Again, many couples, sometimes engaged, but more often merely friendly, arrange to spend their holidays together, either as members of a party or on their own. They live at the same hostel, in the same boarding house or holiday camp. More often than not, the whole episode is conducted with perfect propriety, yet it cannot be overlooked that there is the risk of an emotional element arising which may prove very difficult to control.

Many welfare workers in factories are aware that a considerable proportion of their women employees have had one or more affairs with young men, and a certain number of working girls assert categorically that a girl who is not prepared to allow a young man to have his way with her must face the fact that she will eventually not have a boy at all.

Sex Relations Before Marriage

It is therefore true to say that pre-marital relationships between young people of the same social class are by no means uncommon, and are often entered into lightly and upon only the flimsiest emotional basis. The craving for sensation which is too often the result of an over-exhaustion of the nervous system plays an impor-

tant part in these affairs which, apart from their social consequences, tend to blunt the capacity for sustained emotion and may have a disastrous effect on the whole personality, making eventual adjustment to marriage and family life more difficult.

The young girl, who must eventually work this problem out for herself, will find that there are many factors to be considered. Most young women who are honest with themselves will admit that they wish to marry. Although customs have altered, the majority of men do not tend to seek their wives from among that group of young women whom they know to have had affairs. A girl who enters into sexual relationships with a man hoping that eventually he will marry her, is often running the risk of a bitter disillusionment and one that may spoil her whole life.

Then again, the emotional strain and constant anxiety that such relationships must inevitably bring, often have quite a serious effect on a young girl's health. However great the precautions taken, the girl lives in constant fear that she may become pregnant and have to face the responsibility of bringing into the world an unwanted child. That the child should be unwanted is in itself a subconscious shock to the natural instincts of the normal woman.

It is also possible that the man is already married and the girl who knowingly enters upon an intimacy under these circumstances is not only running the risk of an unwanted child but is helping to break up a home and inflicting a grave injury on another woman.

The Girl's Attitude

Some young people recognize fully the danger of promiscuity in sex relations but claim that, when the emotional background is adequate and a couple love each other in a way that includes respect, tenderness and mutual understanding, there is no valid reason to prevent their entering into full sex relationship provided they are both healthy and are prepared to prevent conception. They recognize the selfishness of bringing a child into the world for whom there is no settled home, but contend that sex experience can be divorced from parenthood. This group is attempting to work out a philosophy of sex conduct and is stating explicitly what is implicit in much of the demand for greater liberty.

A much larger number, however, do not stop to think at all and accept a standard of light behaviour because they see it practised by their contemporaries. For one young man who will attempt to rationalize the gratification of his sex impulses, there are probably

six who will gratify these appetites without attempting any rationalization, regarding their desire as a reason in itself. What of the young girl?

Most psychologists agree that there exists a natural barrier in the girl's mind against the first sex experience, and that this has to be broken down by her lover before she will willingly give herself to him. The strength of this barrier depends largely on external circumstances, but if from early adolescence the girl has developed a measure of fastidiousness, it is likely to prove, not indeed insuperable, but at least a restraining influence. Most girls, too, are aware that the first experience is likely to be accompanied by pain, and apart from this there is a natural fear of the unknown, and of taking a step which can never be retraced.

On the other hand many a girl, largely because of her maternal instinct, is inclined to give the man she loves what he asks for, and this desire tends to break down the barrier even where her own sexual desires have not been aroused. She is fain to treat her lover as an indulged child, and sometimes when her passions are strong there is added to this semi-maternal attitude a real longing for mating.

It must also be remembered that just because a woman's sex instinct is less localized than a man's she tends to enjoy the preliminary wooing as delightful in itself and often it is not until the man has been fully roused by this preliminary courtship that she realizes the strength of his passion.

That fact should be understood by every young girl. It is easy to lead a man on until it is difficult to draw back. A girl should realize that the responsibility in most cases is eventually hers. By refusing too many liberties in the first place, she can set a moderate pace in courtship. Particular care should be exercised in a friendship with an older man, as his knowledge combined with the confidence inspired by his maturity will often encourage a girl to drift into more intimacy than she intended or desired.

The Force of Example

It must never be forgotten that the sex impulse, always one of the strongest, is at its height during the period of adolescence and early womanhood. As on the whole the marriage age tends to become later both for men and women, the frequent gap of ten to fifteen years between the time when physiologically the girl is ready for mating and the time when her marriage actually takes place is

bound to be one of strain and difficulty. The strain is increased by the fact that sex has been found to be a commercially paying proposition and that films, plays and books use every means to exploit the sex impulses of youth. Again, young men and women are thrown together in industry and are allowed complete freedom during their leisure hours. The very warnings given by older people against such interest in the opposite sex are likely to stimulate curiosity, and when the whole subject is shrouded in mystery, as even today it too often is, curiosity as to the technique of sex experience plays a part in drawing young people towards it.

It cannot be too strongly emphasized that these tendencies affect young people without their being necessarily conscious of them. It has been suggested that there is a group of thoughtful boys and girls which is attempting to work out a philosophy of sex conduct. There are also some who deliberately choose promiscuity, it may be because of some deep-seated maladjustment. The great mass of young people adopt neither of these attitudes. They are quite well-meaning, ready to be good if that path is made easy and attractive, but they are also liable to be swayed by urges which are only dimly understood, and to feel that so long as their conduct is more or less in line with that of their contemporaries, that is, if they are no worse than anybody else, everything is all right.

It is this unthinking mass which presents the most difficult, and yet most fruitful field for education in social hygiene, and also that which is most likely to be harmed by being brought into contact with a philosophy allowing freedom in sex behaviour which its members have neither the moral stamina nor the ability to exercise. When a thoughtful couple contend that they are doing no harm to anyone by enjoying a full sex experience outside marriage, they are failing to realize that their conduct may affect that of many other people who have not their power to stand up to the results of their actions. In this sense every man and woman is his brother's keeper, and a sex latitude which may seem justified to two intelligent and courageous young people is socially harmful if it results in the lowering of the accepted standards of behaviour for the general mass of people.

It may not be out of place at this point to say that lectures on the meaning and place of sex in life such as those organized for many years by the British Social Hygiene Council and since 1942 by the Central Council for Health Education play an important part in

preparing the adolescent for the responsibilities of citizenship. Such lectures, while they may not change the attitude of the young woman who has definitely made up her mind, may and do influence the unthinking majority. They may bring home to a girl that irregular sex conduct is likely to have certain inevitable consequences for which she must at least be prepared. They may help to awaken a sense of responsibility for one's own actions, and thus provide some basis for a realization of the need for self-control and self-direction.

Mention has previously been made of the gold-digger and of one possible cause for her selfish attitude. Other possible causes of this selfishness may be found in early post-natal or even pre-natal life, and its effect is to make the young woman determined to use her sex powers for the gratification of her desires in the form of a love of treats, clothes, admiration and power. Such a girl does indeed know how to take care of herself. She is very unlikely to get caught, but she does untold harm to the standard of sex conduct, since inevitably a friendship with her results in disillusionment and bitterness for the man. She is an exploiter and her friend may even learn to exploit others from his experience with her.

To sum up, one may say that in some quarters a new philosophy is growing up which regards sex experience as the inevitable outcome of mutual affection and considers that marriage is no bar to outside sex relationships, and that such relationships may rightly take place before it. In addition, commercial interests exploit the natural impulses of the unthinking majority and loose conduct is no longer made difficult by parental control and social custom.

There is one further consideration that cannot be ignored. A high standard of sex conduct depends ultimately on reverence for personality; without this reverence the basic principle on which to build restraint and control is lacking. Respect for personality, however, must operate in every sphere of human relationships or it is likely to be stultified. In industrial and international life personality is becoming more and more discounted as the machine takes over an ever-encroaching sphere of man's activities.

It is this fact that makes the task of social hygiene so difficult; its purpose is to induce the individual to accept responsibility for the community, to promote the qualities that make for good citizenship; only an integrated and adult individual is capable of being a truly good citizen, and it is just this integration of the personality that is being hindered by the present-day conception of life. In other words, social hygiene, while having its roots in biology and physiology,

must find its inspiration in the spiritual world, for it is spiritual power alone that can oust from its present position the ever-increasing materialism that is choking the life of the world today.

The democracies finally decided to challenge Hitlerism on precisely this principle. They claimed that they were fighting for the right of the human spirit to exercise control over its own destiny; that their struggle was to bring about the victory of the world of values over the world of things. This battle is in the first instance an individual one. It takes place during the period of adolescence and implies either an acceptance or rejection of the truth that man does not live by bread alone. If youth neglects or fails to make this choice, then in spite of any victory achieved by armies the real battle for freedom will have been lost. It is for those who claim to play some part in guiding the destinies of youth, to ensure that, at the very least, young people shall realize that freedom cannot exist in the community unless its responsibilities have been accepted by the individual.

CHAPTER TEN

PREPARATION FOR MARRIAGE

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WHY GET MARRIED?

THE cynic may want to raise the preliminary question "Why get married"? The modern world is full of talk about the failure of marriage. Divorce courts are kept busy, and large numbers of couples apply yearly for separation orders. We are told that husbands and wives get on each other's nerves, that bickering and nagging make married life a misery, and that many thousands who have entered the married state wish devoutly that they could get out of it. These alleged facts seem to give weight to the question.

A sufficient answer to all such talk is that something very deep and strong in all of us impels towards marriage. Man or woman, we have an instinctive feeling that we need someone of the opposite sex to complete ourselves. Most unmarried persons suspect that they have missed something important in life, which would have expanded their natures and released their personalities. It is not only that the human body clamantly demands a mate, the spirit also cries out for a companion. Unmarried men tend to grow selfish and narrow. Some virtue in them dries up, because they have never known the really great human emotions which come with marriage and fatherhood. In a sense they have never really lived. Loneliness is a desperate condition; it means a continuous hunger which is never satisfied, and is bad for us both morally and spiritually. There is indeed something unreal about this question, "Why get married?" if only for the simple reason that the vast majority of mankind could not endure life without marriage.

Yet it is true that marriage has led many to great unhappiness. Many couples discover only too soon that they are essentially congenial. So love dies. Sometimes even liking ceases. Marriage then means living in a house with a person you do not like, but from whom you cannot get away. In such conditions life does indeed become one long endurance with, at best, occasional gleams of sunshine.

Some of this is inevitable. Most of us are still selfish moody creatures, and at times irritable and cross. We want our own way and if

we cannot get it become inconsiderate. We annoy and hurt each other. All the human faults of ordinary people threaten the happiness of marriage. Few are capable of perfect marriage.

None the less a great deal of the unhappiness of married life is preventable. Much of it arises from causes which could have been removed if the partners had been properly prepared. People make mistakes which they would not have made with more adequate knowledge. Owing to recent studies a good deal is now known of the conditions necessary to success in marriage, and in this section an attempt is made to tell those who are thinking of marriage a number of the practical points which may be helpful to them.

I. THE MEANING OF MARRIAGE

What does marriage mean? It means that two persons consent to unite their lives. It is an attempt by two people to make a harmony out of their different natures, inevitably a difficult and delicate matter, yet the attempt is necessary because an individual man or woman only achieves his or her true self by union with another. That may seem strange, but it is unalterably true. We were not made for solitude; each of us must unite with another to become truly complete. Even though the self must sacrifice something in attaining this union, it gains enormously in the end.

In marriage a man and a woman can, through sexual union, experience joy of a most intense kind, and the deep-seated desire for such union, though not always conscious, is always there. It is a hunger, and next to hunger for food, it is probably the most insistent element in our natures. So when two persons of opposite sex are drawn together by love, and satisfy for each other this sex hunger, they mutually become deeply involved. Together they may rise to heights of happy emotion and attain an exquisite type of intense experience. Thousands of married people have testified that they never dreamt that life could contain such possibilities. It is fitting to call such an experience sacramental.

The bond of physical joy, once established, is capable of holding two people together while they gradually learn to adjust themselves in other respects, and to work out a way of life which will give to each an opportunity for full and harmonious development. A hundred mutual accommodations are necessary. The two must come to an agreement about the spending of money, about daily habits and the ordering of the house, about amusements, social activities, and holidays, about the bringing up of children. All these are possible causes of difference and annoyance. The two need the bond of sex

to hold them together while they meet and overcome their differences. They will have different views and tastes; possibly different political opinions, or religious views, but through all these difficulties the sex union they have achieved can hold them together.

A wrong attitude to sex on the part of either husband or wife will make married life terribly difficult, and if happy sex harmony is not attained a marriage can hardly be called a success.

The right attitude to sex comes naturally to those who have had proper sex education. Those who know, look forward to an experience of sex intimacy within marriage as something that should be spontaneous, free, happy, and truly harmonising in its effect on their natures.

When sex experience within marriage is not a source of joy something is wrong. Either the man or the woman has a wrong mental attitude. It may be that the man does not understand the art of making love, or the woman for some obscure reason is unwilling to play her part. These are difficulties which can be removed by patience, and a study of the information to be found in other parts of this book. Two points only will be dealt with here. Both are concerned with mental attitudes.

Many women have in the past acquired an attitude of reluctance towards sex intercourse because of a suspicion that to let themselves be carried away by passion and to surrender themselves to physical delight is not quite right, quite seemly, or quite delicate. The existence of that attitude is evidence of the injury done to women by a mistaken Puritan convention. It is wholly inconsistent with the attitude which was expressed by Jesus Christ when He said: "God made them male and female and said... they twain shall be one flesh." It was plainly the divine intention that children should be conceived in a mood of happiness and an atmosphere of delight. In begetting and conceiving love rises to its heights, and when a mistaken attitude spoils this, the loss is great.

A certain number of men, while desiring to have intercourse with their wives, are uncomfortable in conscience about it. This spoils their experience in sex, because they fail to be free, happy, spontaneous and wholehearted. This again is the result of a mistaken Puritanism.

Such men have been known to despise their own wives when they found them ready and eager. They themselves desire their wives physically, and yet retain a conception of the "pure woman" as one who could never enjoy sex intercourse. This is one of the cruellest wrongs done by men to women. The normal, healthy, intelligent

woman has a full capacity for co-operation in sex experience, and takes great joy in it when it is the expression of love. She is capable of meeting a husband on the high places of love, and playing a generous part. So God made her. That a man should think less of her on that account is monstrous.

II. BASES FOR MARRIAGE

What practical preparation is necessary to ensure success in marriage?

Some will say that advice to the young about choosing rightly is advice thrown away, because nature takes charge of that matter, and causes two persons to fall so desperately in love that they are quite sure they were meant for each other from all eternity. To offer advice to people in that condition might indeed be waste of labour. We agree that there is something in the argument, yet much can be done to guide wise selection in marriage by right education in early years. When values and standards have been accepted as essential, those who do not come up to them do not prove attractive. Even when the affections have been engaged there are many points worthy of consideration.

The Choice of a Mate

The majority of young people do not fall in love in such a final whole-hearted way; many go through trying periods of perplexity. Very often doubts assail them, even after they are engaged. Everything is not decided for them by impulse and instinct; they use their minds and wonder what the experience of others can teach. It is the purpose of this section to pass on some of that experience.

It must be remembered that "falling in love" may be the joyous beginning of life-long love and successful marriage, but equally it may not. It may be almost entirely a physical attraction, the result of some physiological or even "electric" affinity. There may be behind it no real appreciation of each other's natures and temperaments. Such an attraction will indeed at times spring up between two people who are really profoundly unsuited. It should be remembered, therefore, that while physical attraction is necessary, it is not in itself an adequate basis for marriage. Marriage involves so much more than the interchange of caresses. It cannot be built merely on a succession of passionate interludes; a married couple are not always making love; there must be also solid friendship.

A friendship that is to last demands at least common standards. Husband and wife must agree to a large extent about what they

want to make of life, for two cannot walk together except they be agreed as to the direction. If one cares only for money, pleasure and an exciting social round, and the other knows that life was meant for unselfish service, for the cultivation of the mind and the enjoyment of the arts, what chance have they? Or if one cares very much for home and the joys of family, and the other wants always to be out, and dislikes children, what chance have they? When the two come to the business of bringing up children such differences as these will become acute. One young couple who were drawn together by a physical attraction and married, when they had settled down discovered that he cared for nothing but making money, and for politics, while the wife loved reading and music, and cared much for religion. The result was that they could not even carry on a conversation, they bored each other so much.

It is not enough for a man when he merely looks at a girl to be "thrilled all through." It is not enough for a woman to be so moved that she forgets everything else when a certain man makes love to her. These sensations are rooted in a certain part of our natures, but that part is not the whole of us, and all the other elements need to be considered, for in the long run they will assuredly assert themselves.

This is not merely the bloodless sentiment of an old man who has forgotten what young life is; it is a view which receives strong endorsement from a very large percentage of modern novels. Among the commonest themes in modern novels is the story of how a man and a woman start out in marriage in great joy, and then slowly begin to discover that they have made a mistake. It not seldom happens that a man may say to himself quite truly, "I believe I would be happier in hours of love-making with A, but I know I would be happier in the rest of life with B." If he is wise he will try to win B; and if he succeeds he will make a good marriage, always provided that B learns to be a good lover.

That it is so easy to make a mistake in choosing a mate is often used as an argument for easy divorce. I believe that our divorce laws need further reform, but divorce is at the best a sad and painful matter. A far better way of dealing with the problem of unhappy marriages is to prevent them happening, as they will be prevented when we have more knowledge of the things that matter to guide us in making the choice of a life partner.

Of course, a husband and wife cannot have completely identical tastes. Few women can share their husbands' sports, and many are quickly bored by the politics about which men care so much. Men

as a rule are not interested in domestic details, dress, or personal chatter. These, however, are superficial matters. When the two agree about the greater things, such differences will not count.

This then is the first point. In choosing a mate be sure that you choose somebody who is not only good at love-making, but with whom you agree about the fundamental values of life.

Differences in Age

Something definite can be said about relative ages. It is well for marriage partners to be about the same age, though it is even better if the man is a year or two older; even as much as ten to twelve years of added age on the part of the man is no disadvantage. After that it begins to matter, for if the difference be fifteen or twenty years, a time will come when the two are in different stages of life, and they may then find it difficult to keep together. In one case known to the writer, a man, more than twenty years older than his wife, came to be so jealous of her youth and vigour that he ruined their marriage.

For a woman to be a year or two older than the man may not matter at all, but if she is a good deal older it matters considerably. When the difference amounts to seven, eight or ten years serious difficulties are likely to arise. The trouble will not develop at first; when the man is in the twenties and the girl still in the early thirties, both feel that they are still in the same stage of life. They are both full of vigour and can keep step with each other. But fifteen or twenty years later this is no longer the case. The man is still young and vigorous, but the woman is becoming elderly, her pace is slowing down, and she is experiencing those changes that mark the end of the reproductive period.

In such cases the man is very apt to feel strongly the fascination of those who are still girls. Their gaiety and their quickness will appeal, and their society will be much more exciting than that of his ageing wife. It is not claimed for a moment that such unions must necessarily prove disastrous. A man need not be the victim of his passions. His sense of loyalty to the woman he has married should prevent him from unfaithfulness, but such age complications are better avoided. Even when a man for conscience's sake has forced himself back to his wife, and fought down disloyal feelings, his marriage is not likely to be a glad affair. It takes a woman of rare quality to forget a slight to her charms; it demands even rarer qualities in a middle-aged woman to win back the love of an errant husband.

Some who read this will want to break in with accounts of happy marriages in which there has been great disparity of age. Yes, there are exceptions. More than one happily married man has a wife quite literally old enough to be his mother. Some of the young women who marry old men undeniably like the job they have undertaken. It is said that love does not care anything about age. None the less the point deserves to be very carefully considered.

Race Mixture

However strong and sincere our aspirations after international fellowship may be, and however much we may feel that Christians ought to surmount race prejudice, there are certain facts which ought to be weighed carefully before the decision is taken to marry a member of another race. There are difficulties even in a union between individuals of two European stocks, though both derive from a common civilization. But these difficulties are slight compared with those which arise when marriage between a white and a coloured person is contemplated.

A coloured person may come from a race that is backward in the scale of civilization. That may not prevent sex attraction, but in marriage the difference in background is sure to obtrude itself more and more. The relatives of the coloured member of the partnership will not mix easily with those of the white member. In the end the husband or wife in such a marriage is not unlikely to be almost completely cut off from his or her own people.

Even if the coloured person represents an old and highly developed civilization the partners still represent two different civilizations, involving totally different ideas about fundamentals. To many Chinese and Indians some of the social and family customs of western civilization seem quite shocking, while many of theirs seem to Europeans equally deplorable. When English girls, for instance, marry Indians or Chinese, and are taken out East, the entirely different social conventions, added to the feeling of utter isolation from their own kind, almost invariably depress them to the point of rendering them acutely unhappy. In no case known to the writer has such a marriage proved entirely successful, even though in one instance there was between husband and wife the bond of a very strong and sincere Christianity.

Further, even when the marriage does not end in unhappiness, the arrangement bears very hardly on the children. The two traditions which they absorb from their parents differ widely, and this tends towards instability of character and mental conflict. Often the

children are not fully accepted by either of the races mingled in their blood, they occupy a precarious and difficult position in any society, and many of them in their hearts must reproach their parents for having brought them into the world to face life on such difficult terms. It is always the interests of the children that are the supreme consideration. What could be worse than to see in the eyes of a child the question "Why did you condemn me to this"?

To any man or woman who is tempted to marry someone of another race, and particularly someone of an alien civilization, we would venture to say that unless there is very strong presumptive evidence in favour of its success, it is better not to make the venture. The risk may not be so great for some of the Latin races, where race mixture on a large scale has occurred in the past.

The Bond of Religion

A sincere and simple religion is one of the strongest bonds that can unite husband and wife. Instead of weakening as life goes on, this particular bond deepens and strengthens with the years. A large number of the happiest marriages known to the writer spring from a common interest in religion. People who meet each other on this level of life have a very firm foundation for their future. But this applies only to those who have a real religion. Mere religious emotion will often fade away quite quickly, once youth is past.

Must then young people have religion before they marry? Cannot healthy pagans make quite good marriages? Do not love and common standards suffice to give a promise of success, and does it not sound rather like the arrogance of a parson to claim that marriage needs religion to make it successful?

Many marriages have begun happily and gone a long way without religion. Such marriages may even jog on to the end without disaster, or serious strain, provided no heavy trials come to the couple, and life treats them kindly. Especially is this so if both are of the good-natured easy-going type. Do such marriages ever attain to the higher levels of success?

It is the writer's deepest conviction that human life fails if we leave God out of it. That is true for all individuals, whether married or unmarried; it is true also of national life, which without God tends to degeneration and decay. We are all seeing this to be terribly true in the international sphere, for there can be no solution for the problem of Europe except one that springs from a return to God. Why then should it surprise anyone to find that marriage also needs God to complete its success?

To apply the argument to those young people who are thinking of marriage, it is certainly highly important that they should seriously consider this matter of religion. Particularly is this the case if one of the two has a deep religious sense and the other has little or none, for such a couple have a long way to go before they can achieve any real union of spirit.

Conflict will not obtrude itself at first, but it is bound to assert itself more and more as life goes on. This does not imply that a common orthodoxy is necessary, or a common unorthodoxy, but if for one God is the great reality, and the other has no God, then is the matter serious. It is perhaps in this connection that the influence of a strong physical attraction is most dangerous. One might instance the case of a woman, by nature and conviction intensely religious and spiritually sensitive, who succumbed to the forceful love-making of a man who was virile, good-looking and not without ability. But he was densely selfish, inconsiderate and proud, and in his life God had no place. In the end the shadow that came over that woman's life, and which showed in her face, was one of the saddest things ever seen. The tragedy was deepened by the fact that given happier circumstances she might have been a splendidly happy wife and mother.

So often when this difficulty has arisen in a marriage, it has been asked of one or the other of the two, "Did you know about his or her lack of religion before you married?" The answer, in various forms, has always been, "Oh no, we never talked about those things in our courting days." But surely to omit to talk about this essential matter of religious conviction in courting days is to neglect one of the fundamentals of success in marriage.

Differences in Religious Outlook

The most serious instance of adherence to different Christian churches occurs when one is a Roman Catholic, and the other a Protestant. Of course there are people who, though nominally Roman Catholics or Protestants, take their religion with so little seriousness that no great difficulty may arise. But if the Roman Catholicism is a real thing and the Protestantism is also real, then the difficulty becomes almost insuperable. The Roman Catholic Church has made its position quite clear: it will not recognise the marriage of a Roman Catholic to a Protestant unless (1) The marriage is celebrated in a Roman Catholic Church; (2) The husband and wife promise that any children of the marriage shall be brought

up as Roman Catholics; (3) The Roman Catholic partner to the marriage will try to convert the other.*

These conditions make such a marriage practically impossible to a sincere Protestant. The first condition may not be important, but how can a man whose deepest convictions keep him in the Protestant community consent to see his children being brought up in what is to him an alien and mistaken form of Christianity? How in all conscience can a husband be happy living with a wife who is always trying to convert him? The argument is the same, of course, if it is the wife who is the Protestant.

Difference of denomination within Protestantism ought not to matter. We all have so much in common that we ought not to clash, and generally we do not. Naturally the man or woman who thinks that it is socially essential to belong to the Church of England had better avoid marrying a Dissenter. Fortunately, the followers of that snobbish and deplorable convention are rapidly declining in numbers.

What is important is that the two should find some Church in which both can worship God, and then hold to it. The denomination does not really matter. If the place in which they worship aids both to realise the love of God, then for them it is a true Church. They must not expect perfection. Churches are attended and served by human beings, none of whom are perfect. But with all their faults, many churches have in them a vein of real spiritual life. It is such a church that must be sought.

In the case of marriages between Jews and Gentiles considerations of race as well as religion are involved, with this qualification, that for the Jew race and religion are synonymous terms. This does not, of course, apply to those of the Jewish race who do not practise their religion.

Health

Have you not known marriages that got quickly into difficulties because the wife was delicate, or the husband was always being ill? Have you not known marriages that resulted in delicate or even feeble-minded children? Is there not something of the very first importance here that needs thought?

Some people marry who ought not to marry, or at least ought not to have children. There are certain diseases which are hereditary, though their number has been generally exaggerated. There are only a few, and on these a doctor can advise from family histories, or

*No. 3 is not always insisted upon.

from symptoms, even when they cannot be seen by the lay person. Should his decision be, "You ought not to marry, or at least you ought not to have children," such a pronouncement must be a severe blow, and its recipients have a very strong claim on the sympathy of us all. It is, however, far better to know about such a state of affairs in time, and not have children, than to see the children one loves suffering year after year, or growing up unable to face life adequately.

Whether an individual with an hereditary defect might sometimes be allowed to marry, having come to an understanding with the other party to the marriage that there shall be no children, is a very difficult question. There is no dogmatic answer to be offered. It is asking a great deal of a woman to suggest to her that she should forego the joy of having children. It is asking a great deal of a man that he should give up all hope of having sons and daughters. It is essentially a matter for the two to discuss and decide between themselves. Some may agree to solve the problem, at least partially, by marrying and then adopting children.

To pass on from that special, hard, and infrequent case, many of the ailments which spoil the early years of marriage are quite curable, and might be prevented by taking a doctor's advice in time; often it is because none has been taken that trouble has developed. Does not that mean that it is very wise to have a thorough medical examination before getting married? A doctor will often discover conditions which would make true and happy sexual intercourse very difficult, and may be not only able to deal with such conditions, but also to give to both man and woman most valuable advice for the future.

It is of enormous importance that men and women should come together in marriage in a state of really good health, and that both should be physically in a condition to stand up to the work of life. In some countries a medical examination before marriage is compulsory, and no one can get married without a certificate of good health. This is not yet the case in Britain. But certainly we should all seek the advice and help of a doctor. Such advice is nowadays readily available. It can be sought from private practitioners or birth control clinics. These centres are already doing a great deal in this respect to help those approaching marriage, though further facilities are an urgent need.

Many people in this country have not been given the chance of full and normal health, some have been under-nourished as children, and some have been denied all their lives their just share of good

food, fresh air, and healthy exercise. This is a scandal for which the whole nation is responsible. Further, many men and women in early adult life are overworked and underpaid, a condition which results in very poor health. May God forgive us that these things should be in a bountiful world. None the less a great deal can be done by all of us to improve the state of our health, if we know enough and follow the advice of those who are capable of giving it.

Importance of Good Cooking

Now to deal with a very homely and practical matter. Recently a man said in public that the first few years of his father's married life had been overshadowed by indigestion because his mother did not know how to cook. That father was not very exceptional. It may be asked how girls who have been working up to the time of their marriage can be expected to know how to cook? Such girls may be clever, energetic, and good at their work, but of cooking they may know almost nothing, because they have had no opportunity to learn. The answer is that they should make the opportunity.

A husband with indigestion is not likely to be a very happy man or very easy to live with. Poor, scrappy meals tend to make him difficult and irritable. The same is equally true of thousands of wives, although they do not realise it. They have headaches, "nerves," and off days, simply because they are not being properly fed. Given good and well-cooked food, homes would be much happier places.

The advice to any girl about to be married, is, at all costs, to take cooking lessons. These are given at night schools and other places, and the expense is trivial. It means, of course, a certain amount of exertion, and many girls may be tempted to say, "What a nuisance!" But for those who want their marriages to be successful this small amount of extra labour is immensely worth-while.

Good food is generally thought to be expensive, and many say that they cannot afford it. But the truth is, as we are all learning, that a clever cook can make tasty and wholesome meals at very small cost, while a bad cook will waste and spoil even expensive food.

The cynics say that the way to a man's heart is through his stomach. It would be truer to say that the hearts of both men and women are more loving and their minds more attractive when there is peace in their stomachs. That is not a cynical remark, it is mere common sense.

When a man knows that he is going home to a good warm meal prepared by a woman with a smiling face he hurries on his way. When he fears that he is going home to a slab of cold and tired-looking mutton, or a scratch meal hurriedly dug out of tins, and that even so it will be wise for him not to complain—well, he does not hurry, sometimes he does not go home at all.

One realises that the smiling face must be very difficult to produce when the chimney has been smoking all day, the children have been crying, and the wife feels ready to drop, or to cry with vexation. And, unfortunately, men are not always so observant of signs of distress as they might be. But when the tired wife and the self-centred man have had a good warm meal, they both feel much better. It will be easier for them both to smile, and they may discover that they really love each other quite a lot.

Troubles and Trials

The only sufficient reason for marrying is that you have come to love somebody of the other sex. Life must always have troubles in it. Married life has its own peculiar trials, for men are queer creatures, and so are women. It needs love, needs strong and loyal love, to carry a couple through. Love can solve a hundred petty problems, and make light of larger ones. It can make marriage a joy in spite of narrow means, in spite of carking cares and poignant anxieties. But nothing else can.

The writer has talked with a great many couples in trouble. So often a wife has said, "You see I did not really love my husband when we married" or "I know my husband did not really love me." Is it any wonder the two have been defeated by life's difficulties and irritations? It is true that love sometimes develops after marriage, especially with women, but this is by no means always so. To have a man you do not love always in the house, is enough to send many a woman crazy; and when a man has to go home daily to a woman he does not love, may God help and pity him!

Yes! Love is the essential for a happy marriage. There have been many men and women who have married for money. They have generally found that whether they got the money or not, they usually get nothing else. There have been women who have married simply because they were tired of supporting themselves. Many of them have lived to wish devoutly that they were back in the old job. There have been men who have married in order to secure an unpaid housekeeper; they have generally found that the housekeeper they have secured is neither good nor inexpensive.

No, if you mean to marry you must learn to love. Nor is it enough to "fall in love." You must learn to go on loving, and that means a long learning. It needs patience, good temper, unselfishness and common sense. It means being able to forgive, and—which is much harder—being willing to accept forgiveness. It means generosity in giving and self-forgetfulness. It means enjoying going without things that you want in order that someone else may have what he or she wants. Yes! A long learning, but the greatest learning in life.

There are women who impose on a husband by exploiting his love, in order to get out of him all they want. Such women get what they deserve—an unhappy marriage. There are men who, though knowing that their wives love them, grow utterly inconsiderate, and turn those wives into drudges. They too get in the end what they deserve. Loving is not simply enjoying the fact that somebody loves you, it is giving and sympathising and understanding as far as possible. There was once a man who went about complaining that he had never been able to find a woman who would love him as he needed to be loved. He never could. Had he been looking instead for a woman whom he might love with all his strength, he would have stood a much better chance of success. It is by losing ourselves that we find ourselves; but what a lot of people either do not know that, or will not believe it.

Why is it that some couples are happy, while others with the same income and living in the same street are miserable? It is because with the happy ones the divine business of loving and being loved goes on all the time, through all the troubles and worries of life.

"Love never faileth. The poor substitute for love which is all that many of us can provide fails often enough. But real love, never."

III. BEHAVIOUR BEFORE MARRIAGE

When two young people have discovered that they love each other, and have decided to get married, they generally have to wait a fairly long time before they can do so. Until the man gets a rise, or until they can save enough money to set up house.

This period of waiting is generally far too long. For some it stretches out year after year. Social customs should be altered, or if necessary legislative measures enacted, to enable young men to marry much earlier. Some banks and some companies make rules barring early marriage which amount to unjustifiable tyranny. Some churches deter their young ministers and missionaries from marriage. In many ways the balance is weighted against those who

want to marry, when it ought to be weighted the other way. A wise society would do everything in its power to encourage happy and early marriages, and would not tolerate the present situation in which a man finds that while nature calls on him to marry by about 23 or 24, stern economic forces compel him to wait till he is nearly thirty. There is plenty of money in the country, but it is wrongly distributed; and in particular the old have more and the young less than their share.

But as things are, the period of waiting has to be faced. Let us face it squarely. Let us admit that there is something unnatural about it. Nature calls on the two, once they have discovered their mutual love, to give it complete expression in sex intimacy; the rules of society and economic conventions compel them to control themselves and wait—a state of affairs that puts a strain on both. All couples do not feel it equally, but some feel it very intensely. Often it is specially hard on the woman.

It is immensely important to learn how to meet that situation. It is certain that if the two indulge in mutual caresses which grow more and more intimate till sexual excitement is produced, and then break away from each other, they will be left in a wrought-up and unsatisfied condition, which will in turn produce nervous strain and very often moods of depression. The strange and perplexing irritability of many engaged couples at times is probably caused in this way.

Surely then it is mere common sense and practical wisdom for engaged couples to find a manner of love-making which will not lead to such intense excitement, and then to resolve to keep to it. If they learn self-control at that stage it will serve them well later on, for true married life calls for much self-restraint. If they are wise they will lay down an agreed line which they will not cross, though it will not be easy to keep to it. On some occasions the man will find it very hard, at others the woman will be secretly annoyed with the man because he can and does stop; but when the hour of excitement is past, both will be glad that they have been able to control the situation—and they will have discovered for themselves a way of harmonious living.

It has often been asked exactly how far the endearments ought to be allowed to go. No definite answer can be given. Not because the matter is too delicate and intimate for detailed discussion, but because the answer is not the same for all couples. Some seem to be in no danger of becoming too excited, while for others the danger arises almost as soon as the man takes the woman into his arms.

The only rule that can be laid down is to avoid such a degree of excitement, as, if not satisfied by sex intimacy, will leave either the man or the woman strained, dissatisfied, and nervous.

Interests in Common

Another important matter must here be considered. It is a very good thing when engaged couples learn to do things together—to play out of door games, to join in the same sports, to go for walks in the country, to attend entertainments, to mix in general society and, if their tastes lie that way, to read the same books and listen to the same music. Thus they will really learn to know each other, they will learn how their characters fit in to each other, and so move towards the complete union of their lives which marriage will bring. If two people meet only to make love they are satisfying only one part of their natures, and the chance of the physical strain becoming great is increased.

It is possible that when they attempt to fit into each others' characters and tastes they find they do not suit each other at all. Each may bore the other except when they are love-making. That would be a very serious discovery. It might mean that they had better break off the engagement and face all the pain and upset of doing so, rather than go on with an arrangement which is to last for the whole of life, and which does not seem likely to lead to happiness.

Pre-Marital Intimacy

A certain number of people will say, "But why all this talk of going so far and no further? Why should we not have complete sex intercourse, if we know that we love each other, and are going to get married as soon as we can? We hate the idea of sexual relations without love, but we have all the love that is needed to make them beautiful and happy."

Some young people not only say that, but do have complete sex relations though they are not married. It is doubtful whether they often do so with really clear consciences, because society for very strong reasons has pronounced against such relationships outside marriage, and the knowledge of that fact generally casts a shadow on the sex intimacies of the unmarried. The reasons against this plan relating to the physical and emotional adjustment of the partners to life are given in another section. The strong reasons which have led to society's attitude may here be stated as simply and frankly as possible.

To begin with, a woman who has given herself wholly to a man who is not her husband is in an unsafe position. Marriage does not

invariably take place. Men change their minds—even men who have seemed to be very much in love. Then the woman finds that she has given away something that she really wants to keep for her future husband. Also, if a woman has had full sex experience and it suddenly ceases, she is often left with a very strong longing for it, and is apt to take in a hurry some other man who may not really be suited to her at all. The only wise course is not to begin sex experience until you can have it with someone with whom you can carry on freely, fully, happily and for life.

There is always something incomplete and imperfect about the intimacy of the unmarried. It may have to be kept secret. The two may have to seek out times and places for their private purposes; they may constantly have to part, though instinctively they want to remain together. It is for permanent life with the other that our natures cry out—not merely for occasional hours of passionate union.

Usually in such intercourse steps have to be taken to avoid the coming of a child. That means that the experience is not so free, unbound, happy and fearless, as it should be. No methods of preventing pregnancy are absolutely certain, and so an element of fear enters. All the time the woman, though she may be very excited and deeply moved, is a little nervous about possible consequences. That is not sex experience at its best.

Surely too, it is very wise and right to keep some great experiences till the time of marriage, so that marriage may really be a very great event and the beginning of a new life? Sexual intimacy is not a light matter; it deserves to be treated with the utmost seriousness. Many, including the writer, think it ought to be treated reverently. It can be, and ought to be, a beautiful and very happy experience. When it is fully achieved it affects the whole of our natures for good, and has wonderfully harmonising effects on our personalities. The imperfect sex experiences of the unmarried do not have these results.

There are plenty of people who will never take sex seriously, who use it simply for passing pleasure, and reject its responsibilities. Such people will pass from one love affair to another, and never allow themselves to develop any deep affection or loyalty. They separate sex and responsibility and as a result their sex experiences are poor, third-rate affairs. If young men and women really understood this point, they would surely say, "That sort of thing is not good enough for us."

It is the woman who pays, if she slips into sex intimacy with some man and then does not marry him. She suffers intensely when the parting comes. Sometimes she feels as if she really cannot

endure the pain, and tries to ease it in a second experience. Again she is left and again hurt. And then she begins to grow hard. Because her feelings have misled her, she decides not to have feelings and often becomes bitter and antagonistic towards all men.

Many, including the writer, believe that the Christian rule which calls for chastity before marriage was made chiefly for the protection of women, who will discard it at their peril.

The idea is prevalent in some quarters that an engaged couple should have sex intercourse before marriage to see if they are suited to each other. In fact we are told that a trial trip before marriage is quite a good thing.

The scientific grounds on which this idea is proved false are given fully in other chapters. Briefly to recapitulate the social reasons: while in such an experiment the two may achieve a harmonious physical experience together they may yet not be suited for marriage at all. Partners need to be much more than physically suited if they are going to make a good marriage. A man may find a certain woman a very agreeable companion in sex experience, and yet be utterly bored by her in the rest of life. A woman may find a particular man very exciting and wonderful as a lover, and yet almost hate him at other times.

On the other hand if two people do not achieve a harmonious physical relationship during a trial trip that does not necessarily mean that they may not be very well suited. Many of the happiest married couples have taken quite a long time to attain sexual harmony and adjustment. A week-end, or even a month, would have been no use to them. It took much patience and much learning before they achieved success, but in time they did attain success because they loved each other. If such a couple had parted because their first attempts were not successful, they would have missed their real happiness.

Therefore, it may be said that the "trial trip" idea is a mischievous and dangerous delusion. What matters is that the two should truly love each other. Therefore, we return to the first point: sexual relations before marriage are a great mistake, so great a mistake as to be definitely wrong. The narrow way to which the Christian standard calls us all is really the way that leads to the most complete life.

The difficulties of the engagement period have been spoken of, but a wrong impression should not be left in the mind of the reader. In spite of the difficulties, it may be, and very often is, a gloriously happy time. The difficulties sink into the background and the joy

of learning what love is, and of learning more and more about the loved one, fills the days with happiness. Those who control themselves within certain limits till they are married are likely to find marriage all the more wonderful for that very reason.

IV. ADVICE TO THE NEWLY-MARRIED

In the following pages a number of points will be discussed which are very important for married people. They are put into the part of this book which is devoted to preparation for marriage, because to know them is most truly to be prepared. We all need to have the right conception of what marriage is going to mean if we are to succeed.

The First Home

It may seem a very commonplace thing to say that a young married couple ought to have their own home and not live in the house of his parents, or her parents, or in lodgings. Some couples even before the present acute housing shortage started in this way. As we believe priority should be given to the needs of the newly-married we give some of the reasons for the importance of independence of relatives to those recently married. It may also help those who became engaged in time of war to see how best to plan what must be a difficult situation. Obviously, in many cases the permanent home cannot yet be provided.

The two need to get away to a place of their own where they may work out their own problems for themselves. When other people are there to criticise, or interfere, difficulties are certain to arise. In many cases the problem of the "in-laws" is bad enough any way, without complicating it by living in the same house with them. Then it often becomes intolerable. Rather start in one room; rather wait a good while longer than live with relatives. Give yourselves a chance: you need a place in which you can do what you like, make your own mistakes, and learn your own lessons.

There are marriages which have never had a proper chance, because they began in somebody else's house. The husband comes home to find his wife miserable, perhaps in tears, because the older people have been interfering. He gets more and more angry. Then there are rows, one partner takes one side, the other the other, and acute dissensions arise. Love cannot mature in such an atmosphere.

So let all couples be sure that they start in a home of their own. A great deal of a young wife's happiness comes from making her own house into the kind of place she wants; and this she must do

in her own way. She may make mistakes; she almost certainly will. Let her make them. She will be happy in the business and will learn in time.

The Budget

The lack of money is the root of all evil, said the cynic, parodying St. Paul's famous dictum. And his words contained more than an element of truth. As a rule there is never enough of it. Ninety per cent. of mankind think their incomes are too small, and that an extra ten shillings a week, or an extra hundred a year would make all the difference. We try to cut our coat according to our cloth, and make calculations on the assumption that what we have ought to be enough, but somehow it never is. Things wear out or get broken. Prices rise. Children fall ill, and unexpected doctors' bills have to be met. One way or another the wretched money problem seems to be with us all the time.

It is said that squabbles about money come second in the list of causes that spoil marriages. Many a wife thinks that her husband ought to allow her more for housekeeping; and some wives have an ineradicable belief that their husbands ought to be able to earn more. A husband resents the amount that goes in housekeeping expenses, and thinks his wife is not a good manager. He thinks he must have his cigarettes and his beer; she longs for little luxuries which to him seem quite unnecessary and extravagant. So the trouble grows. It is all so sordid and irritating. No wonder married life is unhappy.

There is a way of preventing all this; not an easy one, but a possible way which is well worth learning.

To begin with, the husband and wife must sit down and do some careful planning. They must both know what money is going to come in. The husband must tell his wife what his wages are, and if the wife has any money at all, or any way of making money, that must also be taken into consideration. Then together they must draw up a budget. So much for rent. So much for food. So much for coal, gas and electric light. So much for household necessities. So much for clothes, and so on; and at the end, so much for the husband's pocket money, and an equal amount for the wife's pocket money. The two should agree not to ask questions about the way in which each others pocket money is spent.

A plan like that is very hard to draw up, and harder still to carry out. Women are better at it than men. When it is once agreed upon, however, the effort to carry it out creates a new bond between hus-

band and wife. Both may have to pinch a bit; both will rejoice when a bit extra comes in, but there will be no more quarrelling about money. Of course, if either takes to betting or drink, or any of the other follies into which we frail humans are apt to fall at times, that will upset the plan, for gamblers and sots know no restraint. But we are thinking here in terms of the average, sober and sensible man and wife.

Why be defeated by the money problem? The rich are after all not so very blessed, and the poor have often found a way to be happy.

Quarrels

Have you ever known a young wife and husband terribly upset because they had had a good upstanding quarrel? They had made up their minds that such a thing was never to happen. They knew that other couples quarrelled, but they were going to be different. Yet the quarrel came. One got sulky and the other angry. He went off in a bad mood, and she was left behind feeling miserable. These things happen because unfortunately no wives or husbands are perfect. They happen to probably 90 per cent. of all married couples, and are not so terrible. When the first quarrel occurs, it seems to the two as if all was over, and that their lovely dream house had fallen about them in ruins. Sometimes only one has been in the wrong, and that very likely because of physical causes, but more often both have been in the wrong. Very few human beings have learnt to keep their tempers by the time they marry, and in early life most of us are pretty selfish.

One always wants to say to such a couple, "Now for goodness sake don't get worried. Nothing very serious has happened, and all is not over by a very long way. You are up against something that all couples have to face. The way to get over these troubles is to be absolutely frank and honest about them, and when you have cooled down you will be able to see where you were wrong." If only one went wrong, then that one must be willing to say so. If both went wrong then both must be willing to say so, and each must forgive the other. Each must also learn what is much more difficult than to forgive—humbly to accept forgiveness. If either keeps on claiming that he or she has always been in the right, that person is not being honest, and a happy marriage cannot be built on a fraud. It is doubtful if there is a happy marriage in Britain of more than five years' standing, that is not partly built on forgiveness—offered and accepted.

What is important is that the matter should be cleared up, finished with and buried. A wife who every now and then brings up the subject of some error or mistake her husband once made is going the straight way to ruin her marriage, and a husband who does the same sort of thing is killing his own happiness.

"Nagging"

Now a word about "nagging." Of all the ways in which the peace and happiness of marriage are killed the meanest and the most sordid is nagging. It can amount to the infliction of positive torture. A husband who is worth having as a husband will not stand it. If he is exposed to it in his home he will stay out, and he may even ultimately stay out altogether. A woman ought never to be called on to stand it. She cannot get away so easily as a man, so she tends to wilt under nagging and become a spiritless creature.

The late Dick Sheppard (Rev. H. R. L. Sheppard, the famous "wireless parson") had a really good story anent this point. A woman once went to consult a doctor about her husband's sleeplessness. She told the doctor all about it, and took a long time doing so. Then she told him about it all over again, and that took a good while longer. By this time the doctor felt he understood the case. He got up and went to the corner of his room where he mixed a sleeping draught. "Now this," he said, "is not for your husband. It is for you, and I want you to promise me to take it." The wife took the sleeping draught, and the husband had a glorious night of peaceful sleep.

The real problem married couples are trying to solve all the time is the problem of making a unity out of their two lives. Perhaps it is never finally and fully solved; perhaps in this life it cannot be. There are some couples who seem to have solved it, but who have not really done so at all. They never quarrel either in public or private; one will controls them both, but it is not a common will. It is his will or her will, and that really means that one of the two has been spiritually assassinated by the other. The man generally does it by open dogmatic self-assertion. By cruel, arrogant and sometimes sarcastic violence he batters down all independence in his wife, till she becomes the mere shadow of a personality. The woman does it by constant criticism, by nagging, by complaints, sometimes accompanied by tears, till the man for the sake of peace gives in and becomes a cipher in his own home.

This is the very worst form of failure in marriage. It is a worse calamity than desertion or infidelity, for marriage is intended to

enlarge human beings—to lead them into a fuller richness of life, and to develop their whole personalities. When in a marriage one of the partners is crushed and maimed spiritually, and prevented from self-development and self-expression, then that marriage is sheer disaster. Morally the process is as bad as murder. It does, so far as this life is concerned, kill the essential personality of the crushed one, and the peace it seems to bring is the peace of death.

Nor does the one who domineers escape. By his or her conduct nature is outraged. The petty victories of these domestic Hitlers are really the proof that the authors of them are losing all true humanity. It is to be hoped that these cases are few, but there are some. The houses in which such couples live always seem to have the spiritual atmosphere of a graveyard.

It may be true that many women enjoy being dominated. Just as they like being mastered in the process of love-making, so they find it restful and comfortable to have somebody to make all their decisions for them, and to assume the mastery. Such women actually seem to enjoy being doormats, but usually it is only for a time. Almost always, after a while a woman's personality wakes up, and begins to want room in which to express itself. Then let the dominating husband beware, for this is a critical point in marriage. If the woman does not find some means of self-expression she will either become dull and stupid, or she will revolt. And a woman in revolt is an adversary to be feared.

There is probably always some competition between a husband and a wife. It begins when they choose furniture, and decorate their house, and it goes on in a hundred small ways. Each is apt to want the chief say. Each wants to lead, and each wants to be number one, which is very natural, but it needs watching. If their ardent love at first smooths over these rifts in the lute, that will not go on indefinitely. Later on, clashes will occur which will be more difficult to deal with.

Husbands would be well advised to let their wives have their own way in all matters concerning the management of the house, its arrangement and decoration. They do it all so much better than men can; it is a business they enjoy, and in which they can express themselves. There are exceptions, of course, but it is a good general rule. There are also departments of married life in which husbands ought to be allowed to lead. They are generally better at business, and on the whole they have sounder opinions about politics. It is also their natural function to take the lead when the family goes on

journeys and expeditions. They enjoy that, just as wives enjoy directing the life of the house.

Marriage a Partnership

All this is at variance with the old idea of the "obedient wife." Well, that idea may have worked all right in the Old Testament times, though it may be doubted. Outwardly it seemed to work in the Victorian age, though probably appearances were deceptive; but it is obviously a wrong idea for the present age. Marriage must be thought of as an equal partnership. If married people are to be happy and to grow in character, each must be ready at times to take control, and manage the situation. There are times when even masterful men feel beaten by life, and want and need some woman to mother them, and let them lean back and rest. For the moment the spirit has gone out of them, and only their wives can save them. There are other times when wives are so tired and bothered that they in turn need somebody to take control that they may rest and be passive. The man has then to stand and let the woman lean. Happy are the couples in which both know how to play these different parts at different times, and so manage the problem of the equal partnership.

Quite a lot of young men are attracted by the baby-faced type of girl, who will look at them with adoring eyes, and tell them they are wonderful. Such men imagine that attitude will continue throughout married life, and all they will have to do is to go on being lord and master. They would do well to get rid of that delusion, for after a while "baby face" will develop a mind of her own, and will want her own way, and if she can't get it she will be unhappy, and then she will make her husband unhappy, and the marriage will be a poor thing. We must remember that when we marry we marry persons. Though at the time they may be undeveloped persons, as life goes on each will develop, and it is for the partners to seek together some manner of life which will give both husband and wife the chance to grow.

Home versus Work

One curious and disastrous mistake which some wives make is to allow themselves to become jealous of their husband's jobs. In their desire for more of the husband's society they resent the early hour at which he leaves home, and the late hour at which he gets back. They exclaim pettily, "Oh your wretched job . . . your office . . . your business! Can't you take less time over all that, and give more time

to me!" How hard, often how unfair that is upon the husbands, who generally have no choice in the matter. They have got to devote their attention to their jobs, otherwise they could not maintain their wives. In the case of wage-earners, somebody else fixes their hours. They have to turn up in time in the morning, and they have to stay until the hour of closing, or they would quickly find themselves out of a job, and out of an income.

Wives naturally want to see more of their husbands, and dislike being left so much alone. None of us likes all the things we have got to face. If such wives would but think seriously, even for a few minutes, they would stop their grumbling and learn to welcome their husbands home with sympathy and not with complaints.

One instance occurred of a man whose work took him away from home a lot, and when he did return he was habitually assailed by his wife with so many complaints and reproaches that he could hardly face coming home at all. As he neared his house he would sometimes walk up and down for as much as half an hour before he could summon up his courage to enter. This was a man who particularly needed the comfort of a real home, and the sympathy of a real wife. For want of them he died.

One wonders how these complaining wives would like to have their men at home all day and every day. If only they would ask some of the wives who have had to face that experience what it is really like, it would probably cure them. A husband may be a very convenient and charming thing to have about the house, but not all the time. If he is there day in day out he quickly becomes more of a problem than any of the children. Before long his wife will be heard saying, "I wish to goodness he had something to take him out every day—and for a good big bit of the day too."

The real truth is that a man is only a tolerable creature when he has work to occupy his mind, and fill much of his time. He needs it to keep him healthy in mind and body. Unemployed men (whether they choose leisure and live on private means, or have leisure thrust upon them and live on the dole) are often very difficult for women to live with. Men need the discipline which those without work lack. There ought to be no men, in this or any other country, allowed to idle through their days, either because their fathers made a lot of money, or because through unemployment they cannot find a man's job.

Something must here be said from the other side. It may not seem important to many who read these pages, but it needs saying. There are men who can decide how much of their time and energy

they will give to their work, and how much to their home. Some doctors can do this, some lawyers, some parsons, and some business men in high positions. Such men can say, "We are not going to allow all our energy to be swallowed up by our work. Even though it means being less rich than we might be, we are going to keep a definite part of our lives free that we may share it with our wives and families."

Alternatively they can allow the claims of their work and of all sorts of societies to devour their energies, and use up all their emotional capacity. When they take the latter course have not their wives a just cause for complaint whether they utter it or no? Surely they have. If marriage is meant to be a real companionship, then its essence is destroyed when a man exhausts himself outside his home, and lets his wife sink into the position of a convenient woman who keeps a house for him, and is there on the occasions when he wants her, but who no longer shares his life.

The modern educated, intelligent, energetic and able woman will not be content with such an arrangement. If that be all that marriage means such a woman will not marry. If, being married, such a woman finds herself in the position described, she will develop a life of her own. There may not be any other man in it, or there may be; in either case husband and wife will have parted spiritually, and what remains of their marriage is a hollow shell. When a parson or a doctor, a politician or a business magnate will not reserve even a night a week to go out with his wife or enjoy his home with her, how can a wife be expected to be content? Modern marriage must mean more of a companionship than that.

Husbands for whom this is a real problem may say, "But we dare not do less of the work that lies to hand for us than we can fit in. We must put religion, or the health of the nation, or public affairs, or the development of business on which thousands depend, before our private affairs. We must sacrifice ourselves and even our wives for these great ends." This sounds very fine, but it leaves unanswered two questions: (1) What if a large part of the work for which you were born is to make some woman happy, and to look after a family? (2) If you must give all your strength and time to the ends you mention, ought you ever to have married? Is the little bit of their lives which such men can spare for a wife worthy of being offered to a modern woman? It is doubtful.

There are times and occasions when men must leave their wives on one side for the sake of ends so important that we dare to call them divine. We need to beware of the snare of too much domes-

ticity, which cloy the soul of both men and women. But did God mean that we should have wives and then not reserve space in which to enjoy life with them, and make love to them? Surely not. Marriage must contribute to the development of both husband and wife or else it has failed.

Holidays for Wives

Men often do not realize what a horribly continuous job a wife's is. It is never done. She always works overtime. There is the house to be kept clean, there are meals to be cooked, there is that horrible washing-up business to be faced after every meal, there are the children's clothes to mend, and there are sick children to be nursed, or peevish ones to be comforted. On top of it all there is that queer creature called man to be looked after. As a rule she does not even have a half day off, though she often feels that she really cannot keep up.

Hers is the finest job in the world, because when it is well done it creates a home of the right kind in which children can grow up into useful men and women, and in which a husband can be happy, but it is terribly exacting. No doubt many women like it because they are all the time serving the people they love. It is a labour of love, but for all that it is heavy labour, and it goes on all day and every day.

Does it not seem as if a wife ought to have a break sometimes? Not a mere holiday at the seaside with the family. That's not a real break, because much of the work goes on even there. Doesn't she need to get away sometimes even from her husband and her children? She certainly does. It is very difficult to manage this; most women will say it is impossible. Who would look after the man and the children? Everything would get into a mess, she wouldn't have a moment's peace wondering what was happening to them all in her absence. All the same she needs that holiday. Somebody might be found to come in and look after things; the older children could do a bit more for the younger ones; the husband might do a bit of housework, or rather more, if he already does some. The railway fare could be put aside, and the wife could go off, and forget for a week or so that she is a married woman with all the cares of matrimony and maternity on her shoulders. She could be free of cooking, washing and mending, free to sit in the sun and do nothing, to meet fresh people, to laugh and sing, and be looked after.

The result would make it worth-while. The husband and the children would miss her horribly and say that they had never

realized what a lot she did for them. The wife would grow homesick after a bit, and begin to wish she was back in it all. And when she did come back she would get a glorious welcome, and would be thrilled by her own children. When they had all gone to bed, her husband would very likely tell her some of the things he had not told her for years—perhaps not since they were courting. And the home would start off again, with mother looking ever so much better.

Friends

One young married couple were so much in love that they felt that they did not need anybody else in all the world, and that they were not interested in anything outside their own home. That went on for some years, and they were very happy. The husband dropped all his former men friends and his games and sports, the wife made hardly any women friends, and the two took no part in social life, church life, or any other outside interest, but they felt they were quite happy.

It was not till later that life began to be dull. Theirs was a lovely house but small, and its interests were very restricted. It began to chafe both man and woman, since they were really made for a wider and fuller life. For want of that they vegetated; and their minds ceased to grow.

Happily they realized the position in time and to save themselves took steps to widen their lives. The husband returned at times to the society of men, which he really needed. The wife met other women. Their minds woke again, and new parts of them came to life. The two did not spend so much time together, but when they were together they were more interesting to each other, and their home life was filled with a new kind of happiness.

Married life must never be allowed to become narrow and petty and dull. Both husband and wife must refuse to live narrow lives. It is fatal of course to get so interested in outside things that the home is neglected, and the two hardly ever see each other. This does happen, especially with people of great energy and very active minds. The art of living the married life is the art of steering a course between the two extremes. Outside interests there must be, but these must not be allowed to swallow up the home life.

It is clear that both husband and wife need friends outside their homes, and probably each of them would be all the better for a few friends of the opposite sex. Is a married woman never to have any male society except that of her husband? Has any man ever been born interesting enough to constitute a woman's sole male society?

It is doubtful. Similarly, is a married man never to have any women friends? Such friendships, wisely chosen, are stimulating. They enrich life, and make both husband and wife more interesting people. If some form of narrow and suspicious jealousy makes them impossible, the married couple concerned will be losers.

It would be a good thing for every man over 35 to ask himself every few years, "Am I becoming a dull fellow?" We are apt to become dull without noticing the fact, but our wives are aware of it. We grow fixed in our habits (of which possibly some are annoying), we become confirmed in the same old interests; we tell the same old stories, and the same old jokes till our wives must want at times to scream. We get rooted in our prejudices and we shut our minds to new ideas. We get into physical, mental and spiritual ruts. It must be all very boring for our wives and for the children. So it is for us, though we don't realize it. We let life become monotonous, and we spoil it further by railing at its monotony, never realizing that we ourselves are the cause. Meanwhile the world is throbbing with ideas, is full of the possibility of new experiences. If we lived abundantly and creatively, we should be much happier, and so would our wives, and all those who come into contact with us.

V. IS MONOGAMY NATURAL?

Are men naturally monogamous, that is, content with one wife, and if not what is to be done about it? It is often said that men are not naturally monogamous. To that assertion the reply of the writer has always been, "Well, it's high time they learnt to be." It may possibly be true that while evolution produced long ago the faithful wife, it has not yet quite succeeded in producing the faithful husband. On the other hand a very wise woman once said that for a great many women fidelity is not natural; that in fact they are often acutely conscious of the attractions of other men than their husbands, but that they refuse to give in to those attractions for the sake of their children and their homes. Many women feel that current conventions about conjugal fidelity do grave injustice to women. When they prove faithful all their lives to their husbands the world comments, "Oh, but that's only natural for a woman." When husbands do not prove faithful the same world says, "Oh, but that's only natural for a man."

It may very well be that for many women fidelity requires quite as much self-control, and even self-sacrifice, as it does for men. Passing that point, let us face the fact that many men are apt to be attracted by different women at different times. When a certain Mr.

X. went off a number of years ago to live with a woman who was not his wife, the situation was under sympathetic discussion by the writer and a woman friend of Mrs. X. To the remark that it was hard for some men to be content with one woman for a lifetime, the reply was not, as might have been expected, abuse of the man's behaviour, but the shrewd comment, "Of course, that is so, and that is why a wife who understands her business will take care to be several different women from time to time!" How that it is to be done is not for a mere man to say, but some women do know how to accomplish the feat.

The remark meant presumably that a woman can be sometimes the good and reposeful housewife, and sometimes a gay creature, ready for outings and pleasure, sometimes a serious-minded person ready to discuss important current questions, and sometimes almost a child once more. Sometimes she will be yielding, and will lean on her husband, trusting in his strength; sometimes she will lead with vigour, restoring to him when tired, confidence and enthusiasm. Women do do all this; how, remains a secret which they will probably never give away—if indeed they could.

It is commonly said of many wives that once they have secured their husbands, they take no trouble to keep them. It is tragic when, as so often happens, wives let their appearance go to pieces, and the girls who used to be daintily and neatly turned out, shuffle about their homes in ugly wrappers, with hair done anyhow, and in slippers which may be comfortable, but give an appearance of slipshod slovenliness.

Some wives even seem to think that their husbands are the only men to whom they need not bother to be polite. This is a disastrous mistake. Most women naturally and rightly leave, in the early stages of their common life, the advances in love-making to the man, but some wives never seem to realize that it would be a very wise move if after a while they would occasionally take the initiative, and show that they too can make love. They need to be clever enough to choose the right moments, but many a man has felt as if his love had been born again in him when his wife took the lead and became an active lover. Indeed there are times when a man is so nervously weary and spent that nothing can restore and rest him except such love-making by his wife.

Convention decrees that the girl must be sought and won by the man; before marriage she must not appear to take the initiative. Many women do not realise that after marriage, it is for them to do their share of the courting, and that they must often exert their

charms to woo their husbands if they are to retain freshness and happiness in the marriage life. If a woman wants to remain happy, it is her business to keep her husband, and to do so she must win his affection again and again. She is a wise wife who makes it possible for her husband to feel proud of her every time he takes her out, even though they have been married for twenty years or more.

Husbands often need similar advice. They too tend to take their wives for granted. Once married a man stops studying his wife and trying to please her. Too often a man gives in to his own moods and slouches about the house in an untidy and slovenly way, accepting all the services his wife renders without a smile or a word of thanks. If the wife chances to be attracted by another man who is courteous and attentive and appreciative and gay, the husband is grossly affronted. The woman would be inhuman not to take pleasure in admiration. Husbands are not seldom the most to blame for the infidelity of their wives.

In a really happy marriage both husband and wife fall in love with each other again and again. Each wins the other again and again, and so love is kept burning brightly. For this to happen, both husband and wife must play an active part.

Variation in Emotional Intensity

In no branch of life is human experience even and constant. Take our physical energy for example; one morning we get up feeling as if we could face anything, on another we are annoyed with life and tired out by noon. The artistic temperament is particularly prone to the ebb and flow of inspiration. At one time the writer, sculptor, or painter can work continuously and effectively with no sense of fatigue, but after such a bout of intensive effort there follows the period of reaction during which the artist feels convinced that creative work has become impossible, and that he will never do anything of value again. He is unutterably depressed, a weariness to himself and an infliction upon all around him.

The same law of ebb and flow applies to our religious life. At times the sense of religious devotion is so strong that the devotee feels capable of almost superhuman accomplishment; at others all the glow and fervour go out of religion, and religious practices seem but empty rites. The lives of all deeply religious people bear witness to this inexplicable rise and fall in the intensity of belief.

In every sphere of life we learn not to quarrel with the inevitable, and accept the fact that action and reaction succeed each other; but a great many people are reluctant to admit that this law applies to

love. Young lovers in the glow of their first rapture are quite certain that their feelings could never change while there is breath in their bodies. And young married people are often so completely happy in the first stage of married life, that they know beyond all possible question that they could never change. And yet they do. He no longer fills her with wonder. She seems no longer goddess, but mere woman. They feel lost, but in reality they are only traversing one of the valleys we all have to travel through before we regain the heights.

The truth is that no man or woman could stand the emotional strain of a love life that always remained at fever heat. Our very bodies will not allow us to be always passionate. In the sex life there is also action and reaction. This accounts for the periods of calmness and almost of coolness that come to all couples. There is in this nothing that need cause alarm. If we are sensible and unruffled these times pass, though sometimes slowly. The old warmth will return. The two fall in love again. Most couples would say that their happiness was deeper and stronger than ever after such a period, as they are more sure of each other now they know that together they can overcome difficulty. If husband and wife realize that each knows the worst of the other, and that in spite of it their love still holds, then indeed they will feel secure.

When a woman can say of her husband, "Oh, I know he is a queer creation. He has his moods, he is untidy, he repeats his jokes, and has some funny ways, but all the same he is a dear, and I love him," her marriage is pretty safe.

It is often said that after a few years the romance is sure to go out of marriage, and that love does not last for a lifetime. It is disastrous to begin married life with that idea. Those who believe it are likely to allow it to come true. What is true is that love changes its forms of expression as life goes on, and the married life of two people passes into different phases. Those who are wise know that love is a fire which needs to be tended.

We need to watch ourselves lest we become careless and stupid, and give our love no expression. A woman needs to be told by her husband that he loves her, not just once or twice at the beginning, but again and again all through life. And she needs proofs of that love. When such proofs are given she goes on loving and being happy, and marriage with such couples will grow and mature through all the years, and remain a lovely thing to the very end.

Marriage is a great adventure. Few of us are great enough to make it a perfect thing. But when it fails it is we who are to blame—not the institution of marriage.

CHAPTER ELEVEN

FAMILY PLANNING

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I. PRE-MARITAL CONSIDERATIONS

No longer is it necessary for children to be conceived indiscriminately but rather when they are definitely wished for, and it is to be hoped that in the future it will become the recognised thing for every couple to plan their family and learn to space their children intelligently. Just as people used to leave these matters in the laps of the gods, so was it often said that a knowledge of the technique of sexual intercourse comes by instinct. This is a dangerous half-truth. It is only the urge to sex union that is instinctive; the rest has to be learnt just as anything else that we do has to be learnt.

Adequate preparation for marriage, therefore, should become an essential part of our social life. Those people who embark on the marriage adventure without obtaining adequate instruction about its physical side are running a grave risk of destroying the whole relationship before it has well begun. No matter how much care they have taken over the arrangement of their house, the provision of an adequate trousseau and the hundred and one other preparations that people make at this time, their marriage will be a disappointment unless they learn the art of love. Any amount of unnecessary bickering, quarrelling and mutual unhappiness owe their origin to the inability of a couple to adjust themselves to the physical side of marriage. The evidence collected from the divorce courts, the psychological departments of our hospitals, and the juvenile courts, to mention but three instances, provide conclusive evidence of the truth of this statement.

Every man or woman, therefore, who is thinking of getting married should seek advice from a medical practitioner before the marriage takes place or, if this is impossible for some reason or other, as soon after marriage as possible. More especially is this important if things do not seem to be going quite satisfactorily. An hour spent in this way will often make all the difference to the whole marriage. It is important, of course, to find the right doctor; many general

practitioners do not deal with this type of work, but they can usually suggest someone who does.*

If possible the couple should see the same doctor, though not necessarily at the same time. Their needs can then be discussed in relation to each other and the appropriate arrangements made to suit their particular case. It should be said at once that this business of visiting a doctor for advice before marriage is nothing like so difficult or unpleasant as many people are apt to imagine. Much of the interview is taken up with discussion, and the doctors who do this work are fully alive to the fact that the situation is strange and apt to be embarrassing to those who seek their aid. They can be trusted to make the interview as easy as possible.

Some people think that sex matters are of such an intimate nature that they cannot possibly be discussed with anyone else. It will usually be found that these people refuse to discuss the matter even with their fiancés. Their need for advice is even more urgent because they are approaching the relationship with the wrong attitude, and they are usually worried or full of some fear besides being ignorant of many elementary facts. They are often obsessed with the idea of romantic love. They have yet to learn the part that reason plays in the emotional life. Romance is increased when we begin to use our intelligence.

It is during the period of their engagement that a man and a girl should try to obtain as much help and information as possible. The mere fact of loving each other does not confer knowledge. In particular it is important that they should discuss their problems naturally and sensibly. It is extraordinary how many people marry without having talked over their sex problems together or taken any competent advice. The girl so often leaves it all to the man, whilst he, even if conscious of the need for information, does no more than purchase a cheap book on sex matters, or rather shame-facedly consults one of his more intimate male friends. That done, he either assumes the girl knows as much as he does, or is too diffident to talk over the subject with her. Such a course is most unsatisfactory and will probably create just the type of mental attitude which is likely to produce an unsatisfactory sex relationship.

There is nothing wrong or immoral in engaged people discussing

* If there is any difficulty in obtaining information, application should be made to one of the following societies:—

Marriage Guidance Council, 78, Duke Street, Grosvenor Square, London, W.1.
Family Planning Association, 69, Eccleston Square, London, S.W.1.

their future sex relationship. Indeed, it is essential that they should and the very attitude of mind that refuses to do so should arouse suspicion, because it is an almost certain sign that there are some hidden repressions or difficulties which should be brought to light. Faulty education both at home and school are often responsible for this immature and negative attitude towards sex. A girl has a right to know what her fiancé thinks about these matters and should make a point of finding out. Many young men unfortunately possess some very strange ideas about love and the physical relationship. Similarly, the girl's own attitude should be stated and, when necessary, clarified. The type of people who are likely to make the most satisfactory marriages are those who have no silly inhibitions regarding the discussion of sex subjects when the necessity arises. There is, it may be added, no real reason why all these matters should not be seriously discussed among friends, quite apart from any engagement.

We have acquired a vast amount of valuable information regarding sexual matters. The biologists and the physiologists have between them given us an entirely new conception of our structure. Of even greater importance perhaps are the studies of the psychologists explaining, as they do, much of the intricate mechanism of the mind. Nor can we overlook the discoveries of science regarding the dual purpose of sex and the place of contraception in life.

Voluntary control of procreation is now almost universal and contraception is the main means by which it is brought about.

All this new knowledge has altered our whole understanding and approach to the sexual problem and has created moral conditions which call for considerable understanding and guidance.

We know now that the greater proportion of divorces, unhappy marriages, neuroses and psychological disturbances have as their background some sexual disharmony. The underlying cause of this disharmony is frequently ignorance of simple elementary facts. Many of these conditions could be prevented if there were a more rational approach to sex matters on the part of the population.

The young people of to-day are demanding adequate information regarding sex. And rightly so. Most of them are in search of a higher ideal; of a more soundly constructed ethic in which sex will fit in with the other elements of life. They realize that one of the major prizes of life is a satisfactory marriage, and some are taking steps to obtain help and advice. Those who seek this help can be divided into five groups:—

1. The man (or woman) who has been brought up in ignorance

and who has never given the matter any particular thought. He is quite willing to learn if he is taught.

2. The type of person who has had a strict and narrow upbringing and has come to look upon the whole subject of sex from a negative angle.

3. Closely allied to this type is the individual whose religious upbringing has been such that to him sex and sin are synonymous.

4. There is a distinct type of person deriving from one or the other of the last two groups who has reacted from a restrictive upbringing and has made various tentative and immature sexual experiments, varying in nature or degree, which have led him to the conclusion that sex is unpleasant or over-rated. It is particularly important for such a person to bring his objections and troubles to the surface as otherwise he will form a most unsatisfactory partner.

5. Finally, there is a small but interesting group of young people who have received an adequate sex education from their parents and schools, and have escaped the inhibitions which dogged the steps of some of those in the former groups. They approach the whole matter in a perfectly natural manner, and are likely to make the most successful marriages.

It is obvious that the advice and help needed will vary enormously for each of these different groups. Some people will require a considerable amount of preliminary help regarding the nature and purpose of sex relationship; others will need to spend a good deal of time clearing up misconceptions, whilst others again will be adequately provided for by a medical overhaul and some advice regarding family spacing and sexual technique. Every case is different and each presents individual problems for solution.

Medical Examination

A medical examination is always valuable. Many who come to marriage have not been examined by a doctor for years, and whilst feeling perfectly healthy, are quite likely to have some minor condition, such as bad teeth or varicose veins, which calls for treatment. If such conditions are discovered early they can be dealt with easily, whereas if they are allowed to persist they may become a source of ill-health later. Ideally, everyone should have a periodical medical overhaul, but in any case one shortly before marriage should be regarded as obligatory. Apart from anything else, it is only right that each partner should know the state of health of the other.

In addition to the physical examination, it is important for the doctor to obtain an adequate history of the past illnesses, operations,

habits and general outlook of both partners, and to enquire into the possibility of abnormal family traits. Not only do those about to marry want to know if they personally are physically fit to produce children and likely to do so; they also should know whether their family history is such that they ought to produce children. When any doubt arises on this matter the problem should be discussed in all its bearings and, if necessary, the help sought of some expert body, such as the Eugenics Society.

The importance of this problem cannot be over-emphasized. It hardly seems possible that any reasonable person could wish to produce tainted and unhealthy children, and yet this is happening all the time. The unnecessary suffering and unhappiness which are caused to all concerned could so often be eliminated by a little forethought. It is neither right nor fair on child or society that the unrestricted breeding of unsuitable children should continue, now that we have in many cases, the knowledge necessary to avoid it. The quality of the children we produce is of far greater importance than the quantity. Indeed, many people feel that definite encouragement should be given to those families whose stock is good to breed freely, whereas unhealthy stock should be definitely discouraged, or even prevented from breeding.

Inherited Diseases

Many people worry quite unnecessarily over the problem of inherited disease. For instance, it is quite common to meet people who think that they should not have children because one or the other of their parents had tuberculosis. But tuberculosis is not an inherited disease. It by no means follows that the child of a tuberculous parent will necessarily have tuberculosis. He may catch it from that parent afterwards, but that is a different matter. Others again are worried because members of their parents' or grandparents' family have been inmates of hospitals for mental disease, and fear that this will be a bar to marriage or children. A few minutes' conversation with a doctor will often remove a fear of this nature which has been present for years.

Some parents on the other hand behave most unfairly to their children in this respect. Most families have some skeleton in the cupboard, either real or imaginary, and there are parents who withhold from their children information about this secret trouble, instead of discussing the matter openly and frankly. Of course young children should not be frightened by revelations of troubles beyond their comprehension, but as soon as they come to years of judgment

and discretion it is their absolute right to know about their family history. Pitiful tragedy—all the more pitiful because it ought to have been avoided—may otherwise ensue. The writer well remembers seeing a patient with two children who found out after she had been married for several years that there was hereditary blindness in her husband's family. She made the discovery only when her own babies developed symptoms of the disease.

In addition to all this, a physical examination will often enable a doctor to discover some abnormal condition which might lead to sterility later on. Treatment may or may not be necessary at the time but whatever the condition, the patient should know about it so that appropriate steps can be taken if and when it seems necessary. Ten per cent. of marriages show some degree of sterility, much of which can be remedied fairly easily. The condition may occur in the man or the woman or both, and in the majority of cases has nothing whatever to do with the normal performance of the sex act by either partner.

Male sterility is a matter about which we know a great deal more than we used to, and is far more common than was formerly supposed. It is quite easy for a man's fertility to be determined, and there is everything to be said in favour of a man having this simple examination made before marriage so that his fiancée may be assured that there will be no bar to conception so far as he is concerned. Other abnormal conditions in the male which may be disclosed and which may require treatment include an undescended testicle or a tight foreskin.

Technique

The successful accomplishment of the sex act is by no means easy, and many marriages are spoilt during the first few weeks by faulty technique. A possible bar to a successful result is the state of the hymen, and every intelligent woman should have a medical examination before marriage if only to make certain that the hymen will not cause trouble. Some women have no hymen worth speaking of, others have one which is so tight that coitus is impossible until it has been removed. It is the easiest thing in the world for a doctor to find out the state of the hymen. A simple and painless examination lasting about a minute will usually settle the question.

Nor is the technique of love-making a simple matter, and many doctors will give advice which should prove of incalculable value to the couple in their married life. It is extraordinary how ignorant people are concerning the rudiments of this art. Books are useful in

this respect, but are nothing like so useful as half-an-hour's conversation.* There is often a background of worry regarding childish sexual manifestations, such as self-stimulation, the results of which have never been properly explained. Half our sexual worries are unnecessary and can quickly be dissipated if we get the right advice and can be brought to realize that the discussion of a sexual subject is as natural as the discussion of any other matter that interests us.

Some Unnecessary Fears

Fear of the danger of childbirth seems to cause concern to a number of young women, who are quite unnecessarily alarmed at the possible dangers they may undergo. They overlook the fact that child-bearing is a normal physiological process for which they are specifically constituted, and that children are the normal expression of their physiological and psychological life. They hear so much about the dangers of childbirth and the amount of maternal mortality in the country that they do not realize that nine out of ten women have normal confinements.

Other women dread the thought of having children because they fear they will lose their figures. This is an understandable but quite unnecessary terror, because nowadays a woman's figure can usually be quickly returned to normal by the careful use of massage and exercises.

Such worries are by no means confined to women; many men have the most extraordinary dread of pregnancy. They too fear lest their wives will lose their figures; that they are far too delicate to have children, or that the advent of a child will spoil the harmony of their marital relationship. They argue (quite correctly) that a baby is an expense, that it will upset the way of life to which they had grown accustomed, and interfere with their comfort, their amusements and their amenities. In respect of these last fears all one can say is that no man who is not prepared to put up with some lack of comfort and attention during the times when his wife is bearing and nursing children has no business to marry. The coming of a baby can and should bring out all that is best in a man. If a girl who looks forward to children finds during her engagement that her fiancé dreads the prospect of their arrival for such reasons she should think twice before she marries him. He is likely to be fundamentally selfish and to make a troublesome and selfish husband.

All such worries should come out during the pre-marital examination. Many of them can be resolved or cleared up whilst others

*See "Sex in Marriage," Marriage Guidance Council, 8½d., post free.

will be viewed in a different light as the result of the information which the doctor can impart.

Contraception

The final subject about which advice can be given at a pre-marital interview, is that of family limitation. Whatever our attitude may be to this subject, it is one which must be dealt with constructively. It is no use refusing to discuss it or pretending to ignore its existence. Anyone who attempts to give marriage counsel and ignores this problem is failing in responsibility to those who consult him. It is a matter about which all people want help and information.

There are two main problems which present themselves; the first is concerned with method, the second with ethics. If contraception is to be practised, what is the best way of doing it? Secondly, is the practice morally right; and if so are there occasions on which its use is not advisable?

Many books have been written, and many more will undoubtedly be produced about this subject. For some people there never is any problem. For others it is one of the most difficult to solve. It is well to remember that in one sense this is no new problem; people have been trying to limit their families for centuries. On the other hand, it is entirely new because modern science has presented us, not only with new methods, but, with new knowledge of the sex life and its requirements. It is also worth remembering that to-day the greater proportion of the population is attempting some form of family limitation.

There is nothing mysterious or difficult about modern contraception. Women, in particular, seem to have an exaggerated idea of the difficulty of learning to use a proper method, whereas any moderately intelligent woman can learn the whole matter in about a quarter of an hour. By doing so she will save herself a great deal of unnecessary worry. The principle underlying the practice of all modern contraception is that, whilst normal coitus should take place, the sperm must be prevented from reaching the egg. This can only be managed satisfactorily by a combined method. That is to say, some barrier must be used to prevent the sperm from reaching the egg and a really satisfactory chemical must be used as well to kill any sperm which may pass the barrier. By this means a very high percentage of security can be reached, somewhere about 98 or 99 per cent.

The only reason why one cannot say that the best modern methods will provide 100 per cent. security is that one cannot guarantee that the individual will always carry out instructions which, though simple, are essential. The approved methods in use to-day are far safer than they were even five years ago. They are also very easy to learn.

Contraceptives can be used by the man or the woman and, in exceptional circumstances, by both. If used by the man he wears a thin rubber protective sheath or condom which is used once and thrown away. All types of sheaths said to be usable on more than one occasion are most unsatisfactory; they often fail. Most people think that the male protective method is the safest, but this is inaccurate. There is quite a high failure rate. Security is increased if the woman uses a soluble contraceptive as well, but it is essential to find the right one. The majority of those on the market are unsuitable for one reason or another.

There are other objections to the regular use of the sheath. While it may be useful at the beginning of marriage, or for the prevention of venereal disease, most men dislike it and women find that they do not obtain a high degree of sensation when it is used. Again, while the manufacture of condoms has been brought to a high degree of perfection, unfortunately there is nothing to prevent their being made of poor material, nor is any standard of manufacture insisted upon, although such a standard is possible. Thus there are many unsatisfactory brands on the market for which quite fantastic prices are charged. This is quite unnecessary. Some firms make various different kinds. This is equally unnecessary and only tends to mislead the public. The price of a sheath is no guarantee of its quality. A perfectly reliable one can be bought for sixpence, but people often pay several shillings for an unreliable article. The public are largely to blame for this state of affairs because they will accept anything that is put before them without insisting on real value and quality. No sheath should ever be bought unless the box containing it has printed on it the date after which the sheath should not be used. In addition, there should be a note stating that the brand has the approval of the Family Planning Association, which has drawn up standards of manufacture for all contraceptives.

There is no doubt that the best contraceptive method is that in which the woman has the double protection of preventive cap and soluble chemical. Not only is this method safe and easy to learn but it provides a higher degree of sensation for both partners than

is possible with a sheath. A further advantage is that the woman has control of the situation, and is not dependent upon the man for protection. It so often happens that in those cases where the sheath is the usual method a time comes when coitus is desired but there is no sheath. As a result coitus interruptus, or withdrawal of the penis before ejaculation, is practised with all its obvious disadvantages.

Soluble chemical contraceptives are most unreliable and should never be used by themselves if maximum safety is required. Though there are several hundred different solubles on the market, there are only two or three which are really satisfactory. The only safe method is the combined method of barrier and chemical contraceptive, and the only way to find out which is the best barrier and which is the safest chemical and how the two should be used is by going to a doctor who specialises and is skilled in contraceptive technique, just as we would go to an oculist that our eyes may be properly attended to. There are various clinics all over the country staffed by competent doctors where advice can be obtained for a very small fee. Reliance on the advice of friends is unwise. A method that is satisfactory for Mrs. A. is probably quite unsuitable for Mrs. B. Advertisements are even more untrustworthy.

It seems necessary to emphasize that there is nothing either difficult or painful in learning how to use a contraceptive method. Workers in clinics are constantly coming across women who say that they have waited weeks or months before plucking up sufficient courage to seek advice. They seem to think that something dreadful is going to be done to them, whereas in effect all that is done is to decide on the right type of cap, a matter of a few moments for an experienced physician, and to give the patient instruction how to use it. There are definite rules as to when the cap should be put in and taken out, but the general principle is that it is put in at night and removed in the morning. Neither partner should be conscious of its presence. If it is noticeable it means that the cap is the wrong size. Douching and the use of a complicated technique are absolutely unnecessary.

This account of contraceptive methods may appear to be unduly short, but modern contraception is a very simple thing, easy to learn, very reliable, cheap, and æsthetically unobjectionable. A warning should be given against out-of-date methods; even those which were taught a few years ago are obsolete.

There is absolutely no evidence that the proper use of contraceptives causes sterility. Nor can the use of a proper contraceptive

method do harm to either partner. There are some unsuitable appliances which do harm, but they are little used in Britain, and there are certain solubles which cause temporary inflammation. There is, of course, no reason except public indifference why these solubles should be permitted. The sale and manufacture of all these articles should be put under the control of a competent authority.

II. THE ETHICS OF CONTRACEPTION

Is it right to use contraceptives? Are there any valid moral reasons against their use? These questions are difficult to answer shortly because so many different factors have to be taken into consideration. Most people are agreed that it is advisable to limit the number of one's children, and to have a reasonable period between births, but the point that troubles most people is not whether family limitation is wrong but whether the use of contraceptives is wrong.

It is obvious that contraception and the use of contraceptives can be abused as can almost anything else. The sex relationship itself can be abused both in and out of marriage and is, in fact, abused very frequently. Any two people who marry, and who for no good reason refrain from having children are abusing their sex relationship, whether they use contraceptives or not. That is not a valid reason for abolishing the sex relationship in marriage. Nor is the abuse of contraceptives a valid reason for abolishing contraception.

The answer to this question can be found only by realizing that a sex relationship is a dual relationship which should never be entered into unless it is mutually beneficial. Bearing this in mind, we may ask ourselves what alternatives are before a newly-married couple.

They can abstain from all sex relationship except for the purpose of having children. This may be satisfactory for a minority of the population, but it is quite unsatisfactory for the majority. Neither does it appear to be admitting the full purpose of marriage, which involves much more than mere reproduction.

They can have normal sex relationship without using contraceptives or attempting to limit their family in any way. This may be all right during the earlier years of marriage, and has a good deal to commend it, but there are two main objections. Children may come too quickly, in which case the mother's health may suffer, or the general economic level of the family may fall owing to the income being insufficient to provide adequately for the growing numbers. Also, the bride may at first obtain no sensation in intercourse. For this reason some medical advisers hold the view that it

may be desirable to practise a suitable contraceptive method for a few weeks or months until the normal sensations are experienced by both partners. In other words, the technique of sexual union should be perfected before the complications of pregnancy arrive.

The whole problem of sex adjustment in marriage is *most important*. If it is not achieved early in marriage it may take months of re-education to obtain the desired result.

There are only two ways in which this can be done.

(a) By the couple assuring themselves by a visit to a doctor that there is no bar to coitus and then having normal connection from the start. This means, of course, that the woman may become pregnant almost at once (which may be exactly what she wants.) The improvement of the technique of intercourse can then take place during the first few months of pregnancy, provided the woman is not averse.

(b) The other way is for the woman to practise a proper contraceptive method from the start until the couple have achieved a mutually satisfactory relationship. Either of these methods, given the right conditions, is likely to prove satisfactory; the decision as to which is to be adopted is, of course, a purely individual matter.

It is necessary at this juncture to speak quite plainly about the method known as coitus interruptus, that is, the withdrawal of the penis before the man's climax is reached. Enough has been written about this method in the past few years to show that it is both unsatisfactory and unreliable. It neither prevents the possibility of conception nor does it enable the woman to achieve a proper orgasm. It is universally condemned both by religious and medical opinion, yet it still finds favour with the public, largely because it costs nothing and does not involve the use of any appliance or chemical. While the man obtains some satisfaction, the woman obtains none. Its use cannot be too strongly deprecated.

It is maintained by some scientists that there are certain days in a woman's cycle when she cannot become pregnant. This theory of 'the safe period' is by no means proved and should not be relied upon. Its popularity in certain quarters is based chiefly on religious opposition to the use of contraceptives. All that can be said at the present time is that there are certain days when a woman is most likely to become pregnant and certain days when she is less likely to conceive. The problem is a difficult one which I do not propose to consider here. I have discussed it at length elsewhere.*

*See for instance "Sex in Everyday Life," Allen & Unwin.

If the couple decide that they must delay parenthood, then the most reliable method at the present stage of our knowledge is the use, under medical guidance, of modern contraceptive appliances such as have already been considered. The objections to the use of appliances are based on religious and moral grounds, and it will be found that they are the same as are advanced against the separation of the mating instinct from the reproductive and parental instinct. It is considered wrong to interfere with the "natural law" that intercourse is undertaken for the purpose of reproduction and so nothing should be done to prevent the sperm from reaching the egg. Thus, strictly speaking, even coitus interruptus is morally wrong.

The upholders of the "natural law" admit that coitus between married people is right and necessary, and that it is quite right for the relationship to be enjoyed, but they insist that the primary or main purpose of the sex relationship is the production of children, and that nothing should ever be done under any circumstances to prevent the possibility of conception occurring.

The Dual Purpose of Sex Union

For people who hold such belief abstinence from intercourse is the only alternative to having connection. Whilst admitting that coitus may be enjoyed they do not regard this enjoyment as of any particular value; the real object and purpose of the relationship is children. The enjoyment is a secondary matter of very little real importance and the possibility of pregnancy occurring must never really be ruled out. The fact that a mutual orgasm is something which has a real psychological value in itself is not really appreciated or accepted. This attitude is in my opinion both illogical and in itself contrary to the natural law and ignores the true meaning and purpose of the sex instinct which is two-fold. One part is concerned with parenthood and children and is largely biological in purpose whilst the other is concerned with mating and is largely psychological in purpose. That is not to say that the parental part does not possess a psychological element or that the mating part does not possess a biological element. Whilst it is obvious that they are closely interwoven and interdependent that does not mean that the one may not be expressed more fully at one time and the other at another. To repress or deny either is bad. Voluntarily to have no children is a denial of one aspect of marriage and development; to fail to obtain emotional release is a denial of the other. Both elements are equally important; both must be expressed and catered for. The mating element is, I believe, the most

deep-seated and the one which needs expression in the first instance; the reproductive and parental following naturally from that.

But the essential thing is to establish early a full rhythm of emotional release before pregnancy starts. This may take a week or six months depending on many and varying factors. If this is not achieved early in the marriage it may never be experienced for a long time—if at all. We must accept the fundamental nature of both these needs and make provision for them, recognising that at one time a couple may wish to express their affection for each other by means of physical activity into which the reproductive element does not or should not enter for some reason or other, whereas at another time the reproductive purpose may be uppermost in their minds. The two are closely inter-related and the one is a complement to the other; both must be viewed in the same context. Women need emotional release in this way just as much as men and the achievement of this mutual orgasm will go far to cement and strengthen the marriage. It must be emphasized, however, that the enjoyment which is obtained by the establishment of this rhythm will only have real meaning and purpose when it is the expression of a mental and spiritual unity. One further point may be made. However essential the establishment of this rhythm may be it cannot really be experienced in its fullest measure if there is any worry or uncertainty in the mind of either partner—in particular in regard to pregnancy. No pregnancy should be possible unless it is mutually desired—unwanted children should be a thing of the past. This state of affairs can only be brought about by the use of appropriate contraceptive technique.* Thus science has much to contribute to the solution of many ethical and religious problems connected with sex.

Neither the psychological nor the physiological knowledge that we now possess was known to those individuals, whether religious or secular, who laid the foundations of our moral code. Thus the problem presents new aspects which have never been considered before, simply because we did not have the knowledge we now possess. Not until this is recognised will it be possible for us to make any serious improvement in the laws governing moral behaviour. If contraceptive methods or any other method of family limitation is used for purely selfish motives their use is really immoral. The advocates of modern contraception are just as keen on the production of children as anyone else—more so in fact, because they want

*See my book "Modern Marriage," Methuen, 1946, for a further consideration of this matter.

them created intelligently; when they are wanted, and when they can be properly looked after by healthy parents—instead of haphazardly and without thought.

Other things being equal and a real release of emotional tension having been obtained the sooner a couple start their family the better it will be from all points of view. Having begun it is advisable to complete the required number by additions at fairly short intervals. Two years between the birth of each child is probably ideal.

One of the greatest curses of the present day is the only child; usually a spoilt, pampered little person who is a trial to himself and to everybody else. It is an unfortunate fact that the standard of living desired by many people is too high. They may or they may not want children, but they must have luxuries and amusements, and they are so staggered by the cost of a single child that they refrain from having any more. This is very bad and should be remedied.

There are of course some couples who having had one child, are unable to have another for some reason or other, although most anxious to do so. They should seek adequate medical aid as soon as possible because there is often a physical reason for this type of "one child sterility," which can be remedied in many cases.

On the other hand, the fault is not all on one side. Society talks a lot about the importance of having children and increasing the population, but does far too little to encourage parenthood. Even the actual process of having children is far too expensive. Much has been done for the insured population through maternity benefits, but it ought to be possible for any woman to have the most modern medical care and attention during her confinement without the expenditure of large sums on hospitals, doctors and nursing homes as is necessary at the present time. Other European countries, such as Sweden, are far in advance of Britain in this matter.

III. EARLY OR LATE MARRIAGES

Is it wise or right to marry early although it seems quite impossible to have a child for a year or two? Would it not be better to wait for two or three years and then marry and have a child at once? This is an individual question about which no general rule can be laid down. Enough has been said, however, to enable a couple to weigh up the various different factors which bear on their own particular case. The arguments against a long engagement have been given. Early marriage is in itself a good thing and should be

encouraged. On the other hand, it is important to guard against marrying simply in order to escape from a disagreeable situation—an unhappy home, for instance, or an unsatisfactory job.

Many girls seem to marry out of pure curiosity in order to find out what it is like. They are often gravely disappointed. Some allow men to make a considerable amount of love to them, and as a result become acutely aware of their emotions, find them difficult to control, and tend to marry the first marriageable man that comes along in the hope that everything will be all right. They too are often sadly disappointed. Here again the solution lies in an intelligent use of one's reason. The way to avoid these dangers is to learn as much about sex and marriage as possible; to understand what is happening to one, and to realise the naturalness of our urges and emotions. It is often helpful to talk matters over with a third person who can see the situation from an entirely different angle. A perusal of other sections of this book will illustrate the difficulties and troubles that arise in the sexual sphere by faulty upbringing, lack of essential knowledge, hasty and ill thought out relationships, ignorance of technique and so on. They should serve as an added impetus to all people to make up their minds to obtain adequate preparation and examination before they start their married life.

The Maintenance of Emotional Release

What of the later years of marriage? Is it true, as is so often asserted, that the sex relationship is a thoroughly over-rated affair in which interest soon dies off? Here again we are facing a new situation. It is very probable that until a few years ago interest did, in numerous instances, die off, for the very simple reason that it was never satisfactorily established. Numberless women put up with the whole affair because they thought it was their duty to do so whilst men took what they could get as their right. There are many families in this country where such a state of affairs exists. It is not at all uncommon to hear young women who have been married only a few months say that there is nothing in the whole relationship and that they are heartily sick of it already. The truth is that they made a bad start and never achieved any real satisfaction. Whilst little could be done for our grandmothers, a good deal can be done for the woman who finds herself in this difficulty to-day.

A practical point often raised is that many couples are often forced to spend several months away from each other. The man may be in the armed forces or be stationed abroad for long stretches of time. If there are children it may be inad-

visible for them to remain abroad, and so the wife has to spend her time travelling between the two. It is almost inevitable that difficulties should arise, particularly in regard to the friendships that the parents have with people of the opposite sex. The only way in which these troubles can be weathered is by the couple creating a real sense of mutual trust. If the parents have to decide between separation for a long time or leaving the children at home, it is probably wiser for them to try and keep together. If the children are happy at their schools and have kindly and sympathetic relatives to whom they can go during the holidays, it is better to allow this situation to continue rather than for the husband and wife to be separated for many months. Such separations put a heavy strain on some people but they can be surmounted if real love is present. These abnormal conditions frequently bring out the best traits in both partners. Nevertheless it is no use disguising the fact that war conditions create opportunities for various types of liaisons between men and women. Our social morality altered as a result of the last war and it will undoubtedly alter after this one. Much help and guidance will have to be given during the coming years if the problems created by war conditions are to be solved constructively. Much can be done if only we will face facts and deal intelligently with the problems as they arise—seeking expert help whenever possible.

Ignorance of sexual functioning and lack of understanding of the principles of behaviour which have been outlined in this book need no longer occur. Sex is perhaps the greatest driving force we possess. We should see to it that our young people are so educated that they acquire the capacity for managing this force properly at an early age. Only in this way shall we build up a nation of men and women that live full and harmonious lives in a spirit of mutual understanding and true love.

CHAPTER TWELVE

THE ART OF LOVE

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I. WHY LOVE-MAKING MUST BE LEARNED

THERE are some who would deny that love is an art. They would maintain that it is an instinct, and that love-making can be safely left to a man's and a woman's natural impulses. Why bother to describe what is a natural function? We do not need books to teach us how to eat or drink; nor do we require to be taught how to make love.

But it is in the nature of man to take what is a natural impulse and evolve it to its highest level by the refining force of art. Even what we eat and drink has been submitted to study, and from this study has been evolved the culinary art. So must it be with the natural function of reproduction. The civilized world has long ago realized that it is not enough to rely solely on a woman's maternal instinct for the upbringing of her child. Mothercraft has therefore been studied, and many works are every year published on this subject.

That instruction in love-making is equally necessary will be realized by any of us who has been called upon to deal with the difficulties encountered by men and women in marriage. Not only the technique of love-making but even its fundamental principles are unknown to many newly-wed couples. This statement may apply equally well to what are known as the "educated classes" as it does to the great mass of the people. On one occasion the writer was consulted by a solicitor of forty-two who had been married for two years and had come to the conclusion that something was missing from his marriage. He was right. The marriage had never been consummated, and what was more surprising still he had no idea how consummation could be achieved. A solicitor of forty-two had therefore to be instructed in the rudiments of physical love-making. Truly, civilized man is sometimes a more astonishing creature than is the raw savage, and would appear to be more in need of instruction in the art of love than a South Sea Islander.

No excuse need then be offered for the title of this Section. Love is an art and, since it is intimately connected with man's emotions

and with the more spiritual side of his nature, an art that is to him of the greatest importance. The mating instinct serves not only to assure the continuance of the race, but also to provide material for the harmonious development of man's personality. In the words of Dr. M. J. Exner, a distinguished American authority on problems of sex and marriage: "It may not be too much to say that while biologically procreation remains the primary function of sex in human life, psychologically its primary function has come to vivify, enrich and develop love. Those who still insist upon animal analogy as a guide for human conduct, holding that sex union is justifiable only for the purpose of procreation, are in fundamental error. They fail to appreciate the great contribution sex has to make to the spiritual life of man. In human beings sex serves the end of love, independent of procreation."

It should be realized that men upon attaining sexual maturity at adolescence, come into full possession of their mating capacity. They are sexually awake and do not require sexual experiences for the development of their powers. With women it is otherwise. In the words of Dunlop, "The development of sexual desire in the woman is far more a matter of education, through sexual stimulation and sexual experience, than is the case with a man. In many women the desire is very slight until developed by repeated stimulations and experiences, and may thereafter be powerful and easily aroused."

There is, however, one objection that may be brought against these chapters with somewhat more justification. Love may be an art, but an art cannot be learnt from a book. No one by reading a work on the violin can straightway become a violinist; no manual on painting can make of one who has never painted an artist. Nor can a book—or, as in this case, a part of a book—on the art of love convert a man or a woman into a skilled lover.

No pretence is made here that it can. All that it is hoped to do is to supply the ordinary man and woman with some initial understanding of the problem before them. Armed with this theoretical knowledge, they will at any rate be in a better position to avoid the pitfalls which so frequently spell disaster for the entirely un-instructed. They will be safeguarded from certain mistakes; they will know how to attempt to overcome certain difficulties. They will at all events have a theoretical knowledge of the subject, a general understanding. Practice and experience will in time teach them how to use this knowledge.

That is the utmost that can be effected; and it would be an error to attempt to achieve more than is possible. The motive force behind

love-making is the emotions, and the exact way in which these will express themselves will vary in different individuals. Love-making carried out in accordance with some set standard gleaned from a book would be but a meaningless figment. It would have lost all its spontaneity, be as lacking in individuality as the movements conned from a drill book. The exact form in which a husband and wife express their love is their own concern. It cannot and must not be learned solely from a book.

By way of introduction to the subject it will first be advisable to indicate briefly the physical act of love, an act to which the term coitus has been applied by the scientists. By this is meant the series of events which starts with the initial stirrings of sexual desire in the man and the woman and ends with ejaculation of the male sexual secretions (semen) within the genital passages of the female.

It must be realized that a mere description of the physical events of coitus is as incomplete a description of love-making as would be a word picture of two people pressing their lips together a true description of affection. The pressing of lips together is but the outward expression of an intense emotional experience, an experience which no words are adequate to describe. So also are the intimacies of physical union the outward expression of an emotional and even spiritual experience that cannot adequately be conveyed in language. Because of this a coldly scientific account of coitus divorced from its psychological accompaniment often seems to sensitive readers a travesty of love; from which they recoil with irritation and even with disgust. This is almost inevitable, and it is difficult to see how it can be avoided, however gifted be the pen of the writer and however conscious he may be of the limitations of his description.

II. THE TECHNIQUE OF SEXUAL UNION

It is impossible to avoid the use of certain scientific terms in a description of sexual intercourse. These will be found in the Glossary on p. 503. Many of these have already been explained in the section dealing with the physiology of the sex organs, but it will be as well for the reader to remind himself of their meaning before he embarks upon the following pages. Wherever possible, words in everyday use have been substituted for those employed generally in scientific writings.

By sexual intercourse is meant the full range of contact and connection between a man and woman for sexual consummation. Its biological purpose is the fertilization of the female ovum by the depositing of semen within the female passages, but, as has

previously been pointed out, sexual intercourse is as important to the individual as an expression of his love as it is to the race as a means of perpetuating the species. "Every natural faculty, by means of exercise, evolution and inheritance, can become an Art," we are told, and the natural function of impregnation, because it has become so intimately linked with the emotional life of the man and woman, serves the expression of love as faithfully as it serves the purpose of the race.

The material with which love works is the sensations supplied by the special senses of touch, sight, sound and smell. All play their part in the sequence of events that constitute intercourse, the relative importance of each special sense varying somewhat with different individuals and at different times. If an emphasis were to be placed on any one of them it would have to be on the sense of touch, for it is no exaggeration to say that if a man were to be blind and deaf and to have lost the power of smell he would still derive from sexual intercourse its richest impressions.

The Five Phases

In describing sexual intercourse it is customary to divide it into five phases: the prelude, love-play, sexual union, the climax or orgasm, and the epilogue or after-play. This is a conventional method of presentation, but it must be remembered that the division of intercourse into stages is only for purposes of description. Each phase passes insensibly into the following, and there exist no hard and fast lines of demarcation between them. Intercourse should rather be likened to a piece of music played by two people which starts gently with a prelude, passes with increasing force and speed to its zenith and then gently falls in the "diminuendo" of the afterglow. Each movement merges into the other by delicate gradations, and each may repeat for a short while the "motif" of its predecessor.

The prelude may be said to begin with the first stirrings of sexual desire. The husband looks upon his wife and is made conscious of the attraction that she exerts over him. The wife looks upon her husband and feels within her heart the surge of desire. Erotic thoughts mingle with the sense of attraction. They see each other not only as loving companions but as man and woman, possessing and possessed, divided by a hundred differences yet drawn towards each other by the unifying force of love.

It is impossible to fix on the moment at which this prelude ends and love play begins, unless we arbitrarily decide that it is the kiss which initiates the second phase. Nevertheless the kiss sometimes

mingles with the prelude, for of kisses there are more than one kind. The light momentary contact of two lips with another's cheek is one thing, the erotic kiss is another. The first may well form a part of the prelude, but the lover's kiss may rightfully be taken as marking the beginning of the love-play.

The chief attribute of the erotic kiss is that it is mutual, that it is given and received from mouth to mouth with mutual pressure. The woman or the man who has never loved has never learnt even to kiss; for them kissing has been merely the brushing of another's face with the lips. The erotic kiss is rich in variations. From its lightest form, "the butterfly kiss" it may pass through an infinity of gradations, from the closed to the open lips, to the kiss lasting for many minutes.

It is the part played by the tongue that more particularly distinguishes the friendly from the lover's kiss. Usually this takes the form of the tip of the tongue being protruded between the lips so that it comes into contact with the loved one's tongue or caresses gently her lips.

Occasionally the part played by the tongue is so exaggerated that instead of merely touching the lips it actually explores the other's mouth.

Kisses also vary markedly according to the peculiar tactile sensation imparted, and according to the part played by the teeth. It is not surprising, therefore, that the passionate kiss of the lover passes by degrees into the lover's bite. Possibly this is a relic of a fiercer age, when the male seized and held the female not only by means of his arms, but also by the mouth. At any rate, the mouth is often used by animals in the fierce struggle of copulation. Whatever its origin, the bite in love-play, even if it has been refined to the gentle pressure of the teeth on the skin, may play a part, particularly in the later stages and at the height of excitement. Even if small teeth marks are left on a man's shoulder it must not be considered that this is necessarily abnormal or a sign of linking up of love with cruelty. It may be only the outward expression of ecstasy, of a lover being carried away by an overwhelming rush of feeling.

The kisses of lovers are given elsewhere than on the mouth. That which we love we desire to kiss, and the loved one's hair, eyelids and body receive the caress of the lover's lips. It has been said that certain parts of the body are erogenous, that is to say that their stimulation is especially likely to arouse sexual feeling. The breast and nipples of a woman are sexual organs of high erotic value, and are so made that they react directly to emotional stimulus, and their fondling

by the loved one gives deep satisfaction. Kisses on the breast, therefore, may play an important part in sexual play, as well as kisses on the body generally.

Love-play does not express itself only in kisses, but in mutual touches and caresses. These may be carried out by the body, but the sensitive and delicate finger tips, next to the lips and tongue, are the best instruments for the expression of love. The lover's touch is a light one, which travels over the woman's body, first caressing one part, then another, returning from time to time, and gradually, by imperceptible stages, becoming more and more intimate. The wife does not remain passive; she returns her husband's caresses, and shows her pleasure, or if he has been inexpert, her distaste. In woman a certain diffidence or modesty may sometimes be evinced. She retreats as well as advances; an element of coqueterie may play an important part during the stage of love-play. The husband should act as a courtier for his wife's favours, and she does not necessarily yield immediately to his advances. Desire is stimulated by a temporary refusal, for with many lovers the chase adds relish to the final capture. In those who have not yet become attuned to one another, a considerable amount of time should be given to these caresses, and only after a long and circuitous route should the most intimate centres be reached.

It should be emphasized that apart from the mutual joy it affords there is physiological justification for the period of love-play. All these preliminaries are necessary if the final act is to be as satisfying to the woman as to the man. They are required to lift the woman, in whom desire is roused more slowly, to the proper pitch of excitement, so that the physical changes may occur which make the female passage ready for the reception of the male organ. To neglect or shorten them is to do a physiological and emotional wrong to her.

Of all the erogenous zones in the female body, the most sensitive and stimulating is the clitoris, the tiny organ at the entrance to, and at the fore-part of, the vagina. This becomes prominent in a woman who has been aroused, and so can be easily found. But the touch must be exquisitely gentle, for the clitoris is one of the most sensitive places in the whole body. This form of contact, if the wife has been properly prepared, is acutely delightful to her, and immediately increases a hundredfold her desire. If, however, the necessary preliminaries have been cut short, or if the movements of the hand are brusque and heavy, she will shrink from the contact.

This direct stimulation of the clitoris is usually followed by a rapid mounting of desire and sexual excitement in the wife. The courting

and love-play of the husband now bear fruit; she no longer retreats from him, but stirred to new levels of ardour gives as much as she receives, taking as active a part as her husband in the love-making. Her hand caresses his body as his caresses hers, thereby increasing his psycho-erotic enjoyment and raising him to a still greater pitch of desire. To add to the pleasure and satisfaction of the partner and to give as much as is received becomes the mutual aim. Instinctively her whole body caresses his. Desire mounts to the zenith, and the way is quickly prepared for the initiation of the third phase of intercourse, the phase of communion. Not only is the woman now emotionally ready for it but her genital passages, relaxed and bathed in the secretions of the accessory sex glands, are properly prepared for union.

In a later chapter it will be shown that many of the dissatisfactions that are experienced on the physical side of marriage are the direct result of insufficient preparation of the wife for intercourse. Through lack of knowledge and understanding the husband attempts to penetrate his wife before she is ready for it. Because love-play has been cut short she is not only emotionally but also physiologically unready. The entrance to the vagina has to be forced, and owing to the absence of natural secretions some artificial lubricant has to be applied in order to render this possible.

Intercourse carried out in this way is both stupid and inconsiderate; inconsiderate because it violates the wife's finer feelings, and stupid because it is bereft of the chief joy of love-making, the joy that comes from the knowledge that in satisfying one's own needs an equal satisfaction is being conferred on another. If the pleasure is not mutual love-making is shorn of most of its value; it is a one-sided indulgence, instead of the sharing of a wonderful experience.

It is perhaps unnecessary to add that throughout the whole of intercourse the greatest gentleness and sensitiveness to the partner's reactions must be maintained by the husband. Love-making does not conform to any set standard; it is infinite in its modes of expression. It is for the lover to find out, not only how he desires to express his love, but how his partner responds to his particular mode of expression. From the sublime to the ridiculous, we are told, is but a step; in love-making an equally short distance separates what may be regarded as pleasing from what is repellent. It is easy to overstep the mark; the lover must be ready to desist as well as to advance. He must be quick to perceive the slightest sign of distaste on the side of his partner. Above all he must do whatever he does with reverence, ever conscious of the fact that the instrument on which he plays is

the body of the woman he loves. Sexuality may be closely allied to the tragic or to the sublime, but never to the comic. There is laughter associated with love, but it is the laughter that is the outward expression of joy, not that which springs from a sense of the ridiculous.

Many people are unaware that the physical expression of love may take many forms, sometimes being carried out in one way, sometimes in another. Experienced husbands and wives take pride in varying their approach to love, so that although the same feeling is in their hearts its manner of expression is different. Love-making must never become routine; it must never wear the drab clothes of habit. Variety, spontaneity and wonder are its attributes; even though a man and a woman have made love a hundred times before, still there must remain for them a feeling of freshness and wonder. For there is truly wonder in love, and something of the mystery that is attached to the other great realities of existence, birth and death.

The third act in the love drama is sexual communion. It begins with the insertion of the penis and ends in the climax or orgasm. In its ideal form husband and wife take an equal share in it. The passive wife deprives not only herself but her husband of full satisfaction. Husband and wife are equal partners in a rite which represents not only the union of two bodies but the fusing of two souls. As the first and second acts of a play lead up to the climax of the third act, so do all the preliminaries of intercourse serve only to lead up to the culminating glory of bodily union.

The mounting of excitement and sensation that end in the crisis of orgasm is brought about by the friction produced through an automatic succession of stroking or thrusting movements. But before these can be initiated the erect male organ must enter the prepared female passage. And here let it be noted that few husbands are capable of penetrating without the co-operation of the wife. She must guide the male organ in the right direction, and help to adjust the alignment of bodies so that this may be accomplished. Intercourse may be achieved in many different positions, but for the purpose of this description it is assumed that it is being carried out in the most usual attitude, with the wife lying on her back, her partner kneeling between. Part of his weight is supported by her and part by his own knees and elbows. Whilst the wife participates in the intercourse, her movements, as a rule, are slighter, although at times roles may be exchanged so that it is she who assumes control. This she does by bringing forward the whole pelvis and swinging it back so as to increase friction. But there is a danger if these movements are too vigorous of breaking the link, or else that over-stimulation of her

husband will result in a premature ejaculation. Care and co-operation are necessary if these dangers are to be avoided.

It must always be borne in mind that the woman usually requires a longer time to reach her climax than does the man. Her husband must, therefore, contrive somehow to delay his own orgasm until she is ready for hers. This he cannot do by any direct effort of will, but by reducing the sensations coming from his sex organ by occasionally stopping all friction. The understanding male lover controls not only the intensity of the sensations coming from his sexual organ but also his psycho-erotic excitement by deliberately diverting his mind elsewhere. Whenever he feels that an ejaculation is imminent he should for a moment cease all movement and by every means in his power cool down his excitement until the feeling of impending orgasm passes off. Then once more he resumes movement until again it becomes necessary to stop.

One writer on the subject compares sexual intercourse with a race in which the runners start at the same moment and aim—at an equal and not too rapid pace—to attain the goal side by side. This simile is a good one, and the man, being by nature the faster runner, must, if he is not to reach the end too soon, occasionally shorten his pace or even pause in order that his partner may catch up with him. More especially must he do this when the partnership is a comparatively new one and his wife still an inexpert runner. It may take a considerable time for a woman who is not naturally highly sexed to attain erotic efficiency, and if she is left too far in the rear she will be in danger of never reaching the goal. With practice, however, she will learn to accelerate her orgasm so as to reach it at about the same time as her partner.

At the same time as he controls his own running the male must take note of what excites and aids his partner. Some women are more stimulated by complete union, whilst others only obtain an orgasm from friction against the clitoris. It is therefore necessary for the husband to find out what method of stimulation is more particularly gratifying to his wife. These discoveries are made by mutual exploration, each partner aiding the other to reach the goal of a more or less simultaneous and satisfactory orgasm.

As has previously been stated, sexual intercourse is a natural and spontaneous expression of two people's feelings for each other, and cannot, therefore, be looked upon as an activity that can be carried out in accordance with some arbitrary plan. It would, therefore, be an error to embark on an unnecessarily complicated description of the non-essential details of sexual communion. All that it is necessary

to do is to state general broad principles and to draw attention to certain pitfalls into which the unwary may tumble. The rest may be left for the individual to discover by co-operation with his partner and by a process of trial and error.

Let it be repeated, love is an art, not a science. All the instructions that can be given are of the same nature as those that can be given to anyone who is about to start on the practice of any art, that is to say, they include certain general hints concerning the nature of the materials that he will use, the principles that govern their employment, and the chief difficulties that he is likely to run up against in the practice of his art. No work on music has ever taught two people to play a duet; no book on sexology has ever enabled an inexperienced husband and wife from the very beginning to start as expert lovers.

What actually takes place at the moment of the climax of the sexual act, namely the orgasm, is far better known in the case of the male than it is in that of the female. Since it is with the emotional side of intercourse that we are here chiefly concerned, attention will be paid to its psychological attributes rather than to its biological purposes.

The orgasm has been compared by several writers to the discharging of a Leyden jar. It is, of course, well known that this electrical storage apparatus is able to retain only a certain charge of electricity, and that when charged to a maximum it is liable suddenly to discharge itself when any conductor is brought into its neighbourhood. What happens in the human body during sexual intercourse is somewhat similar. During the whole of sexual communion there occurs a steady mounting of what may be called "tension" in the central nervous system. Feeling and sensation rise to such heights that it is felt that any further increase would be unbearable, and just at the moment when this seems to be the case a sudden explosion occurs which results in an immediate relief of nervous tension.

When the fullest sexual experience has been attained this sudden release of nervous energy is associated with a change of consciousness, and it is for this reason that it has been said that through sex a man or a woman may experience something that is closely allied to a mystical state. At or shortly after the orgasm the sense of time may change, so that thoughts pass through the mind too fast for expression in words. Life becomes vivid, the sense of existence intensified, and ordinary feelings, the sensations and thoughts of everyday life appear poor and colourless compared with those experienced at that moment.

But such intensity of feeling cannot last, and at the end of what may seem a timeless period, but which measured by the clock is trifling, the man or woman slips back into the heavier atmosphere of everyday life. Laughter or tears, pleasure or pain seem an equally appropriate or inappropriate expression of what has happened, yet because some expression of feeling becomes essential tears or laughter follow, without either action seeming to be related to the recent experience. As one who has been carried into another world on the wings of an anaesthetic laughs or cries on coming back to earth, so does a lover who has reached unaccustomed heights on the wings of love laugh or cry when the flight is over.

Although the physical accompaniments of the orgasm are less clearly understood in the case of the woman than in that of the man, it is probable that muscular contractions occur which play an important part in facilitating fertilization. In any case the psychological attributes of the climax are the same, at the lowest an intensification of voluptuous sensations, at the highest a taste of ecstasy.

The orgasm is followed by a release of all nervous tensions. Satisfied and relaxed, the lovers lie in each other's arms, their minds gently stirring with the thrill of what has so recently been experienced. As intercourse begins gradually and almost imperceptibly in the prelude, so it fades in the gentle caresses of the after-play, the fifth and final phase of the love drama. Here, as in the initial phases of the act abruptness is to be deprecated. Let the husband avoid a sudden breaking off of the love act, or any suggestion that because his sexual needs have been satisfied he can turn his attention to other things; for just as the woman is slower in reaching the zenith of sexual communion so with her is the descent from that zenith more gradual and prolonged.

The enormous charge of energy that has suddenly been released at the moment of orgasm quite naturally leads to a feeling of fatigue. The appropriate sequel is sleep, and contented and quite satisfied the two lovers slip into unconsciousness. The duration of fatigue varies in different individuals and on different occasions. During it the sexual organs are incapable of responding to further excitation. Until restoration has taken place all psychological or physical stimulation is powerless to produce a fresh erection. But in the young and passionate restoration rapidly takes place.

It is probable that this phase of love, the after-play, is the most neglected of all. Many males develop the habit of turning over and going to sleep immediately after the end of intercourse. By doing

so they show that they have no idea of the woman's attitude to intercourse and of her need for words and caresses long after the voluptuous moments of the orgasm are over. To say the least of it, to break off thus abruptly is ungallant; but to say that and no more is to express inadequately the sense of loneliness, disappointment and frustration which may assail the wife as she lies wide awake and dissatisfied.

Surely a husband should be as assiduous in his attentions *after* his desires have been gratified as before? It must be remembered that words mean more to a woman than they do to a man, and that even though physical intercourse has proved it, she still longs to be told in words that her husband loves her and appreciates her caresses. Those words, a kiss, a tender touch, an embrace make all the difference to her. After-play sets the seal on sexual union. Even though the communion of bodies is over, the communion of souls still remains, and too abrupt a termination of this most intimate relationship naturally leaves the woman with a sense of affront. She has yielded everything that is in her possession to her husband, and he has, almost without a word of thanks, of appreciation, or of love, turned over and gone to sleep. The whole affair to her seems to have ended in anti-climax.

So let the crescendo of the prelude find its counterpart in the diminuendo of an epilogue — tenderly-spoken words of love, a gradually diminishing intensity of caresses and kisses, a final embrace, and then, when both partners desire it, sleep. Should sleep not be the goal, but rather a renewal of caresses and a return to sexual intimacies, it must still remain a golden rule that the tide must be allowed to run to its lowest ebb before the flow begins. Premature attempts to revive excitement and impatient efforts to excite desire are not only likely to end in failure, but may be productive of harm.

III.—THE ROLE OF THE WIFE IN SEXUAL INTERCOURSE

So far in dealing with sexual intercourse, emphasis has been placed on the responsibility of the husband. It has been repeatedly pointed out that he must show every consideration for his wife, make every effort to satisfy her needs, study her reactions, and play the part of the lover and courtier, and not that of the husband with conjugal rights. Though this is so, it does not mean that the wife merely accepts and plays only a passive part in the conjugal embraces. Just as an unskilful husband may spoil intercourse for his wife, so a thoughtless wife may be responsible for sexual disharmony. It is advisable to

refer here to a few points in her sexual technique that may have repercussions on the husband.

Just as there are expert male lovers who through their proficiency are able to arouse the desire of women inclined to be sexually cold, so there are women who are such mistresses of the erotic art that they can stimulate a weakly-sexed man. Such women know all the ruses by means of which a man can be stirred, and how to vary at different times their repertoire according to their partner's need. Nor is there anything that a woman need be ashamed of in acquiring this art, for does not love take even a more important place in the life of a woman than in that of a man? There is, perhaps, a particular tendency for the Anglo-Saxon wife to look with disfavour on erotic skill. At any rate English women, rightly or wrongly, are reputed in Latin countries to be cold and sexless, and to be but little interested in the physical side of love.

It is almost a pity that an inexperienced and ignorant wife cannot be sent for tuition to some member of her own sex who understands the artistry of love. She would learn a great deal. Take for example the art of disrobing. The removal of a few garments may be thought a simple matter, but it can be so done that by watching it a man can either be converted into an ardent lover or be made inclined to turn away his head embarrassed and disillusioned. Nor is it necessary to be beautiful or smartly dressed in order to stir a man's sexual desires. There is an art in wearing clothes, in adding some touch of colour, in doing the hair, in a hundred small points connected with the personal appearance that are independent of income.

Personal cleanliness, an appearance of freshness, attention to such matters as attractive underclothing—all these points, small though they may appear to be, can play a part in stimulating a husband's desire. Even that much-advertised evil "body odour" can act as a deterrent to intercourse. Smell plays a large part in the sexual intercourse of animals, and although the sense of smell in a man is almost rudimentary compared with that of the animals, a pleasing or an unpleasing odour may increase or diminish, as the case may be, sexual attraction. It is, indeed, no mere accident that women from the beginning of time have made use of artificial perfumes in their toilet. The smell of lilac may bring back in a flash to a man the memory of a garden in which he walked in childhood, the odour of violets a woman he once loved, or of geranium a certain country cottage. In the same way scent that is associated with love may have a strong aphrodisiac value, and instinctively woman has always known this. That is why the mistress of the erotic arts uses it. Though man

may appear to pay little attention to such trifles, they have more effect on him than some wives believe to be the case.

Behaviour is as important as appearance, and more particularly her behaviour during the prelude to love-making. A wrong gesture, a manifestation of indifference or irritation, an abrupt manner, a crude remark or sign of impatience may have a devastating effect on her husband's mood. So important, indeed, is a wife's behaviour, that when marriage relations go wrong, it is often necessary for the expert who is called upon to deal with the situation to interview the wife and to suggest certain changes in her attitude to intercourse.

"Wives who feel it is the husband's duty to make all the advances, fail to realise that there can be no true communion if the male is the only active participant.

A woman must also always remember that a husband who is lacking in confidence is a husband who is at the same time sexually weak. Should any failure on his part to complete intercourse be greeted with contempt it is quite likely that what might have been only a temporary difficulty will be converted into permanent impotence.

A man is extraordinarily sensitive to any aspersions cast on his virility, and to be humiliated in the eyes of his wife is one of the most trying experiences he can be subjected to. Mistresses are often successful where wives fail, because they are students of psychology, and particularly of sexual psychology. There is more aphrodisiacal quality in the magic touch of a woman's hand than there is in the most potent medicine. To quote a well-known authority, "Autobiographies of great men often reveal the fact that they got their inspiration from the woman who praised their efforts and stimulated them, while the haughty wife who felt herself above all things sexual could never understand the mysterious incentive which might be generated by a little erotic play."

IV.—EARLY DAYS OF MARRIAGE

So far we have dealt only with the physical intercourse between two people who have already had some experience of its mysteries. We have not yet considered the earliest days of intercourse, nor the first sex act. If great emphasis has been placed on the responsibility of the husband in the technique of love-making when his wife is no longer a virgin, still greater emphasis must be placed on his responsibility during these earliest days of physical intimacy. Let us therefore begin at the beginning.

Some degree of modesty is inevitably associated with the sexual function. This modesty is not merely a product of civilization, an artificial atmosphere created around a natural function. If there were no modesty, sexuality would be considerably weakened; and where modesty has been thrown to the winds, as has occurred at certain times and in certain civilizations, sexual desire has fallen. Even amongst animals a certain degree of modesty exists. The sub-human female desires sexual relations, but shows an initial diffidence and responds to the earlier advances of the male with an effort to escape. These struggles on the part of the female to escape, form indeed part of the love-play seen amongst animals. The initial effort to escape is not only a playful allurements; it seems to mark a definite struggle between the elemental urge to yield and an equally instinctive shyness and dread of submitting. The final victory of desire over dread is usually slow and difficult, and no brutal violence must be brought into play in order to hasten it. The maiden shows even more strongly than does the young female animal this conflict between desire and modesty, and every husband must realize the necessity for patience and delicacy in the early days of marriage. Modesty must be overcome by persuasion and not by violence.

It must be recognised, however, that in addition to the modesty which is a natural accompaniment of her sex, there is also a modesty that has been deliberately and artificially cultivated in woman by man for his own purposes. At one time women and children were brought up in ignorance of sexuality, and the entirely innocent and excessively modest virgin was believed to add zest to the marriage bed. A man might himself have previously lived a life of profligacy, but his bride was supposed to be not only modest but entirely ignorant of "the facts of life."

Fortunately, this mistaken view is no longer held, and girls are not now deliberately brought up in a state of ignorance. The vast majority of women, by the time they come to marriage, already know what are called "the facts of life," even though they have no practical experience of what sexual intercourse entails. Nevertheless and in spite of this knowledge, the innate modesty of the female still survives; and because his bride is not ignorant a man must not assume that the initiation of marriage will not entail for her a certain emotional conflict. Nor does this conflict consist merely of a dread of the pain that the consummation of the marriage may inflict upon her; it is something much deeper, something that is generally spiritual rather than physical. In any case, whether the reluctance

of a bride is unconscious, sub-conscious or conscious, it has every claim to recognition and respect.

The chief bodily obstacle to the consummation of marriage is the hymen, the thin circle of skin at the entrance to the vagina. This varies in thickness as well as in completeness in different women, so that the obstacle it presents to consummation differs greatly in different cases. In a few exceptional instances it may be so considerable as to constitute a serious barrier to intercourse, and the hymen and vagina may have to be dilated by a doctor in order that the marriage may be consummated. These cases are, however, quite infrequent, and as a rule the hymen is readily stretched or ruptured. If all attempts to penetrate end in failure it is necessary to have recourse to dilation under an anaesthetic.

Undue emphasis has been placed by the general public on the pain associated with the rupture of the hymen. Sometimes this emphasis has been so exaggerated that both parties approach the physical intimacies of marriage with dread and anxiety; the wife on account of the pain she will experience, and the husband on account of the injury he is called upon to inflict on her. Yet, if consideration, patience, gentleness and restraint are shown by the man, the consummation of marriage need not be painful.

In any case, if the bride-to-be dreads the ordeal, she may carry out before her marriage a certain amount of preliminary stretching by the fingers. She should know, however, that though digital stretching may be useful, the ideal method of dilation is not by the fingers, but by means of the organ specially fitted for that purpose, the male penis, as it slides along the vestibule and into the slight aperture that exists between the two labia. With a slight increase of pressure the membrane stretches itself, or else splits backwards, generally in two places.

The stretching or splitting may be made a very gradual process, if the couple agree to restrict their first few attempts at intercourse to this purpose. On the other hand, they may decide to complete it at once, even if the completion is associated with the infliction of pain. Should the more abrupt method of entry be decided upon, the pain is quite brief, and easily bearable by a woman with a normally thin hymen and an average nervous sensibility. If, also, the woman has the courage, instead of shrinking or giving way before the pressure, to respond by a rapid counter pressure, the hymen can be ruptured in a moment, so that the penis slips into the vagina. The loss of blood accompanying this act is as a rule only trivial, and if the bride lies quite still, with closed legs, and avoids for a time all further activity,

it readily ceases. Only in very rare cases is the bleeding sufficient to make it necessary to apply continuous pressure by means of a towel. It must be remembered, however, that after the hymen has been ruptured time must be given for the healing of the tiny wound inflicted. Intercourse must not immediately be repeated, and if necessary, a day or two must be allowed to elapse until all soreness has disappeared. While such soreness exists, special cleanliness must be observed, and some simple lotion applied, so as to keep down any possibility of inflammation. Should the attempt to consummate the marriage have failed, further efforts had better be postponed until the next day, for too prolonged or too often repeated efforts on the part of the man may bring about, not only an increased sensitiveness to pain, but a nervous reaction on the part of the bride. At all costs, fear and nervous apprehension must never become associated in her mind with physical intercourse. If it does, it may take a long time before she can become sexually adjusted.

Yet it is as easy for a husband to be too sentimental and diffident as to be too brutal. Prolonged postponement of consummation can do harm in a variety of ways. Not only may it impose an unnecessary nervous strain on both parties, but it may lead to an exaggerated idea of the difficulty of intercourse. It may be said that, if after four or five attempts to consummate marriage, intercourse still apparently remains impossible, a doctor should be consulted in order to make sure that there exists no physical obstacle requiring medical treatment.

It must be remembered that in the case of a newly-married woman, who has not yet felt the full force of sexual desire, the secretions poured out by the accessory sexual glands may be insufficient to provide good lubrication. It may well happen, therefore, that some additional lubricant is necessary in order to allow of the entry of the male organ into the vagina. This is certainly likely to be the case if a rubber sheath is being used as a contraceptive measure. Many lubricants have been suggested, ranging from the natural lubricant of the saliva to special preparations containing tragacanth sold by the chemist in tubes. Vaseline is perhaps that which is most commonly resorted to, but for those who dislike this somewhat messy material, one of the jellies is preferable.

It would also be wise for the newly-married couple to remember that the idea that the marriage should be consummated during their first night together is entirely a conventional one. Sometimes, both parties are so tired by the events of the day, and the hard work that has preceded it, that they are more inclined to sleep than for under-

taking the important step of consummating their marriage. If this be the case, it would be wise for them to confine themselves to certain preliminary endearments and intimacies, and by mutual agreement to postpone complete intercourse until a future occasion.

Finally, it must be remembered that although the chief responsibility for initiating physical marriage lies with the husband, his wife must take some share in it. Intercourse, as has already been shown, is not inflicted by the male on the female, but is an activity in which both play their parts. So also in the initial phase of consummation the bride must assist her husband. No man is capable of making entry without, not only the consent, but also the co-operation of his wife. In case of physical difficulty it is sometimes helpful to place a pillow under her hips so as to bring the pelvis and the vulva into a more forward position.

An unruptured hymen is not the only physical obstacle that may make difficult the consummation of marriage. Sometimes penetration is made difficult by the muscles that surround the vagina going into a condition of spasm. Whenever the husband approaches her, however much the wife desires to receive him, these muscles contract painfully so that he cannot make an entry. The slightest touch or even the anticipation that she is to be touched starts a series of painful cramps. This condition is known as vaginismus. Occasionally it is due to local tenderness, the vagina contracting to a touch that is painful in the same way that any part of the body is withdrawn on feeling a sudden discomfort. More often than not, the reaction is not so much physical one to pain as a psychological one. In the woman's mind the idea of intercourse is associated with some grave anxiety or fear. She is terrified of sexual intimacies, consciously or subconsciously, and because of this terror attempts to avoid it by this mechanical contraction of the muscles that guard the entrance to the vagina. Sometimes this is due to her having had an unhappy or unsatisfactory pre-marital experience of which the memory recurs on her marriage night.

Naturally, vaginismus, or painful spasm of the vagina, is more likely to be found in neurotic and easily frightened women brought up with a wrong attitude to sex. It has much in common with the anxiety form of impotence frequently met with in men of a similar type, and in both cases it is the fruit of wrong upbringing. It is another instance of the truth of the saying that marriage happiness or unhappiness may be determined so long ago as in childhood. Irreparable damage may result from the wrong approach of a boy or a girl to the mystery of physical love, far greater

wrong than is likely to be caused from any temporary indulgence in masturbation. Yet, whilst all parents are filled with a fear that their children may masturbate, few are alive to the importance of their learning about sexuality without any anxiety being implanted at the same time.

The existence of any degree of vaginismus in a bride calls for the exercise of the greatest care and restraint on the part of the bridegroom. If he attempts to overcome the spasm by force, he will only succeed in aggravating the condition; if he desists and confines his efforts to combating the fears and anxieties of his bride he may little by little so gain her confidence that she will be able to submit to greater and greater intimacies. Usually, however, when vaginismus is well marked, medical treatment will be required in order that the marriage may be consummated.

After the bridal night, or night of consummation, comes the honeymoon, and concerning this period there is often as much misunderstanding as there is on the subject of consummation. To the bridegroom before his marriage the honeymoon sometimes appears as a season of ever-renewed embraces and intimacies, uninterrupted by the claims of everyday existence. It is to be a season of blue skies with no cloud in sight, and there will be nothing to hinder the supreme business of love. As a rule the honeymoon turns out to be quite otherwise, and there are few couples who will not afterwards have to confess that in the honeymoon sky there were clouds as well as brightness. For the honeymoon is in reality a period of apprenticeship, of learning a new art through the painful process of trial and error. It is a school as well as a holiday, a school in which the exercise of restraint and patience is as necessary as it is in the business of life. Rome was not built in a day, nor is sexual harmony attained in a week or even a month. No limit can indeed be put to the duration of this schooling, for the writer has known of married couples who have only attained complete satisfaction for each other's sexual needs after the passage of many years.

It is on the husband that the initial responsibility for the success or failure of the physical side of the marriage mainly devolves. This responsibility of the husband rests on no arbitrary decision but on the conditions imposed by Nature herself, for unless the bride has had previous sexual experiences she will approach marriage less sexually awake than her husband. Inexperienced though he may be, he is nevertheless the more advanced of two beginners, and as such must take the lead. To his bride the intimacies of the marriage bed may as yet have no meaning beyond the fact that she is giving to the

man she loves what he wants and has looked forward to. It is her wedding gift to him, the greatest gift in her power to give—but apart from the pleasure of giving she herself may derive from the physical side of her marriage very little satisfaction. Her sexuality still lies dormant, waiting to be awakened by the first kiss of love, a tender possibility to be made or marred according to her husband's skill or unskilfulness. Small wonder therefore that a man who is conscious of this responsibility approaches his marriage with anxiety as well as with joy.

In the great majority of cases the woman's awakening must be gradual. Especially is this so if as a result of wrong advice or teaching she has learnt to look upon the physical side of marriage as a rather brutal tribute that must be accorded to the male animal. This was the early Victorian feminine view of marriage, and it still may persist in the minds of some women of to-day. Only by great gentleness on the part of the bridegroom, by courting her favours rather than assuming that they will be given, by remaining the lover as well as the lawful husband, can this wrong conception of marriage be corrected. Step by step, advancing slowly, retreating when necessary, avoiding all sudden or severe demands, he must set himself to awaken what sleeps within his wife. Especially should rest and consideration be given to the woman in the days that follow consummation, whilst the structures at the entrance to the genital passages still remain sore and tender. The exercise of restraint, the putting of her feelings and comfort before his own desires, will always be remembered by his wife. Instead of looking back on the early days of her marriage as many women unfortunately do with aversion and distaste, she will look back on them with pleasure and gratitude for the consideration shown her by her husband.

Although emphasis has been laid repeatedly on the responsibility of the bridegroom during the honeymoon, he must avoid feeling over-anxious. Fear and anxiety have a paralysing action on all sexual activity, and if the husband is unduly preoccupied with his responsibilities and too disturbed by any failure, his own sexual function may suffer. Too serious an attitude to love-making is to be as studiously avoided as is a too frivolous attitude. It was not without reason that the term love-play was applied to the preliminary intimacies that lead up to the phase of sexual communion, and no play is possible when the mind is filled with doubt and apprehension.

Let the bridegroom therefore meet his difficulties with a light heart, learning from them but not being overwhelmed by them. It were better indeed that both husband and wife should realize from

the beginning that difficulties will inevitably be encountered. No marriage has ever been free from them, and the memory that by working together they have overcome them will constitute in the future yet another bond between husband and wife. It is well therefore that the bride and bridegroom departing for their honeymoon should realise that all newly-married couples inevitably run up against obstacles to successful union. Naturally their married friends do not tell them of their own initial difficulties, any more than they themselves will discuss such when they return from their honeymoon. These matters are kept private, and it is only the expert who hears about them in the privacy of the consulting room who realises how common they are.

V. VARIATIONS IN SEXUAL INTERCOURSE.

It has been pointed out that there is no standard model for the means by which a man and woman express their love for each other. Just as kisses vary, so by assuming different attitudes may the phase of sexual communion be varied. Oriental works on the art of love describe as many as a hundred methods of intercourse, in which the attitude and motions of love are different. There is, however, a disposition on the part of many married couples to feel that only certain methods of love-making are right and proper, and that others are illegitimate or degrading. If that is their opinion, then they must limit themselves to the models they have accepted. For others, on the other hand, to whom that which is mutually pleasing and satisfying is right and that which to either party seems objectionable is wrong, a greater range of variation in carrying out intercourse is permissible.

Broadly speaking, there are two main positions in intercourse; the first, in which the man and woman meet face to face; the second, in which the man faces towards the woman but the woman turns her back. All the methods of intercourse are variations of these two fundamental positions.

In the face to face position, while most of the man's weight is borne on his elbows, some rests on the woman. This may be a disadvantage if his weight is considerable or if his wife is pregnant. In such cases the position can be reversed, the wife being uppermost, or it may be varied by the wife lying quite flat with a cushion under her loins and her thighs more widely extended so that they are clasped by those of her husband. This brings the base of the penis and the clitoris together, thereby increasing stimulation but reducing the depth of penetration.

Sometimes, after childbirth, the passage has been so stretched that intimate contact is difficult to maintain in the face to face position. In such circumstances penetration at a slightly different angle will provide the necessary friction. The wife lies on her back and lifting her legs at right angles from the hips rests them on her husband's shoulders. This raises the lower spine and brings the vaginal opening upwards and forwards, enabling the penis to press against the front of the vagina. The great disadvantage of this position is that caressing is precluded by the degree of separation involved.

The sitting position is favourable to conception and is also appropriate during pregnancy. The husband is seated, the wife sits astride; there can be mutual participation and deep penetration, but again there is the disadvantage of partial bodily separation.

A natural variation of the face to face position is for husband and wife to lie side by side. At the appropriate stage, pillows having been placed to secure comfort and balance, the wife draws up the leg on which she has been lying, her position then becoming half side and half back, while the husband in a similar manner assumes a half sideways, half above attitude. Its main advantage is avoidance of weight being imposed on the woman together with care and convenience; its disadvantage is the limitation imposed on movement.

An entirely different series of attitudes is based on penetration from the back. Both partners lie on their left sides, the husband having his left arm free to caress his wife. Owing to the direction of the vagina intercourse cannot take place if an exactly parallel attitude is adopted. The wife must flex her hips and bend forward. As the husband lies at full length the two bodies diverge and the heads are further apart. Once an entrance has been made the degree of penetration can be varied by the angle maintained. This position may be of advantage when one of the partners is tired, but it is not usually quite satisfactory for the wife. The astride position already described can also be varied by the wife sitting astride her husband with her back to him.

VI. FREQUENCY OF INTERCOURSE

Medical men are often asked how often intercourse should take place, and what should be regarded as excessive and therefore injurious to health. To this question no general answer can be given. It will depend on the make-up of the individual man or woman, on their other activities of mind and body, on a dozen different factors that will vary in different cases. The golden rule is that *love-making must be spontaneous.*

First of all, it must be accepted that moderate sexual activity has a beneficial action on the mind and body of a healthy man or woman. This does not imply that the health of a person who is unable to be sexually active need in any way be impaired by chastity. Whether this is so or not depends mainly on the motive of his chastity. If a man or a woman accepts continence willingly, and diverts the energy that would otherwise be expended on sexuality into other channels—in other words, sublimates it—he or she can remain as healthy as if happily married. If, on the other hand, a man or a woman is a prey to mental conflict, or if there is a struggle between the desire to have intercourse and the fear of its consequences, then he or she is likely to be exhausted by this struggle, and cannot be regarded as being healthy. Indeed, it is from such people, tortured by desire or frightened to give way to it, that a great number of cases of nervous exhaustion are recruited. But at the present moment we are not concerned with this problem of enforced chastity, but with the bearing of sexual activity on health. We are dealing with the benefits conferred by an active sexual life in marriage, upon those who are living together and physically attracted to each other.

Regular intercourse has a beneficial effect on the body. As the muscles are improved by exercise, so are the genital organs toned up by usage. This is shown by the fact that many women who before marriage have suffered from painful or irregular menstruation, no longer suffer from this afterwards. Intercourse also invigorates and develops the physique, and tones up the body generally. Men and women who previously were too thin or too stout often acquire a more satisfactory weight after marriage. There are many people who, although they are not conscious of any mental conflict are nevertheless worried by the problem of unsatisfied sexuality, and when this has been resolved by experience there is naturally a certain relieving of nervous tension. Sexual harmony also acts like an invigorating medicine. It helps to develop all the sweetness and strength of a man's and woman's nature.

This is not only true of sexual activity in general, but of each isolated act of intercourse. A successful erotic experience leaves behind it a sense of peace and achievement, a feeling of well-being of both mind and body. Life has been enriched by it, and the lovers are left with a feeling of the joy of existence. Only when the excitement has been too prolonged, or when intercourse has been indulged in without any real desire for it are fatigue and lassitude likely to be experienced. If this should persist for many hours, then it must be

regarded as a danger signal that perhaps the limits of activity have been exceeded, and that a greater economy of intercourse is indicated.

The frequency of intercourse, therefore, must be left to the individual's own discrimination. He or she alone knows what is his or her own capacity for sexual experience, and no outside guide can be a substitute for a man's or a woman's inner feelings.

During the honeymoon the amount of intercourse indulged in may be excessive. Novelty and curiosity give to love-making an additional fillip, so that the standard of frequency is higher than it will be when these no longer act as an added source of excitement. The man must remember, however, that intercourse imposes on him a greater strain than it imposes on his wife. He must therefore beware of establishing for her a standard that he will be unable to maintain. When he returns from the honeymoon, his work will make greater demands on his strength, and what he is able to achieve on a holiday he will be unable to maintain when back in his occupation. Fortunately, nature has provided for this danger. Whereas a woman can submit to intercourse when she does not really desire it, to a man this is impossible. Unless real desire is present, and by this is meant not only desire to please his wife, but desire for his own sake, no erection can be obtained.

Each of the partners must also remember that sexual desire and capacity are determined by his or her individual endowment. Neither can give to the other more than he or she possesses. Male and female sexual potency varies according to age, circumstances, health and the erotic and psychic influences acting on that particular person. There exist men who are highly virile and also men who naturally are of low sexuality. Nor does the degree of sexual potency depend on physique; the all-round sportsman may be poorly endowed sexually compared with the less robust sedentary worker. So also the athletic woman may be comparatively cold compared with a delicate girl. Each of the two partners must, therefore, accept what is the sexual constitution of the other, each giving what is, within his or her power to give.

Not only does the sexual capacity of a man or woman vary according to constitution and temperament; it varies also at different times. Sexual desire does not remain at a constant level, but rises and falls. This is particularly noticeable in the woman, and it has been shown that in the majority of women sexuality rises and falls in relation to the menstrual cycle. Usually it is at its highest just before and just after the menstrual flow, though in some cases it may reach its peak in the middle of it. In man also periodicity exists, but it is usually less

well marked. As a rule two or three sexual communions take place at short intervals, to be followed by a period of abstinence; then there is again a rise of desire. The length of the cycle varies in different men.

It will therefore be for the couple to discover after the return from the honeymoon what is the frequency of intercourse that best meets their mutual ends. If it should be proved that one is more highly sexed than the other, and that one desires more than the other can give, let them effect a compromise, accepting the restriction as an inevitable one placed on their union by nature, and not by any unwillingness on the part of either of them to give.

Rarely are husband and wife entirely balanced. If the majority of married people were to be asked whether there was anything in their marriage they would alter, one of them would usually reply that, although he or she was entirely happy, and would not wish to be married to anybody else, the marriage would have been a trifle more satisfactory if the partner had been a little more highly sexed. It is particularly necessary that the woman should realize this incapacity of a man to give more than his power permits because, as stated above, whereas she can submit more frequently to intercourse than her desires dictate, her husband is unable to do so.

Finally, it must be realized that sexuality is strongly influenced by bodily and mental health. If, for any reason, either of these is disturbed, nature like a good economist, husbands all the reserves of energy, and more particularly all unnecessary outgoing in the field of sex. A man, therefore, who is worried by business troubles, or a woman who is exhausted by her housework or her children, will quite naturally experience a weakening of desire. This diminution in sexuality should be only temporary; if no demands are made by the partner, and time is given for recovery, normal sexual relations will soon be resumed. It is therefore a great mistake for a husband or wife to assume that because the other shows no desire for sexual intimacies love has left the home. Many a wife has become a prey to the fear that her husband has lost his heart to another woman when in actual fact he is only suffering from a temporary loss of potency due to fatigue or anxiety.

On a preceding page emphasis has been laid on the need for spontaneity in love-making. Sexual intercourse is but the physical expression of an inner emotional feeling felt for each other by two people of opposite sexes. Since emotions are not subject to routine, but arise spontaneously and unexpectedly, so also sexual intercourse must be free from routine or habit. Laurence Sterne in his novel,

"Tristram Shandy," draws a sketch of Tristram's father as a creature of rigidly fixed habit. So bound to a schedule was he, that on Saturday evenings, the weekly task of winding up the clock was invariably followed by endearments between him and his wife. This, though the fiction of a novelist, is one that has its replica in real life. To some couples, physical intercourse is a weekly or a bi-weekly routine, and because Sunday is a day of rest, the week-end is set aside for connubial enjoyment.

Love tied to routine is a travesty of love. The habitual kiss given by the husband to his wife on leaving for work in the morning, or before going to sleep, may be an indication of his affection for her, but the kisses of love are more spontaneous in their origin. Suddenly, and without previous warning, a strong emotion arises, and the prelude to love begins. It is indeed only because a bed happens to be convenient for intercourse and because by bed-time the labours of the day are concluded, that love-making generally occurs at night, but intercourse need not necessarily be confined to this time. In the lives of many married people, the most happy memories are often those of intimacies that occurred at strange times and in unexpected places.

The less love-making is subject to stage management the better. One of the unfortunate attributes of many methods of birth control is that they require a certain setting of the stage for love-making. Until certain mechanical arrangements have been made, endearments must be postponed; either the wife must retire for a few moments to complete the necessary preliminaries, or else the husband, having started on the prelude and play of love-making, is forced to break off in order to make preparations for intercourse. Should he be of a nervous temperament, or easily upset, this interruption may be quite sufficient to interfere with the following phases of sexual communion. It is therefore of the utmost importance that only those methods of birth control that necessitate the minimum of pre-arrangement should be adopted. Indeed, many of the difficulties experienced in the early stages of marriage are directly due to the use of ill-advised methods of contraception.

VII. INTERCOURSE DURING MENSTRUATION OR PREGNANCY

The question is occasionally asked whether it is wrong for a woman to have intercourse during the time of the menstrual flow. Two main reasons prompt this question; a belief prompted by superstition, tradition, or religious doctrine that there is something sinful in intercourse at this time, and the fear lest it may carry with it some bodily risk either for the woman or her partner. For some nations a definitive

answer to the question has been given by religious teaching: at such a time a woman is unclean and to touch her is defilement. Amongst peoples whose lives are regulated by superstition the same idea prevails. To them the products of the menstrual flow are endowed with magical and harmful properties, and a woman at such a time must be separated from her husband. The view that intercourse during menstruation should be avoided is therefore exceedingly widely spread.

What is the answer that science would give to this question? Probably the great majority of doctors would reply that there is no scientific reason why, if a husband and wife share a mutual desire to make love at that time, they should not do so. Intercourse during menstruation carries with it no physical risk to husband or wife. It has been affirmed that cases of what is known as urethritis, or inflammation of the urethra, have been due to a man's having had intercourse with a woman before menstruation had ceased. This idea rests on no scientific proof. It is a loose assumption; and if there were any danger for the male it could be avoided by careful washing after the love-making has taken place. That there is a necessity for the sexual impulse to be subjected to a certain amount of restraint has been emphasized, but let us be sure that good grounds exist for any rule or regulation imposed on lovers. That menstruation is not necessarily a bar to sexual intercourse is the opinion of the majority of modern experts. So if desire arises at such a time there is no reason why it should not be gratified. This reassurance will be welcome to many who are only able to resume married life for brief intervals. Such intervals may coincide with menstruation. By adopting normal methods of hygienic cleanliness, this need not prevent love-making.

The problem of intercourse during pregnancy is more complicated. The arguments that have been brought against it are that it may cause abortion or, if pregnancy be more advanced, premature labour, and that should either of these accidents happen the fact that intercourse has recently taken place increases the risk of subsequent blood poisoning. What is the truth?

Undoubtedly there have been instances of miscarriage following intercourse, but almost always these have occurred in women who already have shown a tendency to abort. Should there be any reason for believing that a risk of miscarriage exists, intercourse must be forbidden. In any case the more violent forms of intercourse must be ruled out; gentleness is always advisable. Moreover, should the pregnancy have advanced five months or more and the abdomen be considerably enlarged, a position which does not entail pressure on the

uterus should preferably be adopted. Finally intercourse should be abstained from during the last four weeks of the pregnancy.

So far we have only considered the advisability or not of intercourse on physical grounds alone. But there are psychological as well as physical factors that may enter into the case. Pregnancy has, as a rule, a profound influence on a woman's intellectual and emotional life. Sometimes the temporary change in her character is such that what previously she liked she now abhors, and what before she disliked she relishes. This change may affect her attitude to sexual intercourse; although previously she may have enjoyed it, during pregnancy it may be repugnant to her. It is on the psychological attitude of the woman to physical love that the decision to continue or to abstain from intercourse during pregnancy must chiefly be based.

The well-known authority Van de Velde is of the opinion that as a rule the attitude of the woman to intercourse when she is pregnant is determined by her attitude to it beforehand. "Where previously the sexual relationship of the husband and wife was more or less lukewarm," he says, "and the specific gratification of the woman during intercourse only moderate or quite inadequate, then desire, if it still exists at all, vanishes quickly and wholly as soon as the woman knows she is pregnant." If on the other hand the wife has gained from physical love as much satisfaction as her husband, "then as a rule the woman's desire, in the first half of pregnancy, does not subside in the least; on the contrary, there can be a temporary accentuation of desire. In the second half of pregnancy this slowly diminishes, but remains to a certain degree till the end."

It may indeed happen that during pregnancy a wife will feel a particular need for objective signs of her husband's love. To many a woman the physical changes of pregnancy, the loss of her figure, the temporary eclipse of some of her charms, are particularly depressing. She may feel that she is no longer attractive to her husband, and that because this is so she is in danger of losing his love. The knowledge, therefore, that whatever changes may have taken place in her body, she still thrills and attracts him physically brings to her great relief.

Moreover, there is another objection to any abrupt termination of sexual intimacies during the early months of pregnancy, namely the health and comfort of the husband. If he is healthy and sexually robust it is difficult for him to break off sexual relations and yet continue to be affectionate towards his wife. It is as though he were repeatedly called upon to begin the prelude of love and then, just as

desire began to arise in him, to break off and go away. The strain imposed on a sexually vigorous man in playing such a role may be too hard on him.

Finally, there remains the question: how long should abstinence be observed after the birth of the child?

The time taken for a woman to recover from childbirth differs greatly with individual women and in different races. But what really should be taken into consideration in order to mark out the duration of this time is not so much how long the woman requires to recover from the ordeal of birth, but how long the enlarged womb takes to resume its normal size. The process by which the genital organs of the delivered woman return to normality is known as "involution," and according to the authorities on the subject it takes from five to eight weeks. In women who do not suckle their children its end is marked by the reappearance of menstruation. During this period of involution the uterus and the vagina are considered to be particularly liable to infection, and therefore it is advised that intercourse should not be indulged in. Also it is held by some authorities that if sexual relations are resumed too soon bleeding may be provoked.

If, however, gentleness be observed it is not necessary for a couple to remain apart until the uterus has completely returned to its ordinary size, that is to say, for so long as about six weeks after the birth of their child. Many women return to their household duties three weeks after their confinement, and there is no reason in this case why intercourse should not be resumed then very gently and carefully, so that it becomes normal a few weeks later. It is, of course, important that a woman who has just borne a child should not again immediately conceive.

CHAPTER THIRTEEN

WHY MARRIAGES FAIL—THE PERSONAL ASPECT

By KENNETH WALKER

O.B.E.

I. WHY DIFFICULTIES ARISE

FOR a marriage to be a complete success, adjustment on three different planes is necessary—the intellectual, the emotional and the physical. Husband and wife must have the same sort of interests—making due allowance for the difference in their sex—must to a great extent share the same emotional feeling towards the fundamental things of life, and must be sexually adjusted. It is with the last-named in the main that we are dealing in the following pages.

At the same time, even if at the moment we are chiefly concerned with the sexual relationship, it must be remembered that difficulties experienced on one plane are likely to have repercussions on another. If a husband and wife are emotionally at peace, difficulties that are met with on the physical plane of marriage are capable of adjustment. Because two people have so much in common they will make little of sexual maladjustments. With goodwill towards each other they will co-operate in order to overcome any sexual difficulties which crop up in their life together. But if they have also encountered emotional or intellectual difficulties, sexual maladjustment is likely to act as a serious addition to their troubles. Small things will then appear great, and molehills become mountains; consequently it will be a far more serious task to achieve physical adjustment. For this reason in the present section we cannot deal with sexual difficulties as though they existed in a watertight compartment uninfluenced by other factors. Physical difficulties have emotional repercussions, emotional disturbances affect physical adjustment. Everything is inter-related in the fabric of life.

Unfortunately, as an examination of many unsuccessful marriages shows, few people realize the need to practise love-making as an art. Countless examples could be given of marriages that have been marred from the beginning through failure on the part of both partners to realize that physical adjustment can only be obtained as the result of knowledge and skill. With them everything had been left to instinct. As well might they have attempted to set up house in

a building constructed by their own hands without any knowledge of architecture or the art of building. Better indeed that their ceiling had fallen about their ears than their marriage hopes.

Some of the difficulties that arise on the physical plane of marriage would be avoided if husbands and wives realized that there exist certain essential differences in the attitude of a man and of a woman to physical intercourse. It is with these differences that we shall deal first.

To begin with it should be understood that sexual desire in a man is often less centred in the wish to possess a particular person. That is to say, in a man sexual excitement frequently arises spontaneously, and without the stimulation that comes from association with a particular woman. Many men desire intercourse for the sake only of intercourse, and not because they wish to express their feeling toward somebody they love. The mere activity of sex has for such men considerable value, and they may even be capable, if need be, of sharing their experience with women for whom they have no real feeling beyond the desire to possess them.

This separation of sex from the emotion of love is less commonly met with in a woman; for her the desire for intercourse is generally aroused through personal association with some particular man. Physical union is merely the expression of her inner feeling for him. She does not desire intercourse for the sake of intercourse, but for the sake of the particular person who has attracted her. If she submits to the caresses of one who does not attract her, she does not do so for the sake of any physical pleasure to be derived from it; she submits for the sake of some resulting advantages, money, a position, a home, or children. Sex for the sake of sex is likely to make but little appeal to her. There are also a few women, whose early years have been spent in an atmosphere mistrustful of sex and who are unaware of the importance of physical adjustment in marriage, who accept marriage on the basis of intellectual friendship alone.

A second difference between men and women is that desire appears to be more uniform in type in the former. Although it varies in intensity in different individuals in either sex, these variations are likely to be far greater amongst women than amongst men, ranging from complete indifference or frigidity to the opposite extreme of exaggerated passion, or nymphomania. It must also be borne in mind that very great variations occur in the intensity of sexual desire felt by a particular woman at different times. At one time she will appear to remain completely indifferent to the caresses of her husband, at another she will respond with passion. When these variations are

noted it is generally found that they are related in some way to the sexual cycle of menstruation. In many other women the desire is never developed to a very high level, even after years of marriage, and to some of them sexual intercourse eventually becomes intensely repugnant. In most of these cases the conditions of intercourse have been abnormal through absence of the appropriate psychological details—frequently because of the ignorance of the husband.

Besides the difficulties that are likely to arise owing to a failure to take into account these differences in the attitudes of a man and a woman to the sexual act, there are others which result from differences in the temperament of the individual man and woman. As has repeatedly been pointed out, sexuality has a varying significance in the lives of different people. In some sexual desire is so weak that it would be easy to suppress it altogether, in others it may amount almost to an obsession.

Unfortunately there is usually no means of discovering the sexual make-up of two people prior to their marriage. A man may have a shrewd idea of his future wife's character before he irrevocably becomes her husband; but as a rule he has no notion of the intensity of her sexual passion. For all he knows to the contrary she may be either almost completely indifferent or else so highly sexed that few men would be capable of satisfying her. So also is it with the woman. Sexually her future husband is for her an unknown quantity. It may be true that she is marrying him for other reasons than for his sexual companionship, but once she is married to him the success or failure of their physical relationship will play a large part in the success or failure of their marriage. Marriage is therefore a lottery in a very real sense of that word. It is a signing of a life-long contract in which neither party knows whether he will be able to fulfil his part, the accepting of a cheque which may or may not be honoured.

So strongly have some people felt the importance of this difficulty that they have advised that before two people become irrevocably linked to each other they should discover whether they are suitably mated. Such a discovery can only be made as the result of actual sexual experience; the two must live together before they sign the marriage contract. It is not our intention to discuss the advantages that a trial marriage would confer. The disadvantages are only too apparent. Quite apart from the objection that orthodox religion offers to such an arrangement, it is an undoubted fact that it tends to weaken the marriage bond. This system of trial marriage is actually in existence amongst certain South Sea Islanders, and apparently works successfully, but what works in a primitive tribe

may not be equally applicable to a complex civilization such as ours. In any case it does not come within the province of this section to discuss sexual ethics. We are concerned here only with practical difficulties, and the problem of trial marriage has been introduced only in order to emphasize the important fact that before the contract of marriage has been entered into few men or women can tell whether they are in any sense of the word suitably mated.

Unfortunately it is not only with regard to the intensity of sexual desire that there is ignorance before marriage. There is such a thing as quality of sex as well as quantity. It is quite probable that the future wife or husband will satisfy the partner on one score and yet fail on the other. Sexuality is not woven to a fixed pattern; every man and woman must express his or her sexual desire according to his or her individual make-up. In stating this fact we are not necessarily referring to such unorthodox patterns of sex as that characteristic of the true homosexual, although it is unfortunately true that homosexuals have sometimes married and only afterwards discovered the real nature of their desires. We are referring to the countless variations that may exist in the nature of the sexual pattern without any of these variations necessarily coming under the heading of abnormal.

Sexuality may vary as much in its expression in different individuals as does the taste for music or painting, or indeed the liking for different foods. There is no more a standard of sexual desire than there is a standard palate for food. Certain foods may be regarded as unwholesome, but within a certain range all forms of food are permissible. It will depend on a person's own palate what he elects to eat. Unfortunately, however, the satisfaction of sexual desire and of hunger for food do not constitute a true parallel, owing to the fact that what one eats concerns only oneself, whereas sexual intercourse concerns another. Intercourse may therefore be likened to a meal at which one may be compelled to swallow what is not only physically unpleasant but emotionally abhorrent. Herein lies the real difficulty, a difficulty that may not be discovered for a long time after marriage.

Before a remedy can be found for any difficulty that may be encountered two initial steps are necessary, first the recognition that a difficulty exists and second the understanding of it as fully as possible. This may at first sight appear to be so obvious as to be unnecessary to state. We all know that difficulties occur on the physical plane of marriage and that they are due to differences in our make-up. But do we really understand them or is our knowledge merely theoretical? Unfortunately the latter would appear to be usually the case.

The majority of marriages that fail on account of sexual difficulties fail through lack of understanding. What is due to differences in the approach to sexuality of the two sexes, or to individual variation, is put down to perverseness on the part of the wife or the husband. "Things would have been all right if my wife had not behaved in such and such a way," or "Our marriage would have been saved if my husband had been different." are the kinds of comment that are made when a marriage has shipwrecked. Yet the truth is quite otherwise. "Our marriage went wrong because I as a husband entered into it without the requisite knowledge," or "Our sexual relationship failed because I as a wife did not try to understand my husband, and in ignorance resented his behaviour"—these would be truer admissions of the causes of failure, but they are admissions that are not often heard.

It was Alfred Adler, the Austrian psychologist, who said that marriage is a constructive task in which two people must play their part. This is especially true of the physical side of marriage. Harmony can only be attained through concerted effort. It seldom comes accidentally; it cannot be attained by one person's efforts. Yet because it is the husband who is more sexually awake at the time of marriage, and because it is he who must play the more dominant part, to him belongs the initial responsibility. If he assumes this responsibility without first preparing himself for it by acquiring the maximum of knowledge, it is he who must bear most of the blame for anything that goes wrong afterwards. He would not think of marrying without first considering his chances of being able financially to support his wife. Yet only too frequently he will go through a marriage ceremony without even wondering whether he is fitted to initiate his wife into the most delicate and difficult of physical relationships.

How can he best fit himself for this responsibility? First, by reading any book that may contain knowledge which will be of use to him; and it is in the hope that this work will serve this purpose that it has been written. Second, by filling in any gaps that reading may still have left in his understanding by talking to someone who has already acquired experience. It must be realized that knowledge based on theory alone can only be of limited utility. Even a medical man who himself has had no sexual experience can offer very little really useful advice. As an adviser he would prove less trustworthy than an intelligent layman with experience. For this reason it is very unfortunate that many people who offer themselves as advisers on the subject of marriage difficulties are quite unfitted for the job. Undoubtedly they are well-intentioned and wise in certain spheres

of knowledge, but entirely inexperienced in the particular subject on which they are prepared to give advice. As well might they offer their opinion on navigation.

Having taken this first step and armed himself with theoretical knowledge the man, as soon as he is a husband, must begin to put it into practice. In doing so he must be prepared to make mistakes, but he need not be discouraged by them. They should not be taken too seriously. Indeed, an over-serious attitude to sexual intercourse is to be avoided. Much has already been said about the play element in love, the preliminary and playful fondling that is the natural prelude to the sexual act. Yet some men set about the business of love-making with the serious determination that they apply to difficult business undertakings. They are determined to succeed; but the very seriousness of their attitude may itself be the cause of their failure. Love requires a light hand, a delicate sensitiveness; it is an art, not a task.

Nor must failure lead to discouragement and loss of confidence, for if confidence be lost future efforts are almost certain to miscarry. It is only too easy for a man who has run up against difficulties in the early days of his marriage to come to the erroneous conclusion that something is physically wrong with himself. Small anxieties that have troubled him before marriage now become harbingers of disaster. If he be highly strung these anxieties may cause him to become temporarily impotent. The commonest form of impotence is purely the result of fear and of loss of confidence. Initial difficulties must never be taken too seriously; with experience and good-will, on both parts, they are capable of being overcome.

Two people cannot learn to dance together without occasionally treading on one another's toes; two people cannot learn to make physical love without an occasional mishap. Yet, because one is looked upon as play, or at the most as an activity of trivial importance, and the other as a matter of life and death, mistakes in the one are treated very differently from mistakes in the other. Errors in love-making lead to emotional upheavals; misunderstanding arises, and rapidly grows to astounding proportions; the new home is rudely shaken and in danger of falling. Small wonder that in this atmosphere of emotional tension, things may be said by both husband and wife which, instead of easing the difficulties, increase them. What is only an accidental happening and of no real importance, is likely to grow into a dangerous situation. What was merely an incident, soon becomes somebody's fault, and even if suitable measures are adopted to put matters right, much time and energy will be required

before the mischief can be repaired. In none of life's activities is more forbearance required than in the attaining of sexual harmony.

Having dealt in general terms with the problem of physical adjustment, and stressed the necessity for patience and good-will, we shall now discuss in greater detail certain specific difficulties that may be encountered in marriage, and at the same time offer certain suggestions as to the way in which they may be overcome. First, we shall deal with the difficulties encountered by the husband on account of apparent unresponsiveness on the part of his wife.

II. FAILURES DUE TO PHYSICAL CAUSES

It has already been said that the intensity of desire varies enormously in different men or women. There exist men in whose make-up sexuality plays a very small part; there are women who constitutionally are incapable of developing passion. They are made in this mould and nothing will ever alter them. Owing to the state of the ductless glands which they have inherited and their general psychological make-up they are sexually weak. Possibly such people have compensations in the shape of a capacity for other activities, but sexually they must be regarded as ineffective. In any case they are not to blame for their constitutional endowments; they have been given them, not acquired them. Nor need a marriage prove a failure if a man finds himself married to a wife in whose general make-up sexuality plays a very small part. Many women have confessed at the end of a long and happily married life that they themselves have never experienced any physical enjoyment from the embraces of their husbands. Yet they have not only given themselves willingly to their partners but even gained emotional pleasure as the result of their giving. The fact that those whom they loved had derived satisfaction from their union was for them sufficient reward. Should the union also have resulted in children, this was again more than sufficient compensation for their own physical indifference.

It is probable that the more discerning and sensitive of the husbands married to such women may have seen through their wives' pretences of gaining satisfaction when no satisfaction was felt. And if this has been the case they will undoubtedly have been conscious of a sense of disappointment, for complete sexual satisfaction can never be attained when only one of the partners experiences full enjoyment. Yet a sense of disappointment is insufficient to spoil a marriage if harmony on other planes has been attained.

What, however, is important for a husband to realize is that the frigidity of his wife may be due not to any inability on her part to

feel passion, but to his failure to arouse it. Sexual desire, as has previously been pointed out, often remains dormant in a woman until evoked by skilful stimulation. So it may very likely be that it is the man who has failed in this respect, and not that the wife is deficient in sexuality. Unskilful wooing, a failure to recognise that a woman's sexuality rises and falls in accordance with some cycle, misguided attempts to arouse her desire at inopportune moments, indifference to her particular needs, a lack of sensitiveness to her attitude to sexuality—a dozen different errors on his part may be responsible for his wife's apparent frigidity. With a more skilful and less egotistical husband she might have been capable of displaying genuine passion. It may be that even now, if he approaches her in a different way, he will be able to rectify his errors; though it may be that that time is past, and that now it is too late.

These are some of the questions which must be answered before a woman can be labelled constitutionally frigid. Sometimes the inexpertness of a husband may be so great that not only has he failed to awake desire in his wife, but he has actually antagonized her. His method of having intercourse has been so brusque, so lacking in art, that she is revolted. A crude and thoughtless introduction by a husband to the mystery of sex inflicts permanent damage. His wife is never able to forget her first experiences; sexuality for her has been permanently besmirched. She may, in the future, put up with physical intercourse because it is her husband's right, but she herself can never take pleasure in it. A child who has been dragged into the sea by a thoughtless mother or father determined to teach it to swim, will never forget the terror of that first immersion; a young girl who has submitted in fear to the caresses of her new husband because she felt impelled to do so, will never forget the terror of that night of initiation.

But it is not only a husband who may be guilty of spoiling a girl's idea of sexuality. Our introduction to sex usually occurs in childhood, and the ideas of to-day are the result of our thought of yesterday. Unpleasant associations are often the fruit of wrong education. The adults surrounding the growing girl may be more responsible than any future husband for coarsening her views on sex, and undoubtedly the views often imparted by their mothers to Victorian maidens, that although sexual intercourse was a low animal activity, they would have to submit to it because it was a right of husbands, ruined all chances that they themselves would derive any pleasure from it.

So also does some accidental happening of an unpleasant nature, connected with sexuality, often spoil a girl's future. Many women

with sexual difficulties owe those difficulties to past psychological trauma. An attempted assault on a young girl will leave behind it psychological damage that may last for a lifetime. Even the accidental witnessing at a tender age of sexual intercourse between the parents may result in a shock that is difficult to eradicate. Unfortunately the overcrowded conditions in which many families have to live makes such an accident by no means impossible, especially as grown-ups do not always realize how much more conscious children may be of the events occurring in their immediate neighbourhood than would appear to be the case. Chance scraps of conversation between grown-up people, the gossip of neighbours, fearful stories repeated by other children about the mysteries of sex and childbirth, half-understood paragraphs in sensational newspapers and books, any of these may have a disastrous effect on the mind of the growing child, and leave a girl with a fear of sexuality and all that is connected with it. More often than not, by the time that she marries, she will not be conscious of this fear, which will only manifest itself in a complete indifference or revulsion to intercourse.

But, failure on the part of the wife to enjoy intercourse is not necessarily the result either of a constitutional frigidity or of a brutal introduction to sex. To the woman, the fact that intercourse may be a preliminary to the birth of the child is a fact of paramount importance. This is one of the reasons why a trial marriage can never be regarded as a complete parallel to marriage itself. Intercourse entirely divorced from any possibility of pregnancy loses half its meaning for many women.

Sometimes failure is due to the fact that two people who are not physically attractive to each other have happened to get married. This is not such a rare event as would at first sight appear, especially amongst the more highly educated classes. A man and a woman may marry for other reasons than sexual attraction, for the sake of a home, the desire for a family, or for companionship. Unless strong sexual attraction is there physical intercourse will never prove for either of them very successful. This is more likely to be so in the case of the man than of the woman, and if the physical link between him and his wife be so weak that he has very little desire he may find that intercourse is an impossibility.

The sexual ideal of a man or a woman is not always a very lofty one: Hence the strange infatuations that sometimes are developed by both men and women, infatuations that provoke amongst their friends such remarks as "I cannot understand what she can see in such an unpleasant man!" or "How can such a decent man have

fallen for such a woman!" The Greeks made cupid blind, and in doing so they showed great psychological insight. The sexual ideal of a man or a woman may not prove to be the best type of husband or wife, not is an excellent husband or wife necessarily the man or woman who exerts the strongest physical attraction for the partner. Indeed, if a man's upbringing has been faulty and he has been taught as a child to look upon sexuality as something that is unclean and unpleasant, he will only regard it as possible to have intercourse with a woman of low character whom it would be impossible for him to marry. Looking upon all sexual manifestations as unclean, he will not be able to associate them with the type of woman he is likely to marry. For him the world of women will be divided into two classes, good women of the type he could marry, and low women of the type with which it would be possible to have intercourse. Marriage and intercourse for him will therefore always remain incompatible.

Sometimes the difficulty in obtaining complete sexual adjustment in marriage comes not so much from an innate frigidity of the wife, as from her failure to obtain an orgasm. She is anxious for intercourse, enjoys fully its initial stages, but the climax is absent. She is left, therefore, with a feeling of frustration and disillusionment; a promise has not been fulfilled, a hunger is left unsatisfied. Nor is her distress only psychological. As was pointed out in the section on "The Art of Love," the completion of the sexual act is followed naturally by a period of rest, a rest in which the genital tract takes part. The intense congestion of the sexual organs with blood which takes place with sexual excitement is relieved, tense muscles are relaxed and the genital tract generally passes from its state of activity into the natural sequel of quiescence. If, however, the act is not completed, if sexual desire is not satisfied, not only is the woman left mentally and emotionally stimulated, but her genital tract and pelvic organs generally are left swollen and congested. This is not invariably the case, but it is nevertheless likely to happen if the frustration is continually repeated.

This failure on the part of the wife to obtain complete satisfaction is one of the commonest difficulties met with on the physical side of marriage. In studying a hundred cases of physical maladjustment, Hamilton found that forty-six of the women who complained that their sexual life was unsatisfactory, stated either that they had never had an orgasm, that they were doubtful whether they had ever had one, or that they had had it at most only two or three times in all their lives.

What is often not realized is that irritability, emotional outbursts and depression on the part of a married woman may be the symptoms not of innate ill-temper but of an unsatisfactory sex-life. Mind and body are so closely interwoven that neither can be affected without the other being influenced. It has been pointed out that a condition of painful spasm of the sexual passages (*vaginismus*) may be produced by a state of fear; so also may irritability and moodiness be the result of unsatisfactory sexual union. There is many a 'nervy' wife who would be cured of her headaches, her dyspepsia, her constipation and her moodiness if the physical relationship between her and her husband could be adjusted. There is many an ailing wife whose chronic ill-health has disappeared, not through the skill of a doctor but simply because of the satisfaction of her sexual needs.

Reactions on one plane are accompanied by reactions on another, and what makes the matter still more complicated is that each reaction tends to aggravate the other. The less satisfactory the sex life the more difficult the wife becomes for her husband; the more difficult she becomes the less easy it is to attain sexual adjustment.

To a somewhat lesser extent this is true also of the husband. Disappointments and failures in the marriage relationship tend to make a discontented and irritable husband; what two people who were in sexual harmony would readily forgive in each other becomes of vital importance when harmony is absent. It is therefore imperative that both partners of a sexually unsuccessful marriage should realize that many of the difficulties that they are meeting in the emotional plane of their existence will disappear once they have attained a more satisfactory sexual adjustment. Nor will the rewards resulting from patiently striving towards sexual harmony be confined to the gaining of harmony and good health in the home; they will spread out into every field of activity in which either husband or wife plays a part.

By far the commonest cause of failure on the part of the woman to obtain satisfaction is the inability of her husband to continue coitus sufficiently long to allow of her obtaining an orgasm. Almost without exception, a woman takes longer to reach the climax of the sex act than does a man. She is, therefore, left with a deep sense of dissatisfaction, although her husband himself is satisfied. Even if the man is entirely normal and is able to continue coitus as long as most of his fellows, the wife may remain unsatisfied. Should he, however, be one of those men who suffer from a premature finish, his wife is almost certain to suffer. How can this be remedied?

First, the husband must realize that the sexual act cannot be regarded as satisfactory unless his wife, as well as himself, obtains full enjoyment from it. She as well as he has a right to complete satisfaction. Unfortunately, a number of husbands do not realize this simple truth, and many of them only discover late in their married life that to their wives physical intercourse has always proved a bitter disappointment. Wives are often extraordinarily reticent in speaking of these things, even to their husbands, and keep their disappointment to themselves, even during many years of married life. They often think that the fault lies in themselves rather than in their husbands; because of their particular constitution they are unable to obtain from sexual intercourse what other women do. This actually may be the case, for just as there exist women who are constitutionally frigid, so there are others who seem incapable of reaching that intensity of feeling which is necessary for the act to end in an orgasm. Such women could never obtain full satisfaction, however skilled were their husbands, and however prolonged intercourse. But these cases are exceptional, and more often than not the failure is due to lack of skill.

Secondly, it must be realized that the more skilful the preliminary stage of coitus, namely love-play or courtship, the more attention that is paid to the initial rousing of a woman's desire, the more likely she is to obtain an orgasm. If, on the other hand, the husband embarks on the more active phase of sexual intercourse as soon as he himself is prepared for it, the latent period is so prolonged for his wife that he will have finished long before she reaches her climax. Great attention must therefore be paid to the preliminary phases of the act, for only if she has been well prepared for coitus is the woman likely to have an orgasm.

The next step is that the man should employ all the art of which he is capable to stimulate his wife during the second phase of the act. It has been pointed out in a previous section that the clitoris of a woman is, like the penis of a man, a highly sensitive organ, the stimulation of which provokes sexual excitement and pleasure. The best method of stimulation is the natural one, that is, contact with the male organ and the friction that results from it during the copulatory movement. This contact is more likely to be made when the penis is not in a position of full penetration, but near the entrance of the vagina. A deliberate effort should be made therefore to obtain greater stimulation of the clitoris, either by trying a new position or else by movements with the penis less deeply inserted into the vagina. Even if this fails and the woman is again deprived of her

orgasm, it is well to remember that many husbands contrive to obtain full satisfaction for their wives in such circumstances by the finger. It is true that this is a subterfuge and that the finger is a far less satisfactory means of stimulation than the penis, but in spite of this it is an invaluable means of satisfying a woman's needs when she has failed in union to obtain an orgasm. By gentle caresses and by the maintenance of bodily contact she may still be stimulated sufficiently to allow of the sex act being completed.

It must be observed that digital stimulation of the clitoris is not always advisable. Some women shrink from the contact of the finger with the clitoris with signs of disgust and displeasure. To these women anything in the nature of masturbation is repulsive, and they react against it. In such cases it would be a mistake for a husband to persist in it, since an orgasm is only possible if the emotional accompaniments of the act are favourable.

It must not be assumed that it is always the man who is responsible for the failure to achieve sexual harmony. Intercourse is a duet and not a solo, and the woman is an active partner and not merely an instrument. In many cases it is the wife who is the chief obstacle to sexual harmony, and failure on her part to co-operate is by no means uncommon. Dr. Edwin Hirsch, a well-known American expert, in his recent book "The Power of Love" describes his experience in dealing professionally with such women. "Often, after being told how they can greatly aid their husbands, women will reply, 'Isn't that the man's business?' 'Not entirely,' I answer, 'and if you were a smart co-operative wife, you would see to it that you taught him to do the things you wanted him to do, and you would be so clever about it that after he had become masterful in the several branches of the erotic art, he would believe that he had taught them to you. Such a wife is a wise woman. But you are too proud.'"

This puts in a nutshell what should be the attitude of the wife to physical difficulties in married life. Although intellectually a woman may know less than her husband she is often wiser, arriving emotionally at truths for which her husband is still intellectually fumbling. She has a different approach to knowledge. She knows how things are without being able to explain the steps by which she has reached this understanding. She can do a great deal therefore to help to put right a relationship that has gone wrong. Her co-operation in achieving sexual harmony is therefore imperative, and without it no physical difficulties encountered in marriage are capable of adjustment.

Let it be clearly understood therefore that the attaining of sexual harmony is a fifty-fifty problem. The idea that the woman should

remain a passive instrument in her husband's arms is an absurd and dangerous illusion. She is an active partner, working with him and playing with him for a mutual benefit. Feigned purity has no place in matrimony; self-pity is useless. Let every wife work with her husband to confer and receive the maximum of enjoyment.

We have dealt so far with failures on the physical side of marriage due to ignorance and lack of experience. With more knowledge and skill these obstacles to satisfactory union can be overcome, provided of course that there is good-will and the desire to co-operate on both sides. There is, however, another series of obstacles to harmony not so easily removed and which may call for outside help and expert advice. Most of these obstacles are the result of a wrong attitude to sexuality, which in turn is the fruit of a bad upbringing or an unpleasant early sexual experience. By bad upbringing is meant a bad introduction to the subject of sex during childhood, not necessarily a bad upbringing in other directions. Indeed it is in the child reared in a strictly religious and evangelical household that the seeds of future mischief are often sown.

Because such a child discovers that all sexual manifestations are looked upon by the grown-ups around him as evil, he soon learns to look upon sexuality as something that is essentially wicked. This wrong association is likely to remain with him even when he has grown up and married. Sexual intercourse being for him unclean or evil, he cannot possibly connect it with his feelings for his wife. Sexual difficulties in marriage are frequently the results of such faulty upbringing, and since it is not easy to change the thinking of twenty years or more a good deal of help and effort may be required if they are to be removed. When children are brought up more intelligently with regard to sexuality, these particular difficulties will become rarer.

The belief that sexuality is essentially evil and that intercourse is a low, animal-like activity is not the only form that a wrong attitude to sex may assume. Many men and women grow up with the idea that sexuality is comic, so that a more or less veiled reference to the sexual act provokes laughter. The intimacies of married life are a favourite theme for smoking-room jests, and first night happenings for a part of many comic stories. It is not surprising that this close association of intercourse with laughter should sometimes prove a difficulty. What can a comic performance have to do with a man's feelings for a girl he loves? Recently the writer came across a tragic instance of this variety of faulty attitude to sexual intercourse. He was asked to see a young man who had been unable

to consummate his marriage, and on interviewing the wife was told that whenever intercourse was attempted the husband gave vent to peals of laughter. It was not surprising that the wife, who was truly in love with her husband, felt resentful and disgusted. Nor was it surprising that the marriage had ended in failure.

So far we have dealt with the subject of men and women and the difference in their attitude to sexuality as though masculinity and femininity were fixed and invariable qualities. But this is very far from being the case, for there are men in whose make-up there lurks much of the female, as well as women in whom there exists much of the male. Everyone is familiar with examples of the feminine type of man and of the male type of woman, men and women who seem almost further removed from the markedly male man and the completely feminine woman than they are from each other. Femininity and masculinity must therefore not be regarded as fixed qualities but as variables. In every man there is something of the woman and in every woman something of the man.

Provided that it be not too strong, the fact that a man has a feminine strain in his make-up and a woman a male strain in hers is no disadvantage, for it is likely to lead to greater understanding between the two partners. If, however, the feminine element in the husband or the male element in the wife is unusually pronounced difficulties are likely to result, for the wife then becomes the dominant partner. However successful a wife may be in managing a home or in running a business, she must beware of attempting to manage her husband as well. Nature has ordained that in the sexual relationship the male is the dominant partner, and if the female assumes this rôle she will end by dominating an impotent husband. Every psychologist has seen examples in his consulting room of the difficulties that may result when a masculine type of woman marries a feminine type of man. In her inmost heart every woman wishes to be dominated by her husband, and the man who has taken second place in the home not only loses his self-respect but also that of his wife.

Of all the emotions that may affect the working of the body the most potent is fear. Fear has a paralysing action on any function; the mouth becomes dry from absence of saliva, digestion is arrested, and muscular movements are brought to a standstill. Any form of sexual activity may be impossible if fear or anxiety be present.

Unfortunately, anxiety and fear often become attached to the activity of sex, and old fears felt in childhood or youth are likely to reassert themselves after marriage. For example, the idea that a

marriage can only be consummated by the infliction of great pain on the wife frequently acts as a deterrent to consummation. Not only is the husband fearful of inflicting such pain, but the wife recoils from his embrace.

Should another child not be desired, the fear of pregnancy may also ruin the pleasure of intercourse for husband and wife. In some cases anxiety is so great as to cause in a nervous man complete loss of his sexual efficiency. Anxiety is one of the commonest causes of male impotence, and not a few cases of this trouble are connected with anxiety on the score of pregnancy. Only when a reliable method of birth control has been instituted and complete confidence in its efficacy established, can such cases of psychological impotence be cured. It is therefore of the utmost importance that, if during the first year of marriage a decision has been arrived at that the advent of children must be postponed, the best advice should be obtained on the subject of birth control.

A great many other fears may become associated with sexual activity. Many of these have grown up in childhood owing to bad sex education. Some men suffer from a primitive fear of a woman's body, and particularly of the sexual organs. Fear of the vagina is most likely to be due to some infantile impression or early fantasy. A man suffering from this type of fear is in the same position as a man with stage fright, or a nervous person forced to go into the presence of an assembly. He feels his heart beat faster, his confidence is lost, his voice becomes strained, and his self-possession is gone. A vague instinctive fear of women is found in many men, and even when a man has met a particular woman with whom he expects to be at ease, the old anxieties are not readily banished. In such a case; not only is he incapable of becoming the dominant partner during intercourse, but he may be incapable of sustaining an erection.

Other primitive fears have gathered round the idea of the loss of the semen. In the old days it was thought in abstinent men the semen was absorbed into the blood stream, thereby making them strong and happy. If they wished to remain so, they were advised to conserve this precious fluid and continue abstinent like athletes. This idea, deeply entrenched in the mind, may remain after marriage, and even although he desires to do so, a man may find it difficult to achieve intercourse.

Strong fears of this sort will probably require special treatment; but when present in a minor degree, all that is needed is patience and understanding on the part of the wife. If she realizes that her husband is in difficulties and is sympathetic and helpful, all will be

well. If, however, she sows resentment, impatience, or a lack of understanding, her husband's difficulties will be increased. The idea that he is bringing trouble on his mate adds still further to his anxieties. Oppressed with a sense of guilt, his confidence in himself will disappear, so that he finds that he is even less able to achieve intercourse than before. Nothing is so demoralizing to a husband than to have earned the contempt of his wife, and if she is misguided enough to give expression to it, she may convert what should be a temporary difficulty into a permanent disability.

Many of the difficulties which have been described would be avoided if all newly-married people would realize that for the attainment of complete physical adjustment time and patience are required. Months, or even years, may pass before complete satisfaction is reached. As a rule, it is the husband who attains this first, partly because he is more sexually mature at marriage, and partly because he achieves an orgasm more rapidly. This is almost inevitable, and he must not feel in any way guilty if he takes priority in this respect. Nature has so ordained it. But having satisfied his own needs, he must not rest content until his wife has obtained from intercourse the satisfaction that he has already achieved. She on her part must help her husband to attain this desired end, letting him know her requirements and asking him to correct what she finds distasteful.

It has been said that the pattern of sexual desire varies a great deal in different individuals. By this is meant that the setting which sexuality requires for its complete satisfaction, and the manner in which it is expressed is different in different people. Sometimes the individual variation is so marked that the sexual pattern may be regarded as abnormal. If, for example, sexuality becomes linked up with the idea of inflicting suffering, the condition is known as sadism, a name derived from the Marquis de Sade, a French nobleman, who was notorious for the sexual orgies in which he indulged, and for the fact that the orgies often culminated in the killing of his victims. We are not concerned in this work with such gross abnormalities of the sexual pattern, but it must be remembered that lesser degrees of these sexual deviations may crop up in people who otherwise may appear normal.

As examples of these less severe deviations from the normal may be mentioned instances of husbands who are only able to obtain complete satisfaction if their wives are wearing, for example, black stockings or a corset, or who, without having any innate vein of cruelty in their nature, have the desire to whip their wives before having intercourse with them. Although those who suffer from these

abnormal patterns of sex may realize how ridiculous their desire is, they are unable to put aside these curious fantasies. Unless the conditions are fulfilled, their sexuality is not satisfied. Frequently in a normal marriage, the conditions demanded cannot be satisfied, and therefore sexual intercourse is rendered either impossible or incomplete. Should anything curious be found in a husband's or wife's sexuality, it will be necessary to consult a medical man with special knowledge of these matters. The abnormality may often be corrected by psychological treatment.

III. DIFFICULTIES ARISING FROM THE ABSENCE OF CHILDREN

There can be no doubt that children strengthen and give meaning to a marriage and that difficulties are more likely to occur when they are absent than when they are present. It is only exceptionally that a couple decides from choice to remain without a family. Birth control is often used to postpone the advent of the first child and to ensure that subsequent additions to the family do not come too rapidly, but it is rarely employed to prevent the appearance of any children. Unless there are valid medical reasons why the wife should not be subjected to the strain of childbirth, the complete absence of children is almost always involuntary. The marriage is barren because one of the two partners is very infertile, or even sterile, or, more frequently still, because both are less fertile than they should be. Strange to say, lowered fertility is a very common condition at the present day, so common indeed that some doctors believe that civilised man has made for himself an environment so artificial in nature that it is having an effect on his powers to reproduce himself. Whatever the explanation may be, it is probably no exaggeration to say that one in every ten marriages in this country is likely to prove barren.

It is important that this fact should be known because many couples who want to have children postpone seeking medical help until so many years have passed that it may have, by that time, become difficult to undertake satisfactory treatment. Such couples have perhaps deluded themselves that because they were both in perfect health, it was extremely unlikely that anything could be wrong with their power to reproduce themselves. This is far from being the case. A condition of infertility is perfectly compatible with robust health, and it is only when a special investigation has been undertaken that the true state of affairs is revealed. If, therefore, intercourse has taken place frequently, say, once or twice a week, and yet at the end of a year no conception has occurred, a married

couple would do well to consult their family doctor. It is quite possible that measures taken then will prove successful, whereas if they were to be postponed till the wife was much older, they would have but little effect.

In the past it was always assumed that when children were not the outcome of marriage, the wife was responsible for this, and for centuries it was the custom to point the finger of scorn at the barren wife. Not infrequently she was subjected to prolonged treatment and even to operations in the hope of rendering her fertile. Fortunately this short-sighted view is no longer held, and it is more and more widely realised that in many cases it is not the wife, but the husband, who is mainly responsible for childlessness. What is the usual procedure in these cases? As a rule, the wife first consults the family doctor and after having heard her statement, he makes a general examination of her. If he can find nothing wrong with her he may suggest that both she and her husband should submit to a more searching investigation. On the whole it is easier to assess the fertility of a man than of a woman, and for this reason it is usually suggested that he should be examined first. At one time many husbands resented this suggestion. They felt that this raising of the question of their fertility cast a reflection on their manhood. But fertility has nothing to do with man's virility, or sexual capacity. The most virile of men may prove infertile, and a fertile man may be almost impotent. No reflection is cast on a husband's manhood by asking him to submit to examination. The examination consists of two parts, a general medical overhaul and an analysis of the semen. The latter is obtained either by masturbation, or withdrawal. It allows of a very accurate estimation being made of his fertility.

The examination of the wife is considerably more elaborate, but it need not inflict on her any pain. What is still more satisfactory is to know that treatment comparatively seldom necessitates an operation. Great advances have been made of late years in the treatment of infertility, and this treatment often takes the form of injections. As has already been stated, more often than not adverse factors are found on both sides, and this being so, both the wife and the husband receive some treatment. But although treatment inflicts very little hardship it often has to be very prolonged. No rapid result must be expected and both parties may be called upon to exercise a great deal of patience. The injections used are also likely to be very expensive, and unfortunately, at the present time, there are few clinics where they can be obtained free of charge. It is to be hoped that

when a Medical Service is established by Government this defect will be remedied.

There are cases, unfortunately, in which no amount of treatment proves of any avail, and when this is so the question of the adoption of a child will arise. This method of remedying the absence of children in the home often has very satisfactory results, and it is astonishing how soon the foster-parents are able to forget that the child is not really their own. But unfortunately so many couples have recourse to adoption that the supply of available children is not sufficient for the general need. Should it be the husband who is responsible for the barrenness of the marriage, there is yet another method of remedying it, namely, the insemination of the wife with donated semen. This method has been much more widely used in America than in this country and there are many people who consider it with disapproval. Whilst they regard insemination with the husband's semen as a method of overcoming his impotence as a justifiable practice, they believe insemination with donated semen to be immoral.

IV. FAILURES DUE TO TEMPERAMENT

In the previous paragraphs we have described as briefly and simply as possible some of the difficulties that may be encountered on the physical plane of marriage. Some of these obstacles to sexual harmony can be removed by patient co-operation between husband and wife, but some, being the result of the man's or woman's individual constitution and psychological make-up, are incapable of resolution. They must therefore be accepted as part of the husband's or wife's personality which is as natural to him or her as a tendency to seasickness or to outbursts of temper. A man does not marry only the plus qualities in his wife, he is equally married to her minuses; a woman must accept what she dislikes in her husband as well as what she likes. By effort some of the hindrances to marital harmony may be eliminated, but not all. What cannot be mended must be accepted.

But the chief cause of failure on the sexual side of marriage is not the existence of an irremedial defect. It is ignorance. How often does one hear these words uttered in the privacy of a consulting room: "Oh, if only my husband had known a little more before we were married, how much misery would have been avoided." Knowledge is power, and in no sphere of human activity is this more true than in the sphere of sex. One need not labour the point; it is implicit in almost every line of this book.

The second requirement for the overcoming of sexual maladjustment is tolerance. Difficulties must not be interpreted in terms of fault and guilt. In dealing with sexual difficulties we are not dealing with normal faults, but with physical and emotional idiosyncrasies; a man or a woman has been born with such a temperament, or as a result of his or her upbringing he or she has developed such a tendency. Commiseration may be called for, but blame is never appropriate.

The third necessity is for patience. Physical adjustment cannot be attained in a week; it can only come as the result of constant effort and hard-won experience. Let a man and his wife be quite outspoken about their difficulties, discuss them freely and combine together to find the remedy.

Modesty in the presence of a marital difficulty is uncalled for, and the idea that a woman should be ignorant of sexual matters a relic of a more hypocritical age. A woman is sexual as well as a man; it is her business to see that her needs are satisfied as well as his. "The first requisite for a mutually satisfying and enriching love-life in marriage is a frank and full acceptance of mutual capacities and needs," says Dr. Exner, while Havelock Ellis, the great pioneer of free discussion of sexual problems, has written, "Women whose instincts are not perverted at the roots do not desire to be cold. Far from it. But to dispel that coldness the right atmosphere is needed, and the insight and skill of the right man. In the erotic sphere a woman asks nothing better of a man than to be lifted above her coldness, to the higher plane where there is reciprocal interest and mutual joy in the act of love. Therein her silent demand is one with Nature's. For the biological order of the world involves those claims which, in the human range, are the erotic right of women." All the great authorities are agreed that frank and open discussion of a man's and wife's needs is a necessary step to the attaining of sexual harmony.

Sometimes knowledge, toleration and mutual effort are by themselves incapable of removing a difficulty. If the pattern of desire departs so far from the normal that it cannot be satisfied by ordinary marriage conditions, or if one or other of the two partners is suffering from some grave anxiety that cannot be put at rest, expert advice must be taken. For such cases skilled psychological treatment will be necessary before the obstacle to success can be removed. Here again let no blame be attached to the sufferer either by himself or his partner, but let him or her go to the psychologist in the same way as a patient with an aching tooth visits his dentist.

Peculiarities in sexual make-up are the psychologist's business, as a decaying tooth is that of the dentist. He will no more be shocked by what he is told than a dental surgeon will be emotionally disturbed by the sight of a carious tooth. All that he will consider to be his affair will be to understand his patient's peculiarities, discover their origins, and by psychological treatment bring about the necessary adjustment. And, just as it is inadvisable for the sufferer from toothache to put off going to the dentist until his tooth has decayed beyond repair, so it is unwise for the man or woman who has failed to overcome difficulties in marriage to postpone consulting a psychologist until things have become desperate. The earlier that advice is taken the quicker will the difficulty be righted.

So far we have considered only sexual difficulties as a cause of failures in marriage, merely stating that these may be aggravated or even initiated by lack of harmony on the intellectual or emotional planes. Now, however, that we have dealt with these definite sexual difficulties, we must turn our attention to some of the factors that may destroy marriage harmony.

All successful living is to some extent dependent on the possession of sound physical health. Illness is to be reckoned with occasionally, as consistently good health is given to comparatively few of us. When there is true love in the home, an illness will only serve to deepen it. But a persistently ailing or neurotic husband or wife imposes a great strain on the more healthy partner, and in the end may prove a formidable obstacle to a well-adjusted marriage. Successful marriage, therefore, like other of life's activities, is to a great extent dependent on the possession of sound physical health, and it would be wise for all people contemplating marriage to bear this in mind.

There are few men who are capable of making a success out of marriage with a consistently neurotic woman; there are comparatively few women who will remain content to be wedded to a persistently ailing man. This remark may enrage the romantic lover, but it will be more likely to be understood by the man or woman with actual experience of married life. We must not base our opinions on exceptional cases — and fortunately there are many examples of successful marriages in which one of the partners was an invalid—but on what happens to the majority of quite ordinary people.

Incompatibility of temperament is the usual reason for divorce advanced by the unsuccessful Hollywood couple. On being interviewed on the eve of her fourth marriage, the film star invariably states that her previous husbands were impossible, but that this is

a real love match. A year later she parts from her husband on the plea of incompatibility of temperament. These are really examples of emotionally childish people who, although they may cut great figures in the world by reason of some special ability, have never reached intellectual and emotional maturity.

In spite of the abuse of the term, incompatibility, a certain kernel of truth lies concealed in it. Dispositions and temperaments vary as widely as faces and expressions, and a difference of temperament that we would tolerate in a friend or acquaintance may reduce us to a state of chronic exasperation when we have to live with it the whole of our lives. Temperaments, therefore, need some testing out before they are subjected to the strain of marriage. Nor is such testing out best done in a situation in which both lovers are on their best behaviour, but rather in circumstances in which they are tired or upset, when things have gone wrong, and nerves are set on edge. Such conditions as these are more likely to provide a reliable test of temperamental qualities and incompatibilities.

At the same time we must not set our standard too high. It is felt, indeed, by the majority of people that to be married to a person of the same temperament would be tedious in the extreme; variety adds interest. But the variation must not be too marked. A certain agreement on fundamental issues, a way of looking at important things in the same way, a difference in temperament that is not so great that it prevents either from understanding the other's standpoint, this is what is needed for a marriage to be successful. A serious clash of temperaments before marriage is therefore a warning that should be heeded.

Strange to say, the strain in marriage comes mainly from difficulties over small things, from the nagging of life's routine rather than from divergencies of opinion over its bigger issues. A constantly recurring irritation over what a third party might consider a trifle is far more dangerous to domestic peace than the occasional cataclysm that descends on the home.

Just as there is likely to be a fundamental difference in the attitude of a man and a woman to the physical side of marriage, so there are likely to be differences in the attitudes of a husband and wife to other matters. Generalizations concerning the two sexes must be made with great care, but it is almost certainly true that emotions play a more important part in the life of a woman than they do in that of a man, that she is interested in personal relations, and be more in ideas and affairs.

Moreover, a woman often acts through the mysterious faculty to which the name intuition has been applied; she arrives at a certain conclusion, but is not always able to explain how she has got there. A man, on the other hand, is more likely to be guided by what he calls reason, and he will often employ his reasoning faculty to show that his wife is wrong. This display of logic is generally useless, for a wife is apt to show very little respect for a husband's arguments, and the fact that he has proved to his own satisfaction that she is wrong makes no difference to her attitude. Hence some of the long arguments that break out in the home, and men's frequently repeated assertion that women are unreasonable creatures. It must be admitted that the woman often arrives at the right conclusion in spite of the man's logic, and in spite of her inability to describe the steps by which she has reached her goal.

These differences between the male and the female are likely to be more accentuated at the time of the menstrual flow. It is then that the wife is apt to appear unreasonable and moody, and it is at these times that she is entitled to consideration on the part of her husband. He must remember that because of the more important rôle she is called upon to play in the carrying on of the race, she has, on the whole, a heavier burden to bear. Every month, certain profound physical changes take place in her, changes that undoubtedly have a repercussion on the whole of her psychology.

What is true of the menstrual cycle is still truer of the condition of pregnancy. Here, the effect of the physical disturbance on her intellectual and emotional life is sometimes so marked that to her husband and to her friends a woman may appear to have become another person. What before she disliked, she now likes, and what she once liked she loathes. Her whole temperament appears for the time being to have changed, and not infrequently her attitude to her husband is included in this change. He must realize that her moodiness is only a temporary state, as temporary as her physical condition.

Lack of consideration is productive of much domestic unhappiness, and it is thoughtlessness and lack of understanding rather than deliberate unkindness that are the causes of most broken romances. The husband who wanders about the house knocking out the ash from his pipe everywhere and anywhere has no intention of making things difficult for his wife, but if she happens to take a pride in her home, what he has done thoughtlessly and without even noticing it may easily be mistaken for deliberate provocation.

But sometimes it is a larger issue which is the source of trouble; such as the attitude of the couple towards children. It often happens,

for example, that a conjugally minded man marries a maternally minded woman; for the former, marriage stands mainly for a home and the companionship of a loving wife; for the latter, it represents a home filled with children. For a few years all goes well, and then the wife tends more and more to find satisfaction in her children. As a result, the husband, feeling that he is neglected, is disposed to lose interest in his wife. Less frequently, it is the parental husband who is married to a wife who does not want to be encumbered with children. If such a man finds himself mated to a wife who cannot or will not give him what he wants, the gate will be wide open to trouble.

These examples serve to emphasize how important it is that husband and wife should approximate in their relative interests towards each other and towards their children. The fact that birth control has allowed of a separation between the sexual and the reproductive components in intercourse, increases the likelihood of such difficulties arising in the present day. The modern wife who, in spite of her husband's desires, is determined to avoid childbirth, can do so. The man who has no desire for fatherhood can continue to have intercourse with his wife, and yet withhold from her the possibility of what she desires more than anything else—the birth of a child.

There are many men who, although they have taken on the new responsibilities of the home, still remain married to their business or profession. During their working hours, they expend all their energy in their offices, returning to their homes tired out, and in need of rest. It is likely that the wives of such men will find married life disappointing. Nor will it be surprising if eventually, the wife should turn elsewhere for her pleasure. Marriage is a constructive task in which both parties work for a mutual end, and the man who has no energy to devote to it is not likely to help in making a success of it. A man who is not prepared to give up some of the privileges he previously enjoyed for the sake of his home should remain a bachelor.

“To be a lover is easier than to be a husband. For it is more difficult to show intelligence every day than to make pretty speeches from time to time.”

BALZAC.

“Love one another, but make not a bond of love;
Let it rather be a moving sea between the shores of your souls.
Fill each other's cup but drink not from one cup.
Give one another of your bread, but eat not from the same loaf.
Sing and dance together and be joyous, but let each one of
you be alone.

Even as the strings of a lute are alone though they quiver with the same music.

Give your hearts, but not into each other's keeping,
For only the hand of Life can contain your hearts.

And stand together yet not too near together:

For the pillars of the temple stand apart,

And the oak tree and the cypress grow not in each other's shadow."

KAHILL GIBRAN.

If marriage is a constructive task on which two people are engaged, the less any difficult situations which arise are complicated by the intervention of third parties, the better. Whether the difference that has arisen between the two partners be a physical one connected with their sexual relationship, an emotional one or an intellectual one, does not matter; it is their private affair. If they can manage to discuss it in a more or less friendly atmosphere, see how it has arisen, and plan together for its removal, all will be well. Should, however, one or other decide to enlist the help of a friend or relative, what was before a comparatively small difference of opinion is likely to become a serious one. In time a private difference of opinion between a man and his wife may grow into a conflict between two parties, in which words have been said that will never be forgiven, and actions taken that will prevent all possibility of reconciliation.

In novels dealing with marriage quarrels the mother-in-law always appears as a sinister figure. She is the person who is behind the bickerings; she it is who adds fuel to the flames. There is some justification for the prominence of the mother-in-law in the story that deals with a broken marriage. The mother of the husband or of the wife—and more especially of the husband—from a psychological point of view occupies an important place in relation to the couple. There must indeed exist a certain rivalry between her and her daughter-in-law, for in a sense she has been displaced by her in her son's affections. Small wonder therefore that she should often cause difficulties, and feel that her daughter-in-law is not worthy of her son.

It is difficult for a mother to take a second place in her son's affections, and it is better that during the first year of their married life, whilst the two new partners are arriving at the necessary adjustment, the various in-laws should not see too much of them. Sometimes, of course, a daughter or a son is compelled to invite one of the parents to live in their home. This cannot be avoided if through ill-health or poverty a father or mother has become dependent on a child. But if it becomes necessary for a parent to live in

the new home, or for a couple to remain living in the parental home, it is of the greatest importance that the father or mother should avoid any interference in any conjugal difficulties which arise. It may, of course, happen that advice is sought in the hope that it will help them to overcome their difficulties. In this case advice may be helpful, but it should never be forcibly intruded.

Still more dangerous is it for the wife or the husband to enlist the help of a friend, even if that friend be a good one who has no intention other than that of arriving at an adjustment of the difficulty. It is very difficult for a friend to be impartial, and the slightest hint that the one partner is enlisting outside support is almost certain to antagonize still further the other. Few of us are capable of taking an unprejudiced view of a conjugal quarrel.

It may also be said on the subject of quarrels that when a difficult situation has arisen it is much better that the husband and wife should face it rather than pretend that it does not exist. As the presence of an active volcano is to some extent a safeguard against earthquakes, so an open recognition of a quarrel is safer than an underground rumbling of tempers. It is indeed probable that in the long run a single tempestuous scene is better than a long unspoken bitterness, in other words that anger is preferable to sulking. Some husbands and wives have a strong partiality for the behaviour of the ostrich, which is reputed to bury its head in the sand in order to ignore the fact that a storm is raging. By the maintenance of what they regard as a calm and unruffled exterior, ostrich-like husbands and wives try to disguise the fact that they are furious inside. Such disguises are as a rule very unsuccessful. Not only does the more ruffled partner easily see through the pretence, but he (or she) is still further infuriated by it. Better therefore an open eruption of the volcano than a long protracted underground earthquake.

A wife's or a husband's friends may provide a great deal of material for disturbances, quite apart from their interference in any quarrel. Jealousy is unfortunately a very common ingredient in the human make-up, and it behoves the male friends of the wife and the female friends of the husband to walk warily. To the jealous husband or wife an innocent friendship is liable to appear quite other than innocent. Love is strangely possessive; it wants everything for itself. It is also fearful, lest it should lose what it has got. A friend of the opposite sex is always a possible rival, and the more attractive he or she be, the more dangerous the situation. So some arrangement must be arrived at on the subject of friends, if quarrels are to be avoided.

Even apart from the intrusion of jealousy, friends often provide excellent opportunities for a quarrel. "By their friends you will know them" is a truism, and unfortunately the friends of the husband are not always the friends of the wife. Especially is this likely to be the case when the husband and the wife are of different temperaments. Then particularly are friends likely to provide opportunities for difficulties. It need not make much difference to friendship if we say, "I like you but I don't like your friends"; it makes a great deal of difference to conjugal peace if a man has to say this to his wife, or a wife to say it to her husband. For the fully developed personalities who wish to live in happy adjustment, the words of Kahill Gibran quoted previously embody the wisest counsel.

There are some who consider that in no circumstances is it justifiable to terminate a marriage. The Roman Catholic Church, for example, does not admit of divorce, however disastrous the union, and whether it has resulted in children or not. It will agree, however, to annulment of a marriage, provided certain conditions are fulfilled. We will first consider the question of the annulment of an unconsummated marriage, and then proceed to the more difficult problem of divorce.

The law considers that a marriage has not been consummated if penetration has never occurred. Even if the husband has succeeded in penetrating his wife on only one occasion, though intercourse has gone no further, and penetration has never been repeated, in the eyes of the law the marriage has been consummated. For a nullity suit to succeed, it must therefore be proved, first that penetration has not occurred, and second that there is little or no likelihood of it ever happening.

The responsibility for the failure to consummate marriage may rest either on the wife or the husband. In very rare instances a woman may be formed without a normal vagina, so that penetration would be an anatomical impossibility. Such an abnormality, however, would usually be discovered prior to marriage. When a wife is responsible, it is usually because she refuses to allow her husband to be intimate with her, either because she is unwilling, or else because she is so hysterical and frightened that she is unable to accede to his advances. If the husband, therefore, is able to prove that every time he has attempted to consummate the marriage his wife has become so resistant that it has been necessary for him to desist, he will be able to bring against her a successful nullity suit.

More often it is the wife who brings the suit against her husband. Marriage is a legal contract, and if a wife finds that her husband is unable to fulfil his sexual obligations to her, she can ask for the marriage to be dissolved. When the case is judged she must provide evidence, if she has not previously been married, that she is a virgin. Usually, the medical examination to prove this is made by one of the two Court Medical Inspectors, but if she prefers it she can get her own medical man to furnish the necessary evidence.

Sometimes this evidence is not available, either because the wife has been previously married, or else because some operation has been undertaken which necessitated a preliminary stretching of the entrance to the vagina. More often than not, the husband does not defend the suit, so that his testimony is not available. Should, however, he have consulted a medical man previously on account of his difficulties, the latter must give evidence to this effect, and state that in his opinion the husband's inability to consummate the marriage is incurable. Although it is not essential that the petition should be filed within a year of the marriage, unnecessary delay should always be avoided.

The question whether a husband's failure can be remedied by suitable treatment must of course rest in the hands of the doctor he has consulted. As has previously been emphasized, difficulties in intercourse are extremely common during the early years of married life, but most of these difficulties can be overcome provided suitable treatment be instituted, and provided the wife assists her husband to the best of her ability. It would therefore be a fatal mistake on the part of a wife to consider a nullity suit prematurely. Only if the medical adviser considers the situation hopeless, and can give testimony to this effect, should the marriage be annulled. Whether the difficulty admits of a remedy will depend to a great extent upon the help that the wife can give her husband. If she is willing to co-operate and is capable of displaying unlimited patience, a cure may often be effected. But the part that a wife married to an impotent husband has to play is not an easy one, and only a woman who is really in love will be prepared to undertake it. If, as sometimes happens, she has not only lost her affection for him, but also her respect, all treatment will be hopeless, and it is better that the practitioner should avoid embarking on useless measures. A marriage where both partners are at loggerheads, and a marriage, moreover, that has never been consummated, is best annulled.

V. THE TERMINATION OF A MARRIAGE

The desirability of terminating a marriage that has been consummated is a much more thorny question than the annulment of a marriage that has never, in the full sense of the word, reached the stage of being a marriage. No general agreement has ever been reached on the subject of divorce, and all that can be done is to advance certain personal opinions and to furnish material that the reader may use in reaching his own conclusions.

It is sometimes said that marriage is an entirely artificial product of civilization, and that it is therefore unnatural. This view is very prevalent in certain circles of society at the present time. We are told by people who hold it that amongst primitive people marriage, in our sense of the word, does not exist. Either they live a life of complete promiscuity, or else there is some form of group marriage. But is this true? All modern anthropological research shows that it is not. Everywhere, from the tropics to the Arctic, however primitive the people, we find some form of individual marriage. Everywhere the family exists as the fundamental unit of society. Even amongst the apes this is the case, and lower down still in the biological scale, amongst birds and fishes. Polygamy may be tolerated, that is to say the unit may consist of the offspring: three or four females and a patriarchal male, but essentially this unit constitutes a family.

When we consider further this building up of society on the fundamental unit of the family there is no difficulty in arriving at the reason behind it. Marriage, or the more or less permanent linking together of the two sexes, is necessary for the sake of the offspring. Until the young are able to forage for themselves it is necessary that they should be looked after by some responsible adults: and who are more suited to assume this responsibility than those who have brought them into the world? Since a considerable time may have to elapse before the young are able to become independent, some degree of permanency is necessary in the relationship between the parents. And because human offspring take longer to reach maturity than do the offspring of animals, the permanency must be greater in the case of the human family than in that of, say, apes or birds. It must also be remembered that maturity in human beings entails not only full physical development but also emotional and intellectual maturity. For the attainment of this emotional maturity a background of stable parental affection is essential.

In order to safeguard this permanency certain safeguards of the marriage must be instituted. For the sake of family stability certain

obligations are undertaken by the man and the woman. Human marriage has therefore become a legal contract drawn up between two people, which recognizes certain rights of the contracting parties and of the offspring that may result from their union. It must always be kept in mind that marriage is not contracted primarily to enable two people to gratify their sexual desires in a manner approved by society, but to safeguard the rearing of the family that results from this gratification. Marriage has been instituted mainly for the sake of the children.

To add further to the safety of the family unit, certain religious safeguards are superimposed on the legal ones; the marriage is confirmed and sanctified by the Church. This is a wise precaution, since some men and women who would be willing to break a legal contract hesitate to go against the teaching of their Church. The marriage is therefore doubly safeguarded by means of the religious sanction.

Bearing in mind the nature and significance of marriage we are now in a position to consider the complementary question of divorce. When is the termination of marriage advisable? To a member of the Roman Catholic Church only one answer to this question is possible—Never. In theory, if not always in practice, a religious man's actions conform to the dictates of his Church. If his Church has enacted that a marriage which it has confirmed is indissoluble, it must remain so for him. However unhappy he may be, so long as he subscribes to the doctrines of his Church he must go on with it. To the Protestant a loop-hole is presented. Provided he fulfils certain legal requirements he can dissolve his marriage and still remain a member of his Church.

There may be a few men and women who belong to no church, and who yet hesitate to break their marriage vows on social grounds. If marriage is essential to society any weakening of its bonds is to be deplored. But few people are willing to remain unhappily bound together simply for the sake of an institution which happens to be useful to society. On the other hand, many will sacrifice their own happiness for the sake of a more potent reason, namely their children; and it is the children who must always be considered in coming to any decision as to whether a marriage should be dissolved. If the marriage is childless the matter is comparatively simple. Should all efforts to live together have failed, and attempts to adjust sexually have miscarried, then it is surely better that the two should live apart. Marriage without love is in the writer's opinion far worse than

love without marriage. To live with and perhaps be intimate with one for whom there is no love entails a constant violation of all that is best in a man and woman.

If, however, there are children, a man and woman may decide that for the sake of their family they will sacrifice their personal feelings and continue to live in the same house, at any rate so long as the children need them. Separation or divorce may have a bad effect on the children, more especially on account of the fact that in order to satisfy the law no divorce can be amicably arranged, but must be fought for in an atmosphere of hostility and anger, usually further fouled by the addition of adultery.

On the other hand it must be remembered that it is very difficult if not impossible for people who are at loggerheads to continue living together without their children becoming sensitive to the troubled atmosphere which surrounds them. Every psychologist insists that children are more highly perceptive than the majority of adults believe. Even though no hostile words are spoken they sense the instability of their home, and this ever-present feeling of insecurity may in the end have a worse effect on their nervous systems than the complete separation of their parents. It is therefore important that before deciding to remain together an unhappy couple should make certain that they are capable of carrying through their difficult parts. Can they for the sake of their children live together sufficiently well to avoid the latter sensing the underlying disharmony? Unless they are sure of this it would be wiser not to make the attempt.

In certain cases separation or divorce is obviously better for the children, even though their parents are willing to continue living together under the same roof. A drunken father, a drug-addict mother or a mentally unbalanced parent of either sex may be responsible for such scenes in the home that the memory of them may have a permanent effect on the nervous systems of the unhappy offspring. At all costs they must be spared the infliction of such psychological trauma, and the more responsible parent will be well advised to seek what remedy the law can provide for such circumstances.

Summarizing therefore what has been said on this subject of separation and divorce, the individuals most to be considered are those for whom marriage has been instituted, the children. If it appears best for them that the parents should make an effort to continue living together when all love has disappeared, let this be attempted, at any rate during the children's more tender years. If

however the lack of sympathy between the parents is such that they cannot continue living together without their children sensing their hostility, it is better that they should separate.

Unfortunately divorce is generally resorted to for reasons quite other than those we have just been considering. The nominal cause is generally adultery, partly because the law in granting a divorce sets a premium on adultery and partly because sexual misdemeanours are given a position of exaggerated importance in marriage quarrels. A man may be guilty of every form of cruelty in dealing with his wife, but so long as he remains faithful to her in the legal sense, his conduct will be tolerated. A wife may treat her husband with less consideration than she shows towards the cat, but unless she has yielded to another man's attraction she can continue so to treat him with impunity. Let, however, one of the parties in a marriage give way but once to an extra-marital temptation, and the dissolution of the marriage becomes not only possible but in some cases inevitable. It matters not whether previously the home has been comparatively happy; adultery has entered the door, and as a consequence everything is at an end. Fortunately, however, greater knowledge is leading to greater understanding, and this irrational attitude is becoming less common. Let it be repeated, we are not advocating marital infidelity, but merely protesting against the importance given to sexual irregularities as grounds for divorce. This subject will be considered more fully in the following section.

A husband or wife can now obtain divorce on other grounds than adultery; for desertion, cruelty or hopeless insanity. It must be remembered, however, that whereas a single proven act of adultery is sufficient in the eyes of the law for the granting of a divorce, the proving of desertion, cruelty or insanity is subject to a number of intricate rules, so that they are more difficult grounds for the obtaining of a divorce. The least difficult of the three is desertion. The Matrimonial Causes Act of 1937 provides that a divorce can be obtained on the grounds of desertion for three years and upwards. It must be shown, however, that the innocent party has not agreed to the desertion, but has made every effort to induce the partner to return.

Cruelty, if it is to be grounds for divorce, must be such as to endanger the life or health of the innocent party, and the fact that one partner has consistently ridden rough-shod over the feelings of the other is usually insufficient to constitute a legal definition of cruelty. Cruelty, as the law usually understands it, is physical ill-

treatment, though mental cruelty can be regarded as legal cruelty if its effect is such as really to endanger the health. This is, however, by no means easy to prove.

Insanity is only grounds for divorce if it is incurable, and if the respondent has been under care and treatment for at least five years immediately preceding the petition for divorce. This care and treatment must consist of detention in some home or institution for the treatment of lunacy. Detention as a criminal lunatic, or even detention in the form of life-long penal servitude are also grounds for divorce.

Finally the law will grant a divorce to any wife whose husband has been proved guilty of sodomy. Although this is not an accusation frequently brought against a married man it is not outside the realm of possibility.

Many couples so dislike the publicity attached to divorce proceedings that they prefer, if they are no longer able to endure living together, a deed of separation, that is to say a legal arrangement for the maintenance of the wife in a separate establishment. If the husband's income is not fixed, it is usually arranged that the payment to his wife shall be on a sliding scale, and dependent upon any increase or decrease in his salary or wages. Also, it is usually arranged that this payment shall cease if she should commit adultery or molest him in any way. The deed of separation also makes provision for the rights of the parents in regard to the children. It is customary to hand these over to one or other of the parents, but to allow the other what is termed "access" to them. Access means that the other parent shall have the right to see the child or children from time to time, as agreed upon between the two parents. Not infrequently, the arrangement is that the mother shall retain custody of the daughter and the father that of the son. A deed of this nature should always be drawn up by a solicitor, or, if the means of the parent are sufficient for this purpose, by two solicitors, one acting for the husband and one for the wife.

While separation is more frequently resorted to than divorce it is an unsatisfactory solution in that it deprives both partners of the opportunity of re-marriage, and thereby creates conditions provocative of illegal unions and of sexual promiscuity.

This section does not deal with sexual ethics. It does not examine the code of sexual morality existing in Britain or any other country at the present time and decide whether it is good or bad. It accepts what are considered to be decent standards of behaviour. At the same

time, since an infringement of accepted standards on the part of either the husband or the wife is sometimes the cause of a marriage being wrecked, it is impossible to make no reference to sexual morality.

The acceptance of some code of decent behaviour is essential to the survival of all communal living. We cannot live entirely as we like, paying no respect to the rights and feelings of our fellow creatures; we must subscribe to some accepted standard of behaviour. This is particularly necessary with regard to our sexual activities, and therefore all communities protect this standard by certain laws and conventions. At the same time it must be remembered that the laws under which we live are the product of the time and place in which we live. The infringement of every one of the current laws of sexual morality has at one time or place been looked upon as legitimate, and actions which we now regard as moral at one time or in one place have been looked upon as immoral. In the less westernized parts of Japan at the present time a guest is invited to share the bed of his host's wife or daughter if he passes the night in his house. Not to offer a guest this right would be an infringement of the laws of hospitality. So also is it said in the Bible that if a wife remains barren because of her husband's inability to have children, the husband's brother shall raise up seed for him. Such conduct was then regarded as not only permissible but proper.

It therefore seems a pity to the writer—and this is his own personal opinion, and therefore must not be given undue weight—that so many marriages should be wrecked on account of some sexual misdemeanour on the part of the husband or wife. There is undoubtedly an excuse for the severity with which a wife or a husband looks upon any suggestion of infidelity on the part of the other. Both the legislature and the Church place great emphasis on sexual misdemeanours and for a long time adultery was considered the only legitimate grounds for divorce. A man might inflict on his wife every cruelty of which he was capable, but unless he added infidelity to his faults she had no legal redress.

So also is there excuse for the harsh sentences sometimes imposed by the law on convicted homosexuals, even though to a true homosexual the homosexual relationship is as natural as heterosexual intercourse is to normally-constituted men and women. This harsh attitude of the Church and of the legislature to sexual irregularities is based on their desire to safeguard marriage. But the same excuse is also seized upon by the affronted wife or husband in order to

justify anger felt for the partner's infidelity. Even a slight indiscretion on the part of a wife may be sufficient to antagonize for ever her husband, or vice versa. Proprietary rights have been flouted, self-pride affronted and, consumed with jealousy masquerading as righteous indignation, the husband or wife feels that the marriage has been wrecked. All this is done in the name of morality.

Some thirty years ago a picture hung in the Royal Academy entitled *The Fallen Idol*, by the Hon. John Collier. It portrayed a beautiful wife kneeling at her husband's feet in tears, while the husband, with tragedy written in every line of his face, looked with blank despair into the distance. The picture received much approval at the time, for it reflected the conventional attitude to marriage. The onlookers' sympathy was entirely with the man, for the woman had sinned and a happy marriage was, as a result, at an end. The husband probably did the "right" thing, settled a small annuity on his wife and left her, to enjoy his honourable solitude and to brood continually on his tragedy. Fortunately the attitude of men and women to sexual irregularities in marriage is now less uncharitable than at the time of the painting of this picture, and there are countless happily-wedded couples who have not only forgiven but forgotten an incident that once seemed to threaten their happiness.

Do not let it be supposed that the writer is encouraging a lax sexual morality for married couples. If two people are happily adjusted there will be no temptation for either of them to go elsewhere for sexual satisfaction. It is only where there is sexual maladjustment or at any rate incomplete satisfaction, that this temptation exists. A desperate husband once came to the writer saying that he was the most contemptible fellow crawling on God's earth. He had been unfaithful to his wife, and she had discovered his infidelity. Further investigation showed that his sexual life had hitherto been one of continual frustration, for his wife considered sexual intercourse as a low animal activity for which her husband should be ashamed of harbouring any inclination. He had therefore had to resort to masturbation whenever sexual desire became overwhelming in him. During a temporary absence of his wife he had met a sympathetic woman, and had "fallen." At a later visit the writer had an opportunity of talking with the wife. She was so wrought up over her husband's infidelity as to be on the verge of a nervous breakdown. Later she retired to a nursing-home in order to enjoy an undisturbed few weeks during which she could brood on her grievance. Her husband was retained in an attitude of

ignominious prostration and has not yet been even officially forgiven.

The plea that the writer would make is not for a greater laxity in sexual morality but for a more merciful attitude towards those who, because of a failure to obtain sexual adjustment within the marriage bond, have been tempted to find it elsewhere. Stripped of its trappings, the righteous anger of the injured party is not anger because a moral law has been infringed, but because self-pride has been injured. That a wife has looked with favour on another man, that a husband has found another woman attractive, is such gall and bitterness that a marriage, even although it has hitherto been a happy one, must be brought to an end. This is the real situation, however much the injured wife or husband may cover their feelings with moral justifications.

Marriage, like the Sabbath, was made for man and not man for marriage. There is need for a code of sexual behaviour, but no need for the offering up of human sacrifices in its honour. The law must be tempered with mercy, and if a wife or a husband cannot truly forgive a partner, at any rate let it be openly recognized that the marriage has been wrecked through injured self-pride rather than through immorality.

CHAPTER FOURTEEN

WHY MARRIAGES FAIL—THE SOCIAL ASPECT

By H. E. NORMAN

O.B.E.

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THE family as the unit of society has existed since the dawn of the human race for the nurture and upbringing of a new generation, for the protection of the woman in her time of need and for the companionship of husband and wife. Marriage is the seal upon a declaration of intention to set up such a unit within the social group, and the success or failure of the union must be measured by the extent to which it fulfils its true purposes. The future of the race depends upon the health and wellbeing of its family units; therefore the success or failure of a marriage is of even greater importance to the community than to the individual men and women who bind themselves together in matrimony.

The great majority of marriages do in fact fulfil their proper purpose, and in so far as they succeed they are thrice blessed: in the benefits that accrue to the coming generation, in the companionship of husband and wife, and in the instinctive content of parents who see themselves again in replica in their child. But happy marriages must not be expected to happen by chance.

The family unit is incomplete without children, and certain basic principles of biological selection must be observed in the choice of parents. This fact is consciously or unconsciously recognised even amongst primitive peoples; so, too, but in lesser degree, is the fact that both physical and mental health in adult life is patterned by the environment of childhood; but it is not so generally appreciated that the principal factor in the environment of a child is the parents themselves and their moral standards and attitude to life.

There are about twelve million families in England and Wales and some 400,000 marriages are contracted annually. Just before the first Great War 7,000 applications were made to the Courts in a year for divorce and 577 decrees were granted in 1913; in addition 5,000 separation orders were made by magistrates in the Summary Courts. In 1936 the Divorce Courts granted 4,000 decrees of divorce

and 6,000 separation orders were made by the magistrates. During the second World War the position deteriorated and in May, 1946, the Attorney-General, in reply to a question in the House of Commons, stated that the number of applications for divorce had risen steadily until they reached 25,000 in 1945 and 20,000 divorces had been granted in that year. He said there were, at the time of his statement, 43,000 cases of Service men alone waiting to be brought before the Courts and in efforts to meet this situation the Law Society was operating six separate units or teams between whom the pending cases were distributed. The teams were dealing with the cases at the rate of 4,000 a year; at the end of 1946 there would be 35 such teams working and it was hoped they would step-up the rate of disposal to 20,000 a year.

Before attempting to draw conclusions from these figures it is necessary to get some perspective in them by looking farther back than the war of 1914-18. One hundred years ago jurisdiction in matrimony was in the hands of the Church, and the bond between husband and wife could only be dissolved by an Act of Parliament in a particular case. The Matrimonial Causes Act of 1857 transferred the jurisdiction to the Divorce Courts and dissolution was made possible to a husband upon proof of adultery of his wife; and to a wife upon proof of adultery plus desertion by her husband. In 1923 divorce was made possible to a wife on proof of adultery only. Steadily the number of applications increased, but so, too, did the population, which has more than doubled itself since 1857. The Married Women's Acts, 1895-1925, which gave power to magistrates in Summary Courts to make separation orders, and order for payment of maintenance against defaulting husbands, still further stimulated applications to the Courts for redress of matrimonial grievances, and in 1937 two important amending Acts were passed: Mr. A. P. Herbert's (now Sir A. Herbert) Matrimonial Causes Act, which widened the grounds and improved the facilities for divorce, and the Summary Procedure (Domestic Proceedings) Act, which set up special Magistrates' Courts with simplified procedure for the hearing of applications for maintenance and separation orders.

Each of these reforms in law and procedure was followed by an increase in the number of applicants to the Courts for each progressive step was framed to meet hard cases that had hitherto not come within the provisions of existing legislation. But increase in popula-

tion, the unsettlement of war and increased facilities to meet hard cases are not sufficient explanation of the continuous rise in the number of broken homes. A marked change appears to have occurred in public opinion on the subject of marriage and of sexual relationship generally. Very little scientific data exists from which any useful conclusions can be drawn about the causes of this change, and it might do more harm than good to resort to speculative conjecture, but if 400,000 marriages are contracted annually and in the same period 25,000 couples appear before the Divorce Courts, while another 25,000 have recourse to the magistrates for adjudication and settlement of their matrimonial disagreements, it means that a great many marriages are not fulfilling their proper purpose and that family life for a very large percentage of the rising generation must be so defective that the time is ripe for serious action to prevent further drift and hurt to the social health and security of the nation.

Before framing the Domestic Proceedings Act of 1937 the Home Office instituted an enquiry into how domestic applications were being dealt with in the Magistrates' Courts, and an analysis of the total number of applications to the Courts in a period of three months in 1935 showed that 6,222 applicants came to the magistrates in that period and 846 orders were granted; the orders were made in about one-sixth of the cases dealt with in Borough areas; in one-third of the cases in County areas and less than one-tenth in the Metropolitan area, where the Courts were presided over by stipendiary magistrates who had the assistance of a well-defined service of social help by probation officers. A later enquiry made by the National Association of Probation Officers showed that in one large industrial town 500 applications were made to the Magistrates' Court during 1936; in 397 of these cases the immediate needs of the applicant (invariably the wife) were met by advice and help, and of the 193 applicants who elected to bring their cases into Court it was found that only 87 succeeded in producing legal evidence upon which the magistrates could make an order. In another industrial town of 140,000 inhabitants, 357 applications were made during 1938, and it was found that 169 of the complainants were satisfied with advice and social help; in the remaining 188 cases in which summons against the husbands was granted it was found that "drunkenness, sexual promiscuity or temperamental maladjustment was a factor in the breakdown of the family relationship."

In passing the amending legislation of 1937, Parliament had cognisance of these experiences of the Courts, and one of the features

of the new legislation was the institution of a service of conciliation, which in effect means that Parliament intended the magistrates to discover, if they could, the real causes underlying the disputes which they are called upon to adjudicate. The Domestic Proceedings Act provides for specially constituted Courts, if possible apart from the ordinary police charges, provided over by a Bench of not more than three justices, one of whom should be a woman; in London the Court is presided over by a stipendiary magistrate sitting alone, and in the City of London the Lord Mayor and Aldermen constitute the Bench. Restrictions are placed upon the presence in Court of any but those who have business actually connected with the case, and the press is permitted to publish no details of evidence laid before the magistrates, but only the names of the contestants and the findings of the Court. The spirit underlying the Act is that the proceedings shall be as informal as possible and directed in the first place to reconciliation of the parties; in giving evidence, for instance, it is permissible for husband and wife both to remain seated and not to have to undergo the ordeal of, and the bitterness arising from, formal evidence from a witness box.

In the majority of cases the parties are not represented by solicitors; usually the husband has deserted or failed to support his family, and the woman, after exhausting the possibility of credit from shopkeepers, seeks the assistance of the magistrates in bringing her man to a more amenable frame of mind; or she may have had to apply to the social welfare or public assistance officer for food and shelter; in the latter case her immediate material needs will have been met, but the local authority is not empowered to continue providing for a deserted wife who refuses to take legal action against her husband. The applicant in the first instance usually sees the Clerk of the Court or his assistant, who will admit her to make personal application to the magistrates for issue of summons if she is found to have any legal grounds for action. After hearing the application the magistrates will customarily refer her to the probation officer, whose duty it is to give a patient hearing to her story and then make efforts to see the husband and hear what he has to say. Long experience has shown that the best interests of the family are not likely to be served by hastily bringing husband and wife into open conflict before the Court.

A careful study of both sides of the case usually makes it possible for some of the underlying causes of the trouble to be identified and located: perhaps a difficulty related to employment and inability

to make both ends meet, for which the probation officer may find a solution; or physical or psychological ill-health in which expert medical advice is needed; but very often, as we have seen in the analysis of cases in one of the industrial towns quoted, some definite defect of character or bad habit may have to be dealt with. In too many cases the social worker finds evidence of a serious lack on the part of one party, or the other—or both—of a proper sense of marital and parental responsibility and often room for elementary knowledge of the art of housewifery; while cigarettes, cinemas and drinks always seem to peg out claims in the wrong order of priorities in expenditure from the family purse. So much of the behaviour that leads to matrimonial disputes seems, on the face of it, to be due to sheer immaturity: the husband who expects to find again in his wife the mothering he was accustomed to, or was deprived of, in his childhood and adolescence and who reacts with childish ill-temper whenever he cannot get whatever he happens to want at the moment; the wife who, true to her romantic film education, means to make the wedding day "the one great day of her life" and is very disappointed to find in the daily round, the common task, of life that unlike the toad who became a prince, *her* fairy prince seems to persist in following the reverse process. No one, of course, expects men and women to be fully mature in mind and attitude to life by the time they reach the minimum age for matrimony, but perhaps a great deal of the mother-in-law problem would be eliminated if, when the young couple first begin to run back home for sympathy, they could be made to realise that it is indeed almost an automatic rule of adult life that as a man makes his bed so he must lie on it.

Often unhurried conversation over these and similar points, coupled with an unobtrusive statement of the legal responsibilities and liabilities of both husband and wife, will help the couple to talk, or argue, themselves into a solution of their own problem, and in a very large proportion of cases reconciliation is hailed with a far greater sense of relief than separation and a maintenance order.

In cases where the conciliator fails to bring the couple together again the law provides for the drawing up of statements of allegations by both husband and wife; this is a useful provision, for disagreement reduced to writing sometimes sounds not nearly as sensible as when it is presented in heated argument. The probation officer may be asked to assist in writing up the statements of allegations which are then read over to the parties and signed in readiness for use when the summons against the husband is called in Court.

The grounds upon which the Court may make orders are clearly defined and cover the following points: The husband must provide adequate living accommodation and maintenance, within his means, for his wife and children, including any child of his wife's at the time of the marriage; and he possesses the right of determining where the family shall live, and his wife shall cohabit with him provided that his choice of the home is not unreasonable. If the husband fails to provide maintenance, the wife is entitled to obtain what credit she can on his account for food and lodging and the necessaries of life, and thereafter she is entitled, if she is destitute, to apply, as we have already seen, to the local authority for public assistance.

Defiance by the husband of any order of the Court is punishable by imprisonment. Often a man quite wrongfully assumes that appearance before the magistrates and committal to prison ends the matter; but desertion and refusal to maintain is a continuing offence which is renewed daily so long as it continues. The husband's liability towards his wife continues until her death unless she commits adultery or, in the absence of a separation order, deserts him. Excepting in such a case she is not prevented by a maintenance order from using her husband's credit to obtain what necessaries she can for herself and children and liability for the children continues until their sixteenth birthday.

The real importance of a separation order by the magistrates is that it relieves the parties from the legal duty of cohabiting with one another. Separation can be legally effected either by mutual agreement, or by an order granted by the magistrates, or by a decree of separation granted by a Divorce Court.

Judicial separation by an order of the Divorce Court is now seldom applied for, since the proceedings in the Magistrates' Court have become simpler and equally effective and can be instituted without incurring solicitors' fees. Divorce is obtainable in all cases where it is possible to obtain a judicial separation order, and the principal advantage of taking proceedings in the higher court is that such an order possibly carries with it a maintenance allowance of more than the £2 a week for the wife and 10/- for each child, which is the most that may be granted by the magistrates.

In the case of a maintenance order against a man serving in H.M. Forces the paymaster is notified by the clerk to the Court and the amount of the maintenance payments is deducted from the man's pay. Under South African law power exists to give notification of a

maintenance order to a man's civil employer, who is required to deduct the amount from the man's wages and pay the money to the clerk to the Court. Similar power does not exist in this country.

In cases of refusal by husband or wife to cohabit, and where either or both shirk the ordeal of facing a Court, voluntary agreement to separate may be made by direct mutual agreement of the parties or through the medium of a solicitor.

Although we have stated that the person who applies to a Court for a maintenance order or for maintenance and separation is often referred to a probation officer for guidance and advice, it is not the duty of the probation officer to act as a legal adviser either to the wife or the husband. The probation officer is the social adviser of the Court, and his duty is to assist the Court in arriving at a just and effective solution of the family problem, keeping in mind the ultimate welfare of the children who may be victims of the broken home.

Divorce or judicial separation may now be granted on any of the following grounds:

- (a) Adultery by either husband or wife subsequent to the marriage.
- (b) Desertion by either party, for a period of not less than three years immediately preceding the petition to the Court.
- (c) Cruelty by either party since the marriage was contracted.
- (d) Mental derangement of either husband or wife during a period of five years immediately preceding the application.
- (e) Rape, sodomy or bestiality by the husband.

A Court may annul a marriage on any of the following grounds:

- (a) Impotency of the respondent.
- (b) Refusal by either party to consummate the marriage.
- (c) That either husband or wife was at the time of the marriage epileptic, mentally defective or subject to recurrent mental disorder.

Judicial separation may also be granted for non-compliance with an order for restitution of conjugal rights.

The grounds for divorce and judicial separation are to be found in the Matrimonial Causes Act of 1937, but litigants concerned in such proceedings need the advice and help of a solicitor. Even the simplest case may involve a legal interpretation of such terms as domicile, condonation, illegitimacy; complicated issues may arise in

connection with costs, damages, maintenance and custody of children; and the actual pleadings before the judge in Court must be done by a barrister instructed by a solicitor; consequently there is much more formality in Divorce Court proceedings than in domestic applications before the Magistrates' Courts, and divorce cases cost money.

The costs of divorce may range from £50 to £60 for a straightforward undefended case to a very much larger sum for a protracted defended suit, but several well-known organisations exist for the purpose of rendering free legal aid to applicants who are unable to pay solicitors' fees. In such a case the petitioner may have to pay no more than the solicitor's out-of-pocket expenses, amounting perhaps to £10.

In the case of men and women in the Forces the usual procedure during the war was for the complainant to seek the aid of the welfare officer attached to his unit and tell him his story; the welfare officer would then, if necessary, ask a local social worker to get into touch with the husband and wife concerned. The facts of the cases as far as they could be ascertained would be referred by the welfare officer to the legal branch of the Service concerned, and where grounds for divorce were found to exist the case would in due course be placed on the list of those awaiting hearing in the Divorce Court, the subsequent proceedings being entirely in the hands of the lawyers and the cost to the applicant being limited to necessary out-of-pocket legal expenses. In civilian cases where the petitioner is without means application should be made to a Poor Man's Lawyer's office, but where the person is able to pay solicitors' fees the usual procedure is for the complainant to lay the facts before a solicitor and tell him also any relevant facts in his own behaviour. The solicitor will then sort out legal evidence from what is often a tangled skein of emotional distress and give an opinion on the chances of a suit succeeding before the Court. Details of the allegations would be checked and witnesses located, and this might take time and run up the costs.

In the course of this preliminary stage of the proceedings the solicitor would no doubt watch for any inclination on the part of his client towards reconciliation, and perhaps the parties might be brought together again, but in the normal course of events as soon as the legal evidence is collated it is used to frame the petition to the Court, and a copy of the petition is served upon the respondent and

upon the co-respondent if there should be one. The wording of the petition is not conciliatory:

"That the respondent frequently committed adultery; or lived, cohabited and habitually committed adultery with.....
Wherefore your petitioner prays that the marriage may be dissolved, that the respondent may be condemned in costs of his suit, and do pay the petitioner such sums by way of alimony *pendente lite* as the Court shall think just."

In this formal service of the petition upon the respondent there seems to be something akin to the medieval custom of throwing down the gauntlet in combat; for from this stage the chances of reconciliation rapidly recede. If the respondent decides to contest the suit he will at once engage a solicitor, or he may decide to let the suit go against him by default; in either case the proceedings now become a purely legal contest conducted by the lawyers. Yet most of us will be able to recall at least one case where the divorced husband and wife have afterwards regretted the precipitancy of legal action taken under the stress of great emotion. Before formal service of the legally-phrased petition expert assistance might enable the couple, in a large percentage of cases, to get an objective understanding of the real causes underlying their disputes. Sexual disloyalty is the grievance commonly presented in divorce petitions, but it is easy to mistake the symptoms of a disease for the disease itself; this is very true of matrimonial problems. Sexual disloyalty, more often than not, is a result and not the cause of matrimonial unhappiness; indeed, it may be only one of many possible behaviour reactions from a sense of frustration, disappointment and misunderstanding which has led to an intolerable sense of conflict and irritation. Irritation is not a legal ground for divorce, but it is an easy step from irritation to the major ground of sexual misconduct; and so it comes about that a great many divorces are arranged, perhaps almost unconsciously, by the parties concerned before ever the divorce petition comes into the court.

In our earlier discussion of matrimonial applications before magistrates it was suggested that a social study of such cases discloses that immaturity of character is an over-riding factor in the disagreement. A large percentage of the applicants in magistrates' courts are persons who come from the humbler walks of life who have found it not easy to build around them a happy family circle. If one may judge by war-time correspondence in the files of welfare officers many of the spouses in the thousands of divorce cases now pending appear to

regard divorce as a matter of almost every-day routine, with little or no thought of its effects upon the children who happen to have been born of the marriage; "When he's demobbed, Mum's taking the kids, and we are getting our divorce," and this statement is often the conventional prelude to one or more announcements of engagements to remarry. But if immaturity of character is to be judged by standards of responsibility towards social obligations, Divorce Court records show that it is by no means confined to the unprivileged and uneducated.

In Britain any two persons of opposite sex over the age of sixteen years may marry, provided that if under 21 they have the consent of their parents, and provided also that they are not already married or legally incapable of marriage. Incompetence in earning a livelihood, in keeping house, in bringing up children, or the possession of a bad social or criminal record, are not legal barriers to marriage; and it is not surprising that in a certain percentage of cases the State is compelled to shoulder the responsibility for the maintenance of children whose parents prove incapable of bringing them up.

The general trend of Divorce Law reform has hitherto been towards alleviating the lot of the innocent parties and making the best of a bad job by permitting remarriage as far as reasonably possible where there seems no chance of reconciliation. But divorce statistics now show that the State has not succeeded in finding a solution to the problem of the broken home, and there are increasing evidences of public concern about the existing situation. Voluntary effort is gradually being organised for the purpose of giving social help in adjustment of matrimonial disagreements; there is a widespread movement in favour of education in sex relationship, and the Home Office has recently set up a Departmental Committee of Enquiry into administration of the Divorce Law and the question of instituting a service of reconciliation in cases before the Divorce Courts.

The attitude of the Church towards the problem is indicated by two recent Episcopal statements. In his presidential address to the Canterbury Diocesan Conference in July, 1945, the Archbishop of Canterbury said that very many marriages had been broken up or imperilled as a result of war separation, and the problem of helping personal readjustments and advising those whose marriages were in danger was a national problem which could only be tackled on a national scale. In every town there should be a centre where married people could discuss their troubles and obtain expert advice con-

fidentially; the aspect of those troubles were manifold— spiritual, medical, psychological, legal. It should be regarded as a crime against society if anyone by word or deed did anything to cheapen ideas of marriage or weaken the obligations it carried.

At the Convocation in York in May, 1946, Archbishop Garbett said that the law of the State and the law of the Church on marriage were different, and it was folly to ignore the differences. The State had to legislate for large numbers of its citizens who did not accept the Christian standard, while the Church had its own laws and rules for those who accepted its claims. He believed that if all marriages were taken in the registry office it would be easier for the Church of England to confine subsequent use of the marriage service to those who were its own members and who accepted the teaching that marriage was a lifelong union. Before resort was had to divorce there should be every effort made to bring about reconciliation, and when reconciliation had failed and divorce had been granted, the Church still had a pastoral duty.

The setting up by the Government of a Departmental Committee of Enquiry into legislation governing any social problem is the recognised step to amendment of the law, and there will be warm support for any constructive measure directed towards healing this existing serious danger to the social health of the State.

CHAPTER FIFTEEN

THE UNMARRIED

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I. WHY PEOPLE DO NOT MARRY

THE unmarried population of the country consists of two distinct groups of people; those who are likely ultimately to get married, and those whose unmarried state is permanent. The first group includes potentially all young people, although some of them, particularly among the girls, will in time join the second group.

The subject of preparation for marriage, including the ideas current to-day in regard to pre-marital sexual experience, has been dealt with elsewhere in this book. We will in this chapter, therefore, limit ourselves to the discussion of the problems and difficulties, sexual, emotional and social, of those unmarried people for whom marriage is almost certainly excluded from the experience of the future. These are, in the main, older people who have passed the usual age for marriage, but the group also includes people who, for one reason or another, have taken a decision against marriage.

There is a profound difference here between the men and the women. Men are in a minority in this country. Therefore there will never be quite enough husbands to go round, and there will always be rather too many potential wives. Figures will make this abundantly clear. As is generally known, more boys than girls are born, and the census of 1937 showed that in the youngest marriageable age-group, that of the fifteen to nineteen-year-olds, there was actually an excess of males over females to the number of 36,200. Various social factors, more especially that of emigration, then arise, and in the second marriageable age-group, that of the twenty to twenty-four-year-olds, the excess of boys is changed into an excess of girls of an almost similar figure; 34,000. This excess of women over men steadily increases with increase of age, until it reaches the figure 244,500 in the age-group forty—forty-four, giving a total excess of marriageable women over men of half a million.

It follows that a very large number of women must in any case remain unmarried simply for lack of husbands. But the figures also indicate that polygamy would not, as some people are ready to suggest,

offer a simple solution of the problem. The excess in the younger age-groups might be modified by such a change in social custom, but the excess in the older age-groups would still persist and show the same tendency to increase as age increases. Moreover, from the psychological and emotional point of view, such a solution could never be successfully imposed on the traditions relating to love, marriage and home that are deeply inherent in the life of western civilization.

To return to the fact of the numerical excess of women; it is worth noting that the Great War of 1914-1918 was a potent factor in disturbing the normal numerical relations between the sexes. This is illustrated by the fact that in the County of London the excess of marriageable women between the ages of twenty and sixty increased from 153,000 in 1911 to 217,00 in 1921. We may expect, therefore, an intensification of the problem of excess women in the coming years, for in spite of the changed conditions of modern warfare, war still takes greater toll of men than it does of women.

The implications of this situation are very interesting. If men do not marry, one may assume that it is because for some reason they do not wish to, or because of some psychological difficulty in their make-up which makes them, consciously or unconsciously, unable to face marriage. In view of the strong biological urge towards mating and parenthood, it is not unjustifiable to suspect that the first group also includes a certain number of psychologically maladjusted men, for whom the decision to remain unmarried, whether it be based on religious or on sentimental grounds, or on grounds of practical convenience, represents deep down a fear or a fixation barring the way to marriage. To say this is, however, not to deny the existence of perfectly normal mature and psychologically well-adjusted men who remain unmarried all their lives. No generalization ever covers all cases, and this is particularly true in respect of psychological generalizations, for nothing is more complex and individual than personal adjustment to life and its demands. The outward existence, as regards circumstances and mode of life, of two individuals may be almost exactly similar, yet close psychological investigation may reveal in the one case the most rational adjustment to external circumstances, and in the other the rationalization of a retreat from demands that could not be faced.

Where women are concerned, there are likely to be among the permanently unmarried many who have failed to marry because of psychological maladjustments, but there will also be many others whose failure to find a husband is simply the result of the large

numerical preponderance of women over men. Hence the discussion of the problems of the unmarried woman means the discussion not only of psychological difficulties which lead to the evasion of marriage, but also of practical problems relating to the coping with an unavoidable situation which runs counter to natural inclinations. In the case of men we need only concern ourselves with the purely psychological problems, since those men whose permanently unmarried state is the expression of a rational and psychologically justifiable adjustment to circumstances are likely to have found for themselves the solution of the emotional and practical problems involved.

II. THE UNMARRIED MAN

What prevents men marrying, when, to women, the way seems so easy for them? They have only to look round and choose. Here modern psychology has everything to teach us. It is true that for a man marriage is, from the material point of view, a bigger undertaking than it is for a woman, because of the financial responsibility involved. But there are also many difficulties in the course of the psycho-sexual development of the boy child which, if he is unable to surmount them successfully, may lead to fear—sometimes conscious, sometimes unconscious—of marriage, or to fear of normal sexuality in general. To find the source of these, one has to go back to the earliest relationship between the mother and her son.

I should state here, and ask my readers to remember in all accounts of emotional experience in infancy, that this experience is never explicit, for it takes place before the development of language. The small child has no comprehension of the situation as it actually is, and he has no words in which to express his feelings. Our knowledge concerning the intensity of these feelings, the child's fear of them, the means by which he tries to master them, and his interpretation of them, is gathered from the psychological analysis of adults, who during a long and deep course of such analysis unmistakably relive emotional crises of infancy, and are ultimately able to find words with which to express them. Modern psychology is thus based on the actual experience of human beings. It is not a system of theories drawn up in a laboratory or study.

Throughout this chapter we shall have occasion to refer to the emotional crises and tensions that occur in infancy and early childhood, for they are the foundations on which emotional reactions, particularly abnormal ones, in adult life are based. The late Professor Freud, in his analyses of male patients, found that in early childhood

they all seemed to pass through a phase, which he named the Oedipus phase (after the old Greek myth of the son who killed his father and married his mother), during which they experienced a strong sensual attachment to their mother, coupled with jealousy and hostility towards their father. This discovery, when first published, aroused indignant scepticism, but it has gradually received general acceptance; and many of us can confirm its truth from frank utterances of small boys to their mothers, such as: "I shall marry you when daddy dies."

But there is usually involved a strong sense of guilt in this situation, particularly if all manifestations of childish sensuality (the germ of sexual life) have been checked by either condemnation or anxiety. Normally the little boy works through this phase successfully; it is repressed and forgotten as his love interests begin to extend beyond the family circle. But if fixation occurs at this stage, as it may do, if much conflict and excessive sense of guilt are aroused in connection with it, then the boy's emotional development may be arrested, and his love interest be unable to extend beyond the triangle of father-mother-child. He becomes mother-fixed (or father-fixed, as we shall see) and is unable to marry because he cannot face leaving his mother. He may say it is because his mother cannot do without him, and it is true that mothers are often fixated on their sons, and unwilling to let them go; but the situation is more likely to be the other way round.

A further result of fixation at the Oedipus phase is that for the young man all women are "taboo," because all women stand for the mother, with whom sexual intercourse is forbidden. This source of inability to marry is usually buried in the unconscious mind, and needs psychological analysis to discover it. This trouble is probably the cause of those not so uncommon disappearances, even suicides, by young men on the eve of marriage.

There is yet another consequence of the Oedipus complex which may play a part in producing the confirmed bachelor. Between two and five years old the little boy becomes intensely aware of his sexual organ, and begins to value it. Many factors, including that of a sense of guilt arising out of his Oedipus feelings, tend to awaken the fear that he may be robbed of this organ. Some people do in fact threaten that it will be cut off if he plays with it, unaware of the frightful seriousness of such a threat to the small boy.

Experiences such as this, and deeper and more unconscious fears and fantasies, may breed in the little boy exaggerated anxiety about his organ, later expressed as anxiety about its potency, making the

young man fear the challenge of marriage. He may be quite unaware why he fears women, the only evidence of this fear being repeated evasion of marriage. His love affairs will always go so far and no farther, causing repeated disappointment to girls, who also have no clue to the reasons for such behaviour. It is young men with this kind of difficulty who are the chief prey of quack advertisers of so-called tonics to increase virility. It is fear that is the source of the trouble, not any physical deficiency. Lads with this kind of psychological background are also particularly susceptible to the atmosphere unfortunately prevalent in some social groups founded on high and idealistic principles, where girls and women are classed together with drink and gambling as dangers to be guarded against, if life is to be maintained at a high and healthy level. The well-adjusted young man knows exactly what is meant by the term "women" in this connection, but the anxious, unconsciously mother-fixed boy is confirmed in his irrational fear of the opposite sex as a whole. And here it may be added that sometimes a compulsive pursuit of prostitutes may be the complicated result of mother-fixation. It becomes impossible for the young man to contemplate sexual intercourse with a good or nice girl, and his sense of guilt about all sexuality drives him to satisfy his sexual desire in ways which he himself condemns as degrading, though he may conceal this conviction under a façade of boastfulness or indifference.

Sexual Inversion

Homosexuality may be a bar to marriage, and some types of homosexuality also, arise from early emotional conflicts of the type described. There are, roughly, two types of homosexuality, both in men and in women. In the one the man (or the woman) loves someone of the same sex as he normally should love someone of the opposite sex. His feelings of love are not very different from that of the normal man, but their *object* is different. In the case of the other type, it is the *love-attitude* that is different: the man feels, not as a man, but as a woman, desiring to be loved by a man.

The true sexual inverts, whose sex life is as it were all the wrong way round, belong to the latter group; they are men who have the bearing and appearance of women, and in whom there is almost certainly a congenital physical factor at work. Curiously enough, it is this type of homosexual man—the real "sissy" or "pansy"—who suffers the greater scorn and contumely from his fellow-men, solely because of a bodily abnormality for which he is no more responsible

than he would be for a congenital club foot. It is true that men of this type are often rather poor specimens, both from the point of view of physique and character; but in evaluating them one should take into account, first, that their physical abnormality is quite likely to be accompanied by other minor physical defects—a common finding in medicine—and secondly, that the development of their characters may well have suffered from the special difficulties which such people are up against from the time when, as small boys, they first meet with ridicule and contempt for their, to them perfectly natural, preference for girls' occupations and toys. On the other hand, men of this type are often endowed with peculiar sensitiveness to beauty and with creative ability, and are able, through these qualities, to make immensely valuable contributions to the life of the times in which they live.

It is the other type of homosexual man, however, in whom early psychological difficulties have led to an abnormal choice of love object, who should engage our attention here, for he is potentially capable of normal love and marriage, in a way in which the congenital sexual invert is not. These men have nothing in common from the point of view of physique with the former. They are ordinarily fine specimens of manhood, but their love-interest is in boys, and only boys are capable of rousing their passion, sexual and romantic. Here again we are often dealing with an unconscious fear of castration. This dread may have been so intense in childhood, that for ever afterwards people lacking a penis are horrifying to one who has been so affected, although he is unaware of this in his conscious mind. Hence he cannot feel attracted by girls, but only by boys, whose possession of a penis reassures him (unconsciously) against his deep fear of mutilation. Towards them his love is of the pursuing, romantic, protective kind normally felt by a man for a girl. It is not necessarily associated with conscious sex feelings.

This account of some of the psychological factors which make for confirmed bachelorhood in men when this has no really rational basis, must, owing to limitations of space, be somewhat scrappy and inadequate. In individual cases explanations can rarely be so definite. There are no hard and fast lines of demarcation between psychological types. The problem of the permanently unmarried man is thus usually an individual psychological one, and its solution lies in psychological readjustment—a matter of expert psychotherapeutic treatment. It is comparatively rare that the problem is one of external circumstances only.

III. THE UNMARRIED WOMAN

We now turn to the unmarried woman, whose situation may be very different. Here the numbers in recent years are so large, that a real social problem is involved, though this fact has not yet received any very general recognition. Each of these women has her own individual psychological problems, and, as we shall see, many may have been prevented from marrying by difficulties in psycho-sexual development not very different from those which we have discussed in the case of permanently unmarried men. But in addition to such more or less maladjusted women, there are thousands of others whom the mere fact of the surplus of women has condemned to a single life. There is a situation of frustration and deprivation here, which does not exist in the case of men; and, as we know, frustration and deprivation are themselves sources of emotional conflict and disharmony.

Here we have, then, a large group of mature and responsible women, capable of making an enormous contribution to the life of the community in the form of work and service, paid and unpaid, but all of them expected to live a life which, to say the least, is not really a normal one for a woman, who was made to mate and bear and rear children. For some reason, it has always been the fashion to find the single woman of mature years slightly ridiculous, while the confirmed bachelor is more often represented as a rather lovable fellow, however crusty his exterior. Women themselves, it must be confessed, are in part responsible for this tradition, but in these days it has become a peculiarly cruel one, and it might be allowed to die.

Women Who Remain Adolescent

Cases of women whose failure to marry is the result of some psychological maladjustment are probably relatively commoner than psychologically maladjusted men. This appears to be particularly true of women of the professional class, partly as the result of the rather repressive upbringing of girls in this class, and partly as the product of the very complicated emotional development which seems to be unavoidable in little girls.

The clue to this complication probably lies in the fact that while for both boys and girls the mother is the first person with whom an intimate personal relationship is established, the boy ultimately marries someone of the same sex as this first love of his, while the girl has to mate with one of the opposite sex. There is still a great deal to

learn about the emotional development of women, but there does appear to be some connection between this demand on the girl child to free herself entirely from her first childish love, in order as a mature woman to play her proper rôle as wife and mother, and the failure of many women to take this final step in their development to psycho-sexual maturity. Women who fail in this way remain to some extent perpetual adolescents, which fact may, however, be quite compatible with lives of useful service.

Let us briefly follow the typical history of an emotional development leading to a hold-up of this kind. For the baby girl, as for the baby boy, the mother is the first personal contact. She is the source of food and comfort, but at the same time the person who keeps the baby waiting, demands habits of bodily control, and later sets up all kinds of standards of behaviour, interrupting pleasurable activities, removing desired objects, and so forth. All these happenings are trivialities to the mother, but to the child they are the very stuff of her emotional experience, and the battles with her mother mean for the baby shattering emotional upheavals, complicating the personal relationship in far-reaching ways. The same upheavals happen, of course, to the baby boy, but it appears that where the baby girl is concerned, the conflict is more acute, and consequent repression more profound.

There is much that is obscure here but, as already suggested, the difference is probably related to that need for the girl baby to detach herself more completely from the mother than the boy has to, if her psycho-sexual development is to be complete and successful. Repression is intense because the situations are so intolerable. To understand this, one has to realize the smallness, helplessness and nervous instability of the baby (whom difficulty in teething may throw into a convulsion). When she is enraged, the baby girl is at the mercy of forces beyond her control. Arms and legs jerk convulsively, she is choked and near suffocation. This rage is a terrifying monster, attacking her, as it were, from without. It must be controlled, if life is to be maintained. The fantasy monster becomes the instrument of repression, a destructive, punitive force. This instrument, born from the child's conflicts and terrifying fantasies, has been called by the psycho-analysts the *primitive super-ego*. Later it is developed and elaborated in the light of the parents' ideals and standards, and becomes a more conscious guide for conduct; but in children, and particularly in girl children whose infantile history has been a very

stormy one, the primitive super-ego may remain active as an extremely inhibiting and damaging factor in life.

Leaving infancy behind, the little girl passes on to new personal contacts, and her father begins to play an important rôle in her life. Something like the Oedipus phase in the life of little boys now begins. The little girl is strongly attracted to her father, and is jealous of her mother. Like the little boy, she may deal with this latter trouble by becoming anxiously dependent on her mother, clinging to her and not letting her out of her sight—giving evidence, in other words, of mother-fixation.

If the father is unresponsive, or appears to the child to reject her love, she may react, in order to defend herself against her thwarted feelings, by trying to be like her father—to *be* him, as she cannot *possess* him—and this may be accompanied by intensified devotion to her mother, whom her father obviously loves. The unconscious consequence of this kind of reaction is a rejection of the opposite sex as lover, because a sense of guilt is now associated with the child's love for her father, and this, combined with the identification with the father, may result later, not only in a fear or rejection of advances from men, but in some cases in a preference for a masculine rôle in life and work. This latter tendency may also arise, or be reinforced, if the little girl, on realizing the difference between herself and boys, longs to be a boy, or imagines that she really is one, but has been punished by mutilation. The later experience of many little girls tends to strengthen this longing, for in some families boys are clearly more valued than girls (especially by the mother), and in general seem to have a better time and more freedom.

If, alongside development of this kind, no trouble is taken to prepare a girl for womanhood and motherhood, and she is taken unawares by the signs of her approaching physical maturity, it may be very difficult for her to accept this. On the contrary, she is likely to be frightened and revolted. Such girls enter on a difficult adolescence, likely to be characterized by intense passions for older women—evidence of mother-fixation—and fear of the opposite sex.

To the effect of experiences such as these, most of them unconscious or repressed, one must also add, as possible factors in the psychosexual arrest of women at the adolescent level, the conscious effect of an attitude on the part of the mother and other people in authority that all sex is dirty and wrong, and any tendency to be attracted by boys reprehensible and dangerous.

This is the kind of psychological history which is characteristic of the woman who remains forever adolescent in her love-life, although she may be mature and competent in other respects.

To some it may appear that too much space has been devoted to the foregoing account of psychological development in childhood, but it is our recent and increasing knowledge of this subject which has enabled us to understand many of the peculiar difficulties of unmarried people, and particularly of the unmarried middle-aged woman. Many of them, we now realize, are due to the failure to become, or under stress, to remain completely adult.

Love Affairs

Let us now turn to the problem of the sexual life of middle-aged, unmarried women. Must these women forego all sexual experience? Do they forego it? The answer to the latter question is that probably very many more unmarried women do have such experience than their friends and relatives suspect.

There are, it is true, many women who seem able to do without it entirely. (I am thinking here of sexual experience shared with a lover.) Many of the women whom we call perpetual adolescents never even seem to need it. Their ideals would in any case reject the idea, but not at any great cost in the way of self-denial and self-control. Their lives are filled with work and a multitude of interests and friendships. Their sexual instinct, probably never very strong, seems to be completely sublimated. Women of this type are extraordinarily useful to society, and one may be grateful for the emotional development which has left them so unexacting in a difficult world. As scholars, teachers, social workers, doctors and nurses, and in many other careers, they contribute an enormous volume of thorough, conscientious work, without which there would be many more loose ends, muddles and disasters in social life to-day. It is sometimes said that women are only capable of routine work. It might be fairer to say that, fortunately for the community, many women seem peculiarly capable of diverting into conscientious routine work the energy which, under different circumstances, might have gone into home-making.

By no means all the women who make this kind of contribution are, however, incompletely developed sexually. What about the question of love affairs for those who, in the full development of their psycho-sexual life, long for husband and children? Is the love affair, the being mistress to a man for a longer or a shorter period, permissible? And, if permissible, is it a solution of the difficulty?

In the present time there is bound to be a wide divergence of opinion about permissibility, as a result of the change in thought about these matters which has taken place in recent years. Victorian thought on the subject rested largely on a fundamental conception of sex as evil. In these days of greater frankness about the subject, such a conception is rejected by most thoughtful people. Another principle than this must be found to justify condemnation (if condemnation there is to be) of extra-marital sexuality.

The social and personal implications of such extra-marital sexuality in the case of younger women have been stated in another part of this book. Most of these implications apply irrespective of age, but as regards women of mature age who believe that they have no prospect of marriage, the situation needs some further discussion. From the purely personal point of view, a useful guiding psychological principle to take is that of psycho-sexual maturity as against psycho-sexual immaturity. Maturity, from the psychological point of view, means ability to adjust to reality, that is, to accept and make use of the situations life brings to us; and the capacity to form and maintain happy personal relationships, including those involving the physical relationship of sex.

This means that desire does not in itself constitute a sufficient justification for entering upon a sexual relationship. Much more has to be taken into account. Here the problem becomes a very complicated one, and one with social as well as personal implications. There may be a very perfect relationship of love and mutual physical attraction between a woman and the man she longs to have as lover. But then there are the external circumstances to consider. Are facts such as the risk to personal professional reputation, or the risk of pregnancy to be ignored?

More important still, should the chosen lover be married, is the question of his wife and, in many instances, his children. The stability of the family is essential to the community. A widespread toleration of extra-marital relationships would gravely damage the family structure, for the married partner (man or woman, incidentally) still retains responsibility for his or her family. Social acquiescence in the situation, so that every married person might be assumed to have a lover outside the home, would give an expectation of conduct that could not fail to result in a sense of general insecurity for the institution of the family, and of particularly disastrous significance for the children.

Further—to return to the more personal aspect of the problem—is the full sexual relationship which is so greatly desired going to be worth all the risks and difficulties involved, when a real day-by-day life together may never be possible, and the most that can be hoped for is secret meetings and occasional week-ends together?

Of course there are endless possibilities which may make any or all of these questions irrelevant, or enable them to be answered in favour of the lovers. Every such situation must ultimately be decided on its merits, which may be infinitely various. The only certain thing is that a sexual relationship entered into thoughtlessly, irresponsibly, or even quite calculatingly just for the sake of the experience, is likely to bring a good deal of social trouble in its train, and may bring deep disillusionment, self-disgust and a crippling sense of futility to the individual; particularly to a woman only recently emancipated from the traditions inherent in her upbringing.

There are some women, of fairly tough psychological make-up, who can embark on an affair just as an experiment, and make a success of it, without much difficulty or distress; or even with an added self-respect engendered by the feeling that at least they now know what normal sexual experience is. One need not grudge them or blame them for this self-satisfaction; but one may feel pretty sure that the affair cannot have been of much significance as a love affair.

Again, some women may have embarked on love affairs in passionate awareness of all that was entailed, have surmounted all the difficulties and distresses, including that of the inevitable final separation, and in spite of everything would not now be without their memories. Such people, we may assume, are capable of determining their lives with judgment and fortitude; are adult now if they were not so then; and we need feel no call to challenge their conduct, even on grounds of psychological soundness.

There is a challenge from a different angle: are we not taking all this too seriously? It is possible to imagine a point of view which sees the love affair as superior to marriage, just *because* it involves less responsibility. It is fun, say those who uphold this viewpoint, and women have the right to experience what their bodies were made for.

The type of individual likely to express these views usually passes from one affair to another just because she is of childish mentality. Her affairs give her more adult friends the impression of futility, not to say silliness, and she shows no signs of emotional development as a result of them. For love to develop the personality, the individual concerned must be at the stage of emotional growth at which sexual

experience can stimulate and foster the attainment of maturity. The adult wants the full relationship—not just to play at it—and real love, as has been shown elsewhere in this book, tends to be enduring.

Times of tension, excitement and deprivation such as war brings are likely to produce a crop of irresponsible love affairs, but the glamour and romance with which war temporarily endows them is of a very bogus kind, and does not really lift them above the more obviously trivial affairs of peace time.

Before we leave this question of love affairs, there are two points of general significance which should be made. A love affair is not the same for a man as it is for a woman. For a woman, sexual experience is not complete when it stops short at sexual intercourse. Pregnancy, childbirth and the nursing of the child are integral parts of sexual life for her, and these are almost necessarily excluded, or at least not desired, in the illicit love affair. Hence the normal woman is always to some extent dissatisfied in such an affair, and this fact should be reckoned with, before even a mature woman embarks on one.

Again, for a woman love cannot be localized. Just as her whole body responds in physical love, so her whole life is involved in the love of her heart, if it really is love. That is why so many affairs, entered on with joy, confidence and passion, so often lead to unhappiness, despair, and a greater loneliness than before. For an affair can almost never be combined with a real and secure life together, and a woman must always long for this security and permanency in a way not all men will fully understand.

For a man, love is much more localized, both physically and emotionally. A number of men seem even able to divorce sex from love, without emotional disturbance. This would never be possible to the normal woman. Realizing this great difference between men and women (which may also be related to the greater complication of women's psycho-sexual development), one understands how the dual standard of morality arose, and why those pioneers of the emancipation of women, who demanded a single standard, usually meant that men should adopt the traditional standards of women, and not that women should permit themselves the freedom traditionally accorded to men. It is all so much more important for women; and it should be, for in their case sex and love mean the enormous responsibility of bringing the child into the world, and tending him during those early months, which, as we have seen, are so fateful for the whole of his future life.

Self-Stimulation

In the love affair sex finds normal expression in connection with another person, but physical sex may also make itself felt in the absence of any one else. Sexual life in women follows a rhythm, comparable with and usually related to, the rhythm of the menstrual cycle. Sexual desire is a normally recurring phenomenon in the body, and does not always wait upon the presence of a beloved person to make itself felt. Thoughts and fantasies may help to awaken it. What is the unmarried woman to do about this?

Again, questions of immature or mature psycho-sexual development are often involved. Masturbation, or self-stimulation, is often practised by the small girl in complete ignorance of its sexual significance. If she is severely treated on account of it, or if for other more obscure reasons she feels very guilty about it, it will tend to become an obsession during her life. The woman who, with a history such as this, feels herself driven from time to time to arouse and satisfy her own sexual feelings, is likely to feel very troubled about it, in spite of any pleasure or satisfaction she may obtain. For her, masturbation is a childish activity, a regression and a compulsion.

The first step towards relief from the compulsion will be taken if she can realize that physically she is unlikely to be doing herself any harm, and that many, probably the majority of women, have felt and have responded to the same urge. The exhaustion and irritability which may be felt after satisfying a sexual urge of this kind, and which are regarded by her as the result of the act, are in fact the consequence of the worry about it. Anxiety and worry are far more potent sources of fatigue and the feeling of being out-of-sorts than is any physical activity, whether of sex or of work.

The best advice that one can give to the middle-aged woman on the subject is to my mind the following: If from time to time you feel the need to relieve the physical stirrings of sex, do not worry or feel guilty about it. You are normal, and have the normal physical desires of a woman. Do not wage an endless war against them, getting more and more tense and miserable. If you can, relieve them, without dwelling too much on it. Then forget about it, and pass to the next job in hand. It is not wicked, for sex is not evil. It is not even important, except in so far as you worry about it.

Not all women may be able to deal with the problem in such a matter-of-fact manner. They may need more individual psychological help to deal with the difficulty and should consult a medical practitioner qualified to deal with these matters.

It is only too true that self-relief must always be a very poor substitute indeed for normal sexual life, and for some women its very inadequacy makes it hateful. Sex was meant to be shared with a beloved person, and ultimately to lead to parenthood. Its purpose is very much lost sight of where the urge to solitary self-relief is concerned. But we need not, on that account, regard this practice as wicked, or even harmful, if it is kept within reasonable bounds.

Friendship as a Solution

If the love affair can only rarely offer a satisfactory solution, there are, nevertheless, certain compensations inherent in the average woman's emotional make-up, which may help her to build a life for herself, not too unsatisfying, even in the absence of full sexual fulfilment. In any case the sexual instinct is peculiarly adapted for sublimation into other channels; and for women especially, tenderness is an important part of love. For this they may be thankful, for women need to give and receive this expression of love, and can do so in friendship.

Friendship, really affectionate friendship, offers indeed the best of all solutions and compensations to the unmarried woman, and for this reason her friendships with contemporaries, usually other women (for middle-aged men are not often available for plain friendship) are well worth taking seriously. Too often they are unstable and full of reverses, because the friends have not troubled to reflect on the situation, but have allowed their friendships to be the vehicle of all kinds of childish exactions, anxieties and jealousies, and of their, probably unrecognized, sexual frustration.

For older women of the psychologically adolescent type already described, friendship with other women is nearly always of enormous emotional significance, for in it expression is given to the repressed and forgotten longings and conflicts relating to the mother, which played such an important part in their earliest days. It is these which, unrecognized for what they are, often impel them constantly to seek a fresh start, to discover a perfect relationship, with another woman.

Friendships based on this kind of foundation are bound to lead to difficulties, for there is so much that is childish in them. They are marked by exaction, quick jealousy, emotional storms and the liability to break up altogether. Yet into them is often poured a devotion and passion representing the best of which the individual is capable. Hence such friendships are worth taking trouble over, their crises worth trying to understand. If those elements in them of emotional

immaturity, which cause the upsets, can be isolated and corrected, the friendship may yet provide the best, and possibly the only, outlet for all those unused forces originally intended for marriage and home.

Women whose psychological make-up leads them inevitably to form attachments to other women are not the only ones, however, who may find a solution of their problems in friendship. All single women should be able to make use of their capacity for affection and tenderness in their relationships with other women. The very fact that sex does not enter into these relationships, as it almost necessarily does in friendships between people of opposite sex, gives such friendships a wider scope and freedom in the interchange of ideas and interests and shared amusements. The one essential condition for their healthy and constructive growth is that each of the friends should be able to accept the other for what she is, and not unconsciously assume, and ultimately demand, her to be something else—mother, husband, child, or a miracle combining the comforts of all three. This sounds obvious, but it is extraordinary how frequently disasters and miseries in friendship are the result of unconscious and illusory assumptions of this kind.

Homosexual Friendships

At this point the question of homosexual friendships demands attention. The last few years have brought very much increased awareness of the existence of homosexuality, both in men and women; and this is a good thing, if adequate understanding is brought to bear on the subject. Some reference has already been made to the subject earlier in this chapter, more especially as relating to men. Where women are concerned, the situation seems to be even more complicated, because of problems of mother-fixation and of the maternal instinct, but it is still possible to make a rough distinction between a homosexuality which is the result of an arrest in psycho-sexual development, and true sexual inversion.

Many of the passionate friendships discussed above are potentially homosexual, even where sex has never come to frank expression. Recognition of this fact may in some cases be necessary if the friendship is to continue as a useful factor in the lives of the women concerned, and such recognition should not necessarily mean condemnation of the friendship as a whole. Sex is for most people an inescapable factor in life, and a relationship between two people

that is both intimate and passionate is quite likely on occasions to arouse sexual feelings, even though these are not admitted as such.

Where there is this lack of recognition there is much more likely to be a sense of strain and tension, for both instinctive drives and a more or less unconscious sense of guilt are involved. It is far better to know what one is dealing with, in order to come to some arrangement with oneself and one's friend about such feelings, and the situations that give rise to them, than either to pretend they do not exist, or to condemn them out of hand and perhaps break up a good friendship. Love is the criterion of what is worth-while in a friendship, not any purely physical manifestation.

The Case of the Sexual Invert

Where the true invert is concerned—the woman who really feels she is a man in her inclination towards her women friends, and who usually has much that is typically masculine in her physical make-up—the management of sex in friendship may offer a serious problem, and much self-denial and self-control. It is a problem rather of responsibility towards other and particularly younger women. It is a grave responsibility to initiate a girl into sexual experience which is not normal. It may easily hold up her psycho-sexual development and thus be a factor in depriving her of normal fulfilment in marriage and motherhood.

Fortunately, in most inverts the sexual instinct (contrary to popular opinion) is not very powerful, and is very readily sublimated in work and activities of which the invert is peculiarly capable: artistic and creative work, and, in women, work involving executive and mechanical ability. Such women are, as a rule, energetic and executive people, able to take responsibility, to work well with others, men as well as women, and capable of being very good friends to other women. They are handicapped, as male inverts are, by an anomalous psycho-sexual constitution, so that life will never be easy for them. But the anomalous is not necessarily the diseased any more than the abnormal is necessarily the vicious (every genius is abnormal); and these people have a definite place in the world's work—particularly in circumstances when women are wanted to do men's work. They have also a great deal to offer in the way of friendship; because of the obligation so frequently laid upon them of developing the tender and self-sacrificing elements in their love, at the expense of the purely sexual.

The Change of Life

Before leaving questions directly or indirectly connected with sex, to pass to more general problems of psychological and social adjustment for the unmarried, there remains something to be said about the change of life as it affects unmarried women.

It is quite a mistake to think that unmarried women will have more trouble at the change of life than married women. Many go through it with no trouble at all. The monthly period ceases, and that is all they notice. Others are greatly troubled with all manner of symptoms and transient physical discomforts. A detailed account of the change of life as it affects women generally will be found elsewhere, but from the psychological point of view it certainly does mean something rather different for the unmarried woman from what it does to her married sister. For the latter it means the end of a period of great activity. She has fulfilled her function as wife and mother, and her body now informs her that this task is finished. For the unmarried woman it also means the end, but in quite a different sense.

Till now, consciously or unconsciously, she has felt herself to be a woman, and somewhere in the back of her mind there has probably persisted the thought: I may yet find a husband and have a child. For her the menopause means that this hope—at least in regard to the child—must be given up. There is likely to be a reaction of disappointment and frustration in the recognition that all the wonderful provision made for the bearing of children has been allowed to “rust in us unused.”

And this brings us away again from the problems primarily related to the sex life, to more general problems of adjustment to unmarried life; practical questions of how to achieve happiness and usefulness in circumstances which are bound to be difficult.

IV. PSYCHOLOGICAL ADJUSTMENT TO THE UNMARRIED STATE

For the emotionally maladjusted woman not really grown-up in her attitude to life, things are likely to be more difficult than for the really mature woman; with the exception of those cases which I have described where all the energies of the emotional and sexual life seem to have been successfully directed into work, profession, or some social cause. The fully-matured woman, on the other hand, is likely to be more conscious of her need for fulfilment in marriage and home, and for this reason to be more aware of a definite lack in her life, with which she may find it hard to reconcile herself. The

difficulties of the emotionally immature are likely to lie mostly in her personal relationships, those of the mature in the very circumstance of being unmarried.

It is to the first group that the discoveries made by the psychoanalysts and others concerning the processes of emotional development will offer explanations and solutions of difficulties in friendship and other personal contacts and problems. So often, on analysis, one finds that the heart of the trouble is that behaviour, or the attitude taken in some difficulty, has been based on a childhood pattern, and that that is why it has brought trouble in its train. Exactingness, repeating the baby's intolerance of being kept waiting; furies of jealousy, repeating the little girl's reaction to the new baby, whose existence threatened her own importance in mother's eyes; clinging devotion swinging suddenly over into bitter resentment, repeating the complicated relationship between mother and baby; all these point to the insecurity and fear of not being loved (or approved of, the same thing to the child) which lie at the bottom of so many emotional crises between friends, and between colleagues in work. The solution lies in the clear recognition of the childish source of the difficulty, and a steadfast rejection of the attitude, however much it costs. To the woman whose love-life is fixed at the mother-child level it will often seem that to give up the claim for love is equivalent to giving up love altogether; yet that, too, is the thought of a child, for love is never given in response to a claim, and only a child thinks it is.

Another result of fixation in the emotional conflicts of early childhood is that the primitive super-ego, whose inception was described earlier in this chapter, still holds the adult woman in thrall. Such women have, at the demand of this infantile force, repressed so much of their normal instinctual energies, have so defended themselves against any manifestations of them, that they have grown up inhibited and even lacking in ordinary vital energy for life and work. They fear life, and are rigid and negative to many of the things that it offers. But it is most important for the unmarried woman, and for the unmarried man, too, that they should be generously receptive of all that life can offer in the way of interests, opportunities and satisfactions. The married woman may not have time or energy to take up hobbies, but to the unmarried woman they are essential, and they should be cultivated in time, before retirement from work leaves her bereft of occupation. This applies to all unmarried people, but it is the anxious, inhibited women who specially need to be reminded of the importance of a positive attitude

to life. So often their anxiety not to do anything which would arouse disapproval (in themselves as well as in others) makes them blind to opportunities, and reluctant to follow up chances, which, if they had the courage to take, might lead to sources of great happiness.

The adoption of a child is often suggested as the best possible solution for the single woman. It is, of course, a very obvious way of satisfying the mothering instinct which is active in nearly all women, but can be such a nuisance in friendship. Apart from the difficulty of the financial undertaking involved — beyond the means of most working women—there is the child to be considered. Nothing could be more disastrous for the psychological development of a child, whose life is still to come, than to be the sole object of the starved affections of a middle-aged, frustrated woman. It is less harmful for women to work off tensions of their affections on one another than on a child, and their mothering instinct will find inevitable, and even if tiresome, less damaging, outlets in their work and in their contacts with pupils, patients, subordinates, colleagues and friends. Other motives than that of a personal solution should determine a decision so fateful to a child.

From a practical point of view it would seem sensible for unmarried women to join forces and set up house together. Something in the way of a home is secured in this way, and all women long for a home. Some may nevertheless prefer under all circumstances to live alone, but living alone brings many problems with it, for example those of proper feeding, and of illness. And there is the liability to a narrowing of interests and sympathies as a result of the development of self-indulgences which become necessities, of rigidities and a general intolerance of interference which ultimately alienate friends. On the other hand, a shared home, whatever the inconveniences and irritations, has always something natural about it, and provides solutions of the problems of adequate meals and times of illness. Responsibilities, sometimes irksome, are involved, but in later years they will probably prove to be well worth while compared with the almost inevitable loneliness of the older woman with no remaining family ties.

It is as old age comes on that the position of the unmarried may become really grim, and it will need all their courage and fortitude to save the situation. For the time may come when, through no fault of their own, but simply as a result of the circumstances of their lives, they are literally no longer essential to the happiness of anyone. The unmarried are not alone in this. It is a situation which many old people have to face. But family ties do mean something, and in

the absence of any but very remote ones, loneliness can become even more absolute. Every ounce of determination will then be required to combat self-pity, the most alienating of all manifestations. Every possible source of interest must be cultivated in time in order that some kind of self-sufficiency may be attained. There is a place for everyone provided he or she can refrain from emotional exactions on others. Physical claims there may have to be, in times of bodily infirmity; but physical claims are never entirely intolerable to those who have to meet them, provided they are not coupled with emotional clamour, particularly the clamour of self-pity. But it is a hard task for anyone to be set, and it should be prepared for ahead, while faculties and interests are alert. The best preparation of all is the storing up of a philosophy of life based on wider issues than those of our own personal experience.

All of us must, however, have known at some time or other elderly people of whom one never thought; have they been married or not? They were persons in themselves radiating confidence, interest and enjoyment of life, quite independently of their actual circumstances. It never occurred to anyone to feel sorry for them. They did not require it. Those of us who do not marry may have to work through a great deal of trouble and self-discipline to become like such persons, but these people stand as a witness that it is not impossible.

CHAPTER SIXTEEN

SEX IN MIDDLE AGE

By KENNETH WALKER

O.B.E.

I. MEN

I. NORMAL CYCLE

Nor only does the intensity of sexual desire vary with the individual man, but so also does the age at which he still retains interest in women. At one end of the scale are men whose sexual life comes to a natural end at the age of fifty, at the other those who remain potent in their eightieth year. The earlier disappearance of sexual interest does not necessarily mean that the man is less healthy than one who remains potent for thirty years longer. It may merely indicate that sexuality has never played a very important part in that man's life, and that he has therefore laid it aside earlier than his fellows. At the same time, since sexual activity entails the expenditure of a considerable amount of bodily energy, a man who is showing signs of the wear and tear of life, who, in other words, appears to be old for his age, is less likely to remain sexually active than one who has conserved more fully his energy and health.

Usually, the sexual life ends gradually, intercourse becoming less and less frequent until finally it ceases. Sometimes, and more especially when a man is married to a wife much younger than himself, this gradual diminution of sexual interest on the part of her husband occasions difficulty for the wife. What may make the situation still more difficult is that occasionally a woman while passing through the "change of life" experiences an increase of desire. Should it so happen that this corresponds in time with a cooling off of desire on the part of her husband, it is easy to see that conjugal difficulties may result. With the best will in the world the husband will not be able to satisfy the wife's needs.

It is well known that during the "change of life" a woman is liable to show a change in character perhaps tending to be irritable, moody or depressed. She may also be stimulated sexually, and make demands on her husband that he is no longer able to satisfy. As an example of this may be quoted the case of a woman who had remained completely frigid all her previous married life, she and her husband

living together as brother and sister rather than as man and wife. At the age of forty-two, this woman suddenly developed two obsessions, the first for complete sexual satisfaction, the second for a child. Unfortunately she was by now past child-bearing, so that her second desire could not possibly be satisfied. Her first wish also presented a difficulty. Having managed to sublimate his sexual desire, and to live with his wife without sexual relations for twenty-odd years, her husband now found it practically impossible to become her lover. As the result of medical treatment, some rather tepid love-making eventually took place, and the passion for a child was solved by the help of an adoption society. They have now both settled down to a comfortable middle age, no longer troubled by the stirring of sex.

Fortunately for them, men are less likely to be troubled by emotional disturbances towards the end of their active sexual life than are women. Occasionally, the realization that they are no longer able to achieve physical intercourse is wounding to their self-pride, and they consult medical men in the hope that by the taking of some medicine their sexual life may be revived. This, however, is a mistake if the sexual life has come to a natural end. To revive sexual activity in such a person is an impossibility. No medicine is capable of restoring a function that has ended naturally. The elderly man, therefore, who finds himself in this position should accept what has happened and devote the store of energy that has been liberated from the function of sex to other interests. Much remains for him to do, and it would be as absurd for a man to allow the disappearance of active sex from his life to lead to despair, as for the man who is no longer able to run to decide that he no longer cares to walk. All of our activities have their seasons, and all their natural termination.

II. OCCASIONAL DIFFICULTIES

But although a man is less likely to be troubled by emotional and intellectual disturbances towards the end of his life of sexual activity than is a woman, he does not always escape them. It has even been suggested by some scientists that the male passes through a period of emotional and physical irritability comparable to that experienced by the woman at the time of the menopause. To this period the name of "male climacteric," or "male critical age" has been given.

As in the case of the female, it is assumed that the physical basis of the disturbances that may be noted at this time is a temporary

upset in the glands of internal secretion, (thyroid, pituitary, testicles, etc.). As has been shown elsewhere, all these glands form substances which are absorbed into the blood and which help to maintain the bodily and mental health of the man or woman. If too much of one substance and too little of another is formed, there occurs an upset in the balance of secretions, with a consequent disturbance in the health. This is shown in both sexes by a tendency to put on or lose weight, associated sometimes with certain psychological disturbances and minor physical discomforts. While passing through this period a man may show unnecessary anxiety about trifles, become irritable, be subject to moods of depression, lose his capacity to deal with his work, and be conscious of a sudden falling off of his physical or mental vigour. At the same time he may complain of headaches, failing memory, sleeplessness, giddiness, and loss of sexual power and desire. These symptoms normally last only from six months to a year, at the end of which time the subject regains his accustomed vigour. On the other hand, the trouble may continue, and even become more severe. In a man, who has previously shown a lack of mental balance the disturbance of the critical age may even pass by slow degrees into chronic depression or melancholia.

Occasionally the severer mental disturbances may take some sexual form. This is generally the explanation of the well-known "park offences," where a middle-aged or elderly man is arrested for indecent behaviour in some public place; a man who has previously led an entirely respectable life, to everybody's surprise is suddenly found by the police exposing himself indecently or molesting women. Unfortunately, the police seldom realise that such a man is not entirely responsible for his behaviour, and that he is more in need of medical care and treatment than of punishment. He is indeed the victim of an upset in the working of the mysterious ductless glands of internal secretion that have so strong an influence, not only on our general health but on our emotional life and behaviour.

What makes matters worse is that this flare up in sexual activity sometimes takes an abnormal form. The elderly man's desire may not be for women but for very young girls, or even for members of his own sex. He is therefore charged with very grave offences and liable to a long term of imprisonment. This is particularly apt to be the case if at some earlier period of life he has shown a disposition to what is known as an abnormal "pattern of sex," for example, a desire for sexual dealings with his own sex. With the diminution of

the power of control that hitherto he has successfully exercised, the old abnormal tendency reasserts itself with disastrous consequences. He becomes the victim of the disturbances in his own body.

Fortunately magistrates are slowly beginning to realize that unhappy events of this nature are not necessarily the result of a man's deliberate choice, and are showing more understanding of the real situation. It would indeed be absurd to think that a man of sixty, who has hitherto led an entirely respectable life, would deliberately choose to be indecent in a public park. Other people, and particularly children, must be protected from him, but he is in need of a doctor rather than of a policeman, of sympathetic treatment rather than of punishment. Punishment, indeed, will very likely have the effect of making him worse, through all the mental suffering that prison will entail.

Although it has been advisable, for the sake of completeness, to deal with these accidents of the sex life of man, it must be borne in mind that they are comparatively rare. The vast majority of men pass through the period of sexual decline and cessation of desire easily and without mishap. The loss of sexual activity brings with it many compensations. Difficulties and handicaps that at one time seemed formidable are now seen to be of little importance. Free from the disturbances, as well as from the pleasures of an activity that is now in abeyance, the man enters on a new phase of life. He is a spectator of others still in the throes of finding their adjustment to this mysterious sexual force that plays so big a part in mankind's pleasure and pain. He himself is immune from its influence, and, looking back on his own past difficulties and errors, he may still draw from his memories material for thought, and, if need be, for wise council for those in need of it. He is no longer a participant of its pain and pleasure, but a philosopher, drawing on his rich store of past memories.

Of the physical disturbances that may be a temporary symptom of the male critical age it is unnecessary in a book of this kind to speak. Medical men are still in doubt as to what may be truly ascribed to a disturbance of the balance in the ductless glands, and what is merely a sign of advancing years. For example, there are those who put down many of the bladder troubles of late middle life and of early old age to a glandular disturbance, and others who regard them as symptomatic of an actual disease of advancing years. To us this question is of little importance. All that we need state

is that, just as many of the psychical disturbances that are associated with the critical age in women can be relieved by the taking of certain glandular extracts, so can some of the accidents of the male climacteric be mitigated by suitable treatment.

Finally, it must again be emphasized that the cessation of sexual activity must no more be regarded as marking the close of the useful life of a man than the end of child-bearing be looked upon as the end of the utility of a woman. Countless examples could be given of men who made their biggest contribution to the welfare of humanity long after their sexual life had come to an end.

All that can be said of the climacteric is that it marks a phase in the pilgrimage of life, a diminution in certain interests and an increase in others. It is an entirely natural episode and should be accepted as such, whether it comes, as sometimes, in the mid-fifties when a man is at the height of his mental vigour, or in the seventies when he has reached the evening of life.

CHAPTER SEVENTEEN
SEX IN MIDDLE AGE

By LAURA HUTTON
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I. THE CHANGE OF LIFE IN WOMEN

Two medical terms are used to express what in ordinary life we call the "change of life": (1) the *climacteric*, and (2) the *menopause*. Of these the first is used of men as well. It is a word of wider and more general meaning than the word *menopause*, which applies only to women, and means simply the cessation of the monthly periods, i.e., of menstruation. It is because of this cessation that the change of life is such a definite landmark in the life of women.

The climacteric is for women an indefinite and occasionally long-drawn-out affair, lasting in some cases up to seven years—a "seven years' war," as some cheerful soul once called it. It may begin at any time during the late thirties, though this is comparatively rare, the usual age being about the forty-fifth year. Indications of its onset may make themselves felt before there is any change in the regularity of the periods, but some irregularity in this respect is usually the first evidence that a woman notices indicating that she is approaching the change of life.

The menopause means that the ovaries have ceased to produce ripe seeds or ova. If no seed is ripened and discharged, no change takes place in the lining of the womb, and the lining-membrane which is what we see as the monthly period is not shed; so there is no menstruation.

This failure to produce any more ripe seeds may normally occur any time between the ages of thirty-eight and fifty-two. Cases have been known where the periods came regularly up to the age of sixty; where they cease at an age considerably earlier than thirty-eight, one would suspect the presence of some trouble, perhaps only deficiency in the gland system, not incompatible with general good health, or it might be due to the onset of some wasting disease, such as tuberculosis. It is advisable, therefore, to consult a doctor when amenorrhoea (absence of the periods) persists in a woman under forty years of age.

Contrary to popular belief, there appears to be no connection between the age of onset of the monthly periods and that of the

menopause. Many women think that if the periods began at an early age they should cease early, but, if anything, the opposite is true. Actually, no consistent correlation between the two ages has been proved. It would seem reasonable to assume that vigorous ovaries might begin to ripen seeds at an earlier age and continue to ripen them for a longer time than less vigorous ones.

Climacteric Not a Period of Ill-health

There is, unfortunately, a tendency in some people to regard menstruation as related to ill-health. Nothing could be more erroneous. Neither its onset nor its cessation has anything to do with ill-health. Both are completely normal events in the life history of a part of a woman's body which is adapted by nature for hard and exacting work—the conception, carrying and bearing of children. There is nothing mysterious or essentially delicate about a woman's reproductive organs. They are tough and strong, and admirably adapted for the work they were meant to perform.

What is delicate, and much more mysterious, is the adjustment of balance among the endocrine or ductless glands, of which the ovaries are two of the most important. At the change of life the ovaries not only cease to ripen and discharge seeds; that part of their tissue which acts as an endocrine gland also becomes less active, and it is this change, a very gradual one, which is probably responsible for the varied signs and symptoms of the climacteric.

The endocrine glands, as described elsewhere in this book, are a co-operative system, exercising control in various ways over the unconscious and involuntary functioning of the body. It stands to reason that the introduction of a new member into this co-operative group, or the removal of an old one, necessitates a good deal of reorganization. This reorganization takes time, and during this time there is likely to be greater or less disturbance in the functions which the endocrine glands control. We see the effects of this temporary disorganization during adolescence, and during the climacteric. Adolescence tends to be a stormy period, and the change of life is also generally regarded as a difficult period for the woman herself, and for those who have to live with her during this time. Nevertheless both adolescence and the climacteric are normal phases of life, and trouble is by no means inevitable.

There are wide variations in the way in which menstruation comes to an end. In a minority of cases the periods cease quite suddenly, having been hitherto perfectly regular. More often the actual menopause is preceded by some months, or even a year or two, of

irregularity, both as regards intervals between the periods and the amount of loss. As a rule this irregularity is in the direction of longer intervals and scantier flow; perhaps more marked at particular seasons of the year. Sometimes there is a considerable period of amenorrhoea, and then the periods reappear again and are quite regular for a time. More troublesome are the "floodings" (*menorrhagia*) occasionally associated with the menopause. Here there is excessive loss at the time of the period, amounting occasionally to serious haemorrhage, with possibly a lessened interval between the periods. Sometimes this trouble may be so severe as to cause definite anaemia. In either case medical advice is essential.

Women are so used to the regularity of the function of menstruation that some of them tend to get anxious the moment any change or irregularity becomes apparent. In married women this is probably partly the result of the association of any irregularity with the thought of a possible pregnancy. For a married woman in the forties there may reasonably be some doubt as to the significance of a delay in the appearance of the monthly period. In such cases it is now possible to determine the presence or absence of a pregnancy at a stage when obvious signs of pregnancy are not discernible, by means of a test carried out with the woman's urine. If she is pregnant her urine will contain certain substances, whose presence can be established by a laboratory test. Such a test will usually be made at a hospital laboratory. In some cases the expense involved may be worth while to allay unnecessary anxiety.

When to Seek Medical Advice

With such a wide range of normal variation in the signs of the approaching menopause there is really no need for anxiety when irregularities begin to be noticed. But there are a few situations which should suggest to the woman concerned the advisability of seeking medical advice. These are as follow:

- (1) As already indicated, if the period ceases or becomes very irregular and scanty at an early age, in the twenties or early thirties.
- (2) If an excessive loss at the period is accompanied by pain in a woman who has hitherto not suffered with her periods, or if there is irregular loss between the periods. The cause of the trouble may be a small innocent tumour whose removal will quickly clear it up.

- (3) When haemorrhage from the womb, however slight, recurs some time after the menopause has been definitely established a doctor should always be consulted at once, as there may be need for immediate treatment.

The only reason for mentioning these three conditions in which medical advice is desirable is that they are related to the function of menstruation (the last one only in appearance). They are in no way related to the menopause as such, which is a perfectly normal occurrence, as normal as was the onset of the periods.

An investigation carried out by a sub-committee of the Medical Women's Federation in 1932 showed that 15 per cent. of the 1,000 women whose cases were investigated went through the change of life with no symptoms at all, and practically 90 per cent. were able to carry on with their life and work, without having to take time off or lie up because of symptoms to do with the change.

Comparing the married with the unmarried in regard to this question of symptoms, we find that unmarried women were more free of trouble than were their married sisters, 20 per cent. against 13 per cent., so that the fact of being unmarried appears to have no disadvantageous consequences where the climacteric is concerned.

The commonest symptoms of this time of life, apart from irregularities in menstruation, appear to be hot flushes, giddiness, headache, nervous instability, "rheumatic" pains, and obesity. Of these, obesity is more characteristic of married women, and nervous instability of unmarried women. Under "nervous instability" one may include irritability, nervous apprehension and depression, and as I have shown in the section on "The Unmarried," there is considerable reason for the existence of the last two in single women, who have been denied the normal fulfilment of their womanhood, and who have a peculiarly lonely old age ahead.

Minor Changes in Bodily Habits

I would add to these symptoms as investigated by the Medical Women's Federation, two others: irritation in the private parts—the vulva and/or the anus—and various minor changes in bodily habits, demanding equally minor readjustments.

The first of these is often a source of great distress, and is probably more common in single women. How common it is is difficult to estimate, for it is a subject which the sufferer is likely to be unwilling to mention. This is because the irritation, usually restricted to night-time, impels friction of the parts, and this touching of the sexual

organs, particularly under these circumstances, when such action may arouse sexual sensations, is associated with a sense of guilt, dating probably from early childhood, when "playing with yourself" was considered very wrong. There is no need for a sense of guilt. The irritation is probably a manifestation of the same glandular lack of balance, which, as we shall see, causes other skin troubles. Treatment may be troublesome, but recently considerable success has been achieved with ovarian extracts by injection.

As regards the changes in bodily habits, sleep may be disturbed by hot flushes, but the sleep habit may also undergo modifications, and the woman who used always to affirm that she could never sleep in the daytime will find that an afternoon nap comes almost too easily, and that sleep at night may have to be wooed by a spell of reading in bed, formerly condemned as most reprehensible. In a similar way, bowel habits may change and demand small readjustments in routine, such as the giving up of old friends in the way of aperients, now found unnecessary. Changes such as these may or may not be permanent. They are not worth the name of symptoms, however, except in so far as some women regard with misgiving any change in habits which they have maintained for years.

To return to the more troublesome symptoms: the hot flush is generally recognised as being the most common and the most trying. With some women it is the only symptom, and occasionally it persists for years. It seems clear that it is a consequence of the disorganization in the glandular system, and it is suggested that it is due to a sudden outpouring into the blood-stream of the secretion of one of the glands capable of dilating the small blood vessels in the skin, which would normally be controlled by the other glands. The symptom may vary from a slight momentary sense of heat to a quite elaborate series of sensations, culminating in an almost overwhelming feeling of oppression and heat, and followed by a profuse perspiration. Most trying of all may be the odd sensations of unease and apprehension which may precede the flush. These may be so severe as to make a nervous woman feel she must be having a heart attack or be seriously ill. But it is nothing but a hot flush, of no serious significance except for the very great discomfort it causes; and the best way of coping with such severe flushes is to relax, reject all thoughts of anxiety and let them pass over. An open window is often a help, but ease will return in due course even without this aid. In some cases the flushes may be so frequent or so severe that they disturb sleep. In all such severe cases the doctor's help should be sought, for very often the whole trouble can be cleared up as if

by magic with the aid of tablets made of ovarian extracts. Such tablets need to be taken under medical supervision, however, for though not poisonous in the ordinary sense they are very potent.

To some women the most trying aspect of the hot flush is its appearance, which causes them great embarrassment. To them one may say that the flush is hardly ever as red as it feels, and that they are probably themselves aware of it far more intensely than are their friends.

Headache and giddiness associated with the change of life are likely also to be the consequence of temporary disturbances in the circulation due to glandular lack of balance. If this is so, gland treatment will help. "Rheumatic" troubles may vary from muscular and neuritic pains of greater or less severity to a true, so-called menopausal arthritis, with swollen joints. The latter usually responds well to the appropriate treatment, and the former also seem to clear up in due course, with or without treatment. A suggested cause for such troubles is a temporary lowering of resistance against minor infections, also the result of glandular lack of balance.

Obesity may be the cause of considerable distress to the women in whom a marked "middle-aged spread" heralds the change of life. Here there seems to be less that can be done than in the other symptoms of the climacteric, and the alteration in contour tends to be permanent, and not temporary as are most of the other symptoms. The demand is here for measures of hygiene, and for psychological adjustment.

In so far as the increase in weight is a manifestation of glandular activity, treatment by diet and exercises is not likely to eliminate it entirely, and to try to do so by taking large doses of thyroid extract is most unwise. However, measures in regard to diet may well have a useful place, provided they are reasonable and not extreme. It is important to maintain a correct balance between the fats, proteins and carbohydrates, and to ensure a sufficiency of vitamins. With this proviso, certain notoriously fattening foods, such as potatoes, suet puddings and pastry may be cut down or eliminated entirely, and thin toast substituted for white bread. Some people find great benefit in a weekly or fortnightly day of starvation, when for twenty-four hours nothing but fruit juice is taken. Any attempt to diet should be controlled by regular weight taking, and by noting its effects on general health and spirits. And it should never be allowed to become an obsession, irritating to friends, and a burden (or too great an indulgence) to oneself.

Appearance

Some of us are inclined to think—and perhaps with some justification—that in the modern world too much time, thought and money are spent by women on their personal appearance. But there is no doubt that there is a place for beauty culture, where middle-aged women are concerned. It is a pity that skins and figures should be allowed to spoil for lack of a little extra and not necessarily expensive attention. The middle-aged woman can, as we all know, and as films and novels show us, be a creature possessing a charm all her own. Very few come by this charm quite accidentally. In the normal course of events, a woman who carries on a busy life, particularly one who has borne and nursed many children in addition to carrying out daily household duties, finds, as middle-age approaches, that her figure is losing a certain beauty of line, and is thickening and becoming clumsy. At the same time skin blemishes become more apparent, the brightness of hair and eyes fades, finger joints begin to look knobbly and feet to get flat.

Now is the time to begin to take things in hand—not with any feeling of horror or dismay, for the progress from youth to age is a normal one and to be accepted as such; but as part of a scheme of adjustment to middle-age. During the change of life, we become somewhat different people; just as the just-grown-up young man or woman is different from the gawky adolescent of a few months ago. To make the best of the span of life ahead it is necessary to make friends with and like the person we are becoming. To do some regular daily exercises for the figure and feet, to take a little extra care of the skin and hair, need not mean a despairing clinging to a youth we no longer possess, but rather a determination to make the best of the potentially charming middle-aged woman we are becoming. This middle-aged self may have a different shape, but with care it need not be an ugly one. Its habits may be different, for example as regards napping during the day, and waking during the night, or being slower in movement; but this need mean no damage to health or real efficiency.

II. HYGIENE OF THE CLIMACTERIC

To refer to a few practical points concerning hygienic and (for lack of a better word) rejuvenating measures recommended at this time of life. Exercises should be regular, but not strenuous. Many busy women whose households depend on them to start the day (with cups of tea, early breakfasts, etc.), may feel that regular morning “physical jerks” are quite out of the question for them. But even if

only two minutes are spent in some simple stretching, bending and massaging exercise, including deep-breathing and rising on tip-toe, they will most definitely feel the benefit.

An exercise which includes almost all that is necessary is the following: Bend forwards slowly and grasp the ankles, then rise slowly, breathing in, and passing the hands up along the fronts of the legs, over the abdomen, between the breasts, rising on to tip-toe at this point and stretching to full height, with head thrown back. Then continue the movement without break, bending forwards, breathing out, while the hands pass outwards over the breasts, over the waist to the back, down over the buttocks and backs of the thighs and calves and round to the front of the ankles again. If this is done three to six times it is quite sufficient. Rotating the body from the waist from side to side, with hands on hips, which are kept steady, is a good exercise for the "dunlop tyre" which is apt to spoil the middle-aged waist-line.

Frequent baths may be a luxury which many women cannot afford, but where they are possible they should be indulged in even more frequently than usual. They should not be excessively hot. Their value lies in the relaxation and refreshment they provide, and hygienically they are important for women who may be perspiring more frequently and profusely than usual.

Care of the hair and skin has been referred to. Owing to changes in the thyroid gland which may occur in consequence of the change of life, the hair may become dull and brittle and tend to fall out, and the skin dry and rough. Where these changes are very marked, treatment with thyroid extract is probably indicated, but thyroid should never be taken apart from a doctor's prescription. Like the ovarian extracts, it is very potent, and some women have reduced themselves to nervous wrecks by self-dosage. Minor hair and skin troubles of the kind indicated can be greatly relieved by taking just a little more trouble than usual with brushing, and scalp friction (for the hair), and the use of emollients (for the skin). Details about treatments of this kind are so widespread in newspapers and journals, that it is unnecessary to go into them here.

Many women assume that with the cessation of the periods, marking the end of the child-bearing period, all sex-life must end for them. Some are disconcerted and some are relieved to find that this is not so, but that sexual desire remains, and may even, in fact, be intensified and more frequent. Many a woman has a needless dread that her physical attraction for her husband will cease. It is quite characteristic of this time of life that there is a flare-up of sexual desire, and with it a longing for romance and passion which

a woman may find very disturbing, and feel to be very reprehensible. On the other hand, she may abandon herself to it and land herself in situations which afterwards she will regret.

Considerable wisdom is necessary to cope with this situation satisfactorily. There is no place for condemnation, for this flare-up of desire is a natural phenomenon—not, it is true, universal, but still very common—and found in the unmarried as well as the married. At the same time, the impulses to self-indulgence in romantic directions need watching and curbing, for there is likely to be a good deal that is spurious, and certainly temporary, in them; and commitments made for their sake are likely to be a source of trouble and regret later on, when the blaze has died down.

As is said elsewhere in this book, this is a period in the life of women when they are in special need of help and consideration from their husbands. Many women, as a result of their upbringing, have a strong feeling that it is humiliating for them to feel more desire for their husbands than the latter appear to have for them, and hence they will do all they can to conceal this desire—at great cost to themselves. Both they and their husbands may be quite unaware that the intense irritability which so torments the home, and is labelled offhand as a regrettable symptom of “the change,” is the result of frustration and of the unsatisfied need for a relaxation which only sexual expression can give.

In due course the fires will die down, but there is no rule as to the age at which this will happen. Every individual is a law unto him or her self in this respect; and hence in these later days of married life there is demanded a delicacy and consideration in the marriage relation quite as great as that of the early honeymoon days. Where love has persisted and grown throughout the years, there will be no difficulty, but where husband and wife have grown apart as the years went on, life may be very difficult for a time. Its difficulty will be a little eased, however, if the wife can accept the strange turmoil in her sexual life as just one of the transitory symptoms of the climacteric, which will pass along with others. This is a hard task, however, more easily prescribed than carried through. The sex life is so intimately bound up with that of the emotions, that a woman's whole self may seem to be involved in the longings aroused by this last flare-up of her sexual nature. To call them “passing symptoms of the change of life” will seem an outrage to her under these circumstances. Yet time will probably show that this description was justified, and that her need during that difficult time was for courage and patience, not for romance, fulfilment, or self-expression.

Unnecessary Fears

Some women nurse a deep fear that insanity may overwhelm them at the change of life. It is true that there are certain types of insanity which seem to be specially linked up with woman's sexual life, with child-bearing, lactation (suckling) and the change of life. But just as the so-called "puerperal insanity" is only a rare occurrence, so also is "involutional insanity," as the mental breakdown associated with the change of life is called. There is no more need to fear such a mental breakdown at the change, than for a normal woman to fear insanity in connection with the birth of a child. As we have already seen, some depression or irritability or nervous apprehension, or all three, do fairly frequently play a part in a woman's difficulties during the climacteric, but these are very different from true insanity or psychosis. It is, as always, difficult to draw a line between very severe depression and the agitated melancholia that is characteristic of involutional insanity, for there are all degrees from a mild depression, anxiety, and sense of inadequacy which numbers of people feel and get over, and the delusional sense of unworthiness and incapacity to do anything, which characterises the really mentally ill person. On the whole, the outlook is favourable even in severe cases of involutional insanity, particularly where the sufferer has previously shown no liability to mental breakdown under strain. It is by no means an incurable disease, and many women come through the shadows to spend a peaceful and happy old age.

Any discussion of the characteristics of the menopause and climacteric must inevitably include the enumeration and description of the various symptoms and difficulties associated in the case of this or that woman with these phases in her life, and this gives in the mass a somewhat gloomy and depressing picture, calculated perhaps to alarm rather than reassure the reader. It cannot therefore be too often repeated that it is possible to get through the change with no symptoms at all, and that even where there are symptoms, these are not likely to be seriously incapacitating. One recalls that of the thousand cases investigated by the Medical Women's Federation, approximately 900 carried on with their life and work without interruption through this period of their lives. Moreover, one of the difficulties encountered by those collecting data for this report on the menopause was that heads of departments in business houses who were approached on the matter were frequently uncertain as to which of their women employees should be questioned, since so many of those over 50 years old had shown no sign of passing through the change of life.

Here I would like to make one comment on the selection of

women for this investigation. The report states that many of them were in public institutions in different parts of the country, and it was thought that these women would "represent a good average of health, in view of the fact that their presence in these institutions was determined by matters of finance, or accident, or death of relations, rather than by their own health." In the main this is no doubt true, but the statement does overlook a psychological factor which may well have been operative in some of the cases—the psychological factor of an inability to maintain financial independence. Where this factor did play a part in landing a woman in a public institution, one might also assume a certain degree of psychological ill-health, likely to have some influence on health at the change of life. Hence the data drawn from a large number of residents in public assistance institutions might weight the balance in the direction of increased figures of ill-health, rather than the other way round. If this criticism is justifiable, we may take an even more hopeful view of the situation than the report suggests. Certainly the impression gained from personal experience is that a larger number than 15 per cent. pass through the change of life with no symptoms worth mentioning.

Yet the change of life is a real change. It is a change which has its right and normal place in the life of a woman. Signs of it, therefore, whether physical or psychological, should be accepted calmly, without anxiety or regret. Where there is comparative or complete freedom from any troublesome symptoms, such acceptance may only mean absence of resentment at the indications of increasing age—such as a certain loss of bodily elasticity, or greater liability to fatigue.

Involution or closing down is just as inevitable in life, as evolution, or opening out. There is no need to regard it as a process of decay. Resentment at growing old adds an unnecessary burden, not only to the person concerned, but to those who have to live with her and listen to her complaints. Some pleasures have to be given up, it is true, but others can be found to take their place. An old lady once said: "I think I rather like getting old; people don't expect so much of you." The change of life scarcely marks old age, but it is a reminder of the prospect of old age ahead, a prospect which needs to be prepared for, just as childhood is a preparation for adult life.

To take a final look at the possible troubles of the climacteric, and the attitude to be adopted towards them: where bodily symptoms are concerned, the greatest help is an absence of anxiety (because they are only temporary and have no serious significance). In so far as relief is obtainable, it should, with the doctor's help, be obtained.

Treatment with gland extracts and with sedatives has its place; and appropriate hygienic measures in the way of rest, exercise, fresh air and diet will always be worth taking some trouble about, although they should never be allowed to become an obsession.

As to symptoms of a nervous kind—irritability, nervous apprehension, depression and the like—an effort should be made to develop a tolerant attitude to the self. Irritability is to be regretted, naturally, because others suffer from it; but the situation is in no way improved by indulgence in bitter remorse over irritable outbreaks. It is far better to explain to the family that there is physical basis for it, and to grant oneself an inner forgiveness on the grounds of one's "time of life." The more cheerful attitude which will follow will react favourably on the environment, and mean more to those around than depression or expressions of regret.

It may be difficult not to pass on to others the burden of apprehensions and fears which often beset the "menopausal" woman—particularly in the small hours. But here again the aim should be a tolerant expectant attitude: *It will pass. Things are not likely to be quite as I seem to see them, as I am now, and at this hour. Wait, and think again a little later.* The principle all through is the same: the climacteric is a normal occurrence in every woman's life, and is a temporary phase. Any disturbances are probably mainly the result of a temporary disorganization in the co-operation of the gland system.

An attitude of tolerant expectancy, free from anxiety, and of looking forward to a spell of improved health and vigour before old age really begins, is the surest way to surmounting any or all of the troubles which may come and go during this phase. It is a "critical" phase only in the sense that it marks a turning point in a woman's life, when she surrenders her biological function, and can contemplate a life free from the tasks which motherhood entails. This thought may, it is true, be a very saddening one to the unmarried woman who has never borne a child. But as I have shown elsewhere, she has compensations, and need not regard her life as wasted, because physically she is unfulfilled. For most women, married or unmarried, the end of the climacteric usually means a new lease of life in the way of physical energy and freedom from minor symptoms of ill-health quite adequate to compensate for a certain loss of speed and elasticity. The great thing is to make friends with this somewhat changed physical self, to make the best of her, and to welcome her as a reliable companion for the latter half of life. She may prove incapable of some of the diversions of youth, but she will be found to have capacities for enjoyment all her own.

CHAPTER EIGHTEEN

THE MISUSE OF SEX

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I. ANTI-SOCIAL SEX BEHAVIOUR

THE early Christians, a small minority in a pagan world, tried to demonstrate an attitude to life entirely different from that accepted by those among whom they lived. The social customs most clearly demonstrating the differences in this attitude were those affecting the position of women and the standard of sex behaviour. In the effort to bear witness to the importance of bringing the physical life under the guidance and direction of the ideal, sex came to be regarded as a solely physical character that must at all times be kept in subjection.

In those days but little was known of the way in which mind, body and emotion are interrelated and interdependent. Ignorance, as always, gave rise to fears; and fear of sex has characterized orthodox Christian teaching until quite recent times. One can trace many of the evils which have arisen, to this deep-rooted fear.

Sex was thought of as an evil too strong to be overcome without Grace, which is another way of saying that the physical sex equipment can only be adjusted to the wellbeing of man if it is consciously related to the spiritual values accepted by the individual.

Great store was placed on "chastity," which was interpreted to mean preservation of the "purity" of the body by the complete avoidance of physical sex relations. The chaste life was considered more holy than the family life, and so it early became the rule in the religious orders for monks and nuns to take vows of celibacy.

It was recognised that the enforcement of celibacy on those who did not fully desire it gave rise to thoughts of sex and to secret practices for obtaining relief from mental conflict. The attempt was made to direct thoughts, and the emotions that gave rise to them, to the service of religion, in other words, to sublimate sex. Unfortunately in those days knowledge was lacking as to the conditions necessary to success.

Throughout the Middle Ages, however, the religious orders

initiated social service and provided the centres of medical care and of education. Many men and women in the orders found for themselves the secret of a successful sublimation, and proved that continence could be practised without damage to mind or body.

Those who could not accord conscious and willing personal acceptance of the ideal of chastity suffered severe mental and emotional conflict because of the standard of behaviour imposed by the religious orders, claimed from its members by the Church, and expected by Christian public opinion. The practical commonsense of the community recognized that all could not fully realize the ideal of complete chastity throughout life if their emotional desires did not support the standards imposed. A wide divergence in behaviour between teaching and practice was accepted; thus various customs came to be tolerated, providing those adopting them were not found out. Such conditions created an atmosphere of fear and guilt which came to envelop all that concerned physical sex relations.

The fact that spiritual development could be attained through a complete sex adjustment was unrecognised except by a few outstanding personalities. In the effort to impose chastity as a tangible service to the ideal as it was seen in those early days, the physical aspect of sex was presented as a beast to be fought, and not as a source of spiritual strength. Consequently, ignorance remained and fear of sex grew throughout the Middle Ages; and their traces are seen in the social problems we face to-day.

It was accepted that the practice of complete chastity could not be demanded of men living in the world, though for social and property reasons it was desired for women. Social customs thus arose that protected unmarried women from "dangerous opportunities," and girls were usually married at an early age.

Thus arose the dual moral standard of one rule of sex behaviour for men and another for women which has persisted to the present day. It is being challenged by the present generation of several countries, including our own. Once more there is conflict between teaching and practice. For example, in a community which recognizes no grounds for divorce, and gives no freedom to the individual to select a partner in marriage, the practice of sex relations outside marriage—provided these are discreet—is tolerated.

The Christian Church condemns prostitution, but those Christian countries in which women have little freedom and there is no divorce remain the last strongholds of prostitution in a regulated and tolerated form.

Where the conception that the physical act can have intellectual and spiritual value is absent, the wife may be the companion of her husband and the guardian of the legitimate family, but as a "virtuous woman" is expected to take no interest or pleasure in sex relations. As a "good woman" she is expected to face these as an unpleasant "duty." We have only to read our Victorian novels with understanding to see that this attitude still persisted in England until the end of the last century.

In those countries where the choice of partners in marriage is freely made by the individuals concerned, and where women have similar opportunities for education and economic independence as men, the divergence in the standards of men and women tends to decrease and marriage develops as a real partnership. The woman endeavours to make herself "child, mother, mistress, all in one word—wife." The rôle of prostitute becomes less lucrative and in less demand because the man is either satisfied with his marriage partner or seeks before or outside marriage a more complete relationship. The degraded sex relationship of casual commercial prostitution appears no longer to attract the more educated, fastidious and selective men.

Ignorance and fear still remain as the deep-rooted origin of many of the problems which result from the misuse of sex, such as venereal disease, prostitution, illegitimacy, perversions and other ugly manifestations. When communities give lip-service to a standard of behaviour which, as individuals, they do not accept intellectually, or, accepting it intellectually as "good for the community," take the attitude that as individuals they are not strong enough to maintain it, the result again is the growth of tolerated but anti-social forms of behaviour. To-day we have, as has been seen in the earlier pages of this book, a knowledge of sex that can replace fear by understanding. The prejudices of the past and a general apathy in the face of change are barriers to progress that only honest thinking can remove.

Every person thinking rightly helps social progress. Public opinion depends mainly on the outlook of each one of the individuals who, in the mass, constitute society. Progress is possible provided the individual is honest and does not keep one point of view as a guide to personal behaviour and express another when voicing his views as a member of a group.

Progress is not possible when, for example, a member of the local watch committee authorises the police to take active steps to arrest

for solicitation girls on a certain street, while he himself is soliciting the waitress at his favourite restaurant to spend the next weekend with him. Or when a woman disappointed in her own home life, who, as a member of a public assistance authority responsible for the care of unmarried mothers, allows her envy towards those who have more sex-appeal than intelligence to make her hard and unsympathetic towards such girls when they come within her jurisdiction.

On matters relating to sex, personal opinion often differs widely from public opinion. The old prejudices remain long after the ideals on which they were based have been proved false. Those customs and prejudices that are at variance with the discoveries of science or the experience of society gradually disappear but the time-lag between knowledge and practice is long. It is said that it takes thirty years for the discoveries of the laboratories to benefit the man in the street. To reduce the time-lag everyone should try to understand the position, as changes in social custom are based on public opinion, and every reader is a maker of that opinion. From enlightened public opinion new social customs will emerge.

The twenty years between the two wars were a period of steady progress. The complete upheaval of the social structure of every European belligerent country recreated for the time those conditions which promote all forms of the misuse of sex.

During the present decade, prostitution, promiscuity, illegitimacy and other such manifestations thereof, have all increased. It is confidently anticipated, however, that the reconstruction of family life, the return of stability to the social structure and of confidence to the individual will enable the pre-war advance to be continued. It may even be hoped that the time-lag may be reduced between knowledge and practice and the development of healthy social customs hastened, owing to the large number of intelligent people in all countries who have been brought face to face with the practical implications of these problems. Those who were members of the fighting forces and those who handled the immediate needs of the civil populations of occupied countries have all had their range of knowledge of social problems widened, and many are thinking constructively.

As the long view is taken in this brief outline, each problem is dealt with from the pre-war position. Figures to illustrate the extent of the rise in commercial prostitution, in illegitimacy, venereal disease, and the various anti-social practices related to sex during the war and immediate post-war period are not available and are not likely ever to be available in a complete and accurate form.

II. THE ILLEGITIMATE

Consider how our knowledge of the dependence of the child on its mother for emotional stability as well as physical health has altered law and social custom in the last thirty years and how the economic and political independence of women has had its repercussions on the position of the illegitimate child. The spread of knowledge is gradually changing the way in which society deals with illegitimacy.

The number of illegitimate births is between 24,000 and 25,000 a year for England and Wales, and between 5,000 and 6,000 for Scotland. The proportion of illegitimate to legitimate births altered hardly at all during the 20 years previous to 1939 and remained at between four and five per cent. of all births in England and Wales and between six and seven per cent. in Scotland.

It is interesting to note how little effect the spread of information on birth control has had on the proportion of illegitimate to legitimate births. It is probably an indication that unmarried motherhood, when not occurring in the mentally sub-normal or where attempts at contraception have been ineffective, occurs where the girl, ignorant of her own sex-nature, has been unexpectedly swept away by her emotions, usually when she has allowed physical fondling without understanding that she would thereby be deprived of her capacity to control her subsequent actions.

Administration and the Child

Public authorities now deal on the same lines with all children who come under their care. In 1939, there were over 18,000 boarded-out children under the care of some 13,000 to 14,000 foster mothers, in addition to about 6,000 children boarded out by public assistance authorities. In the regulations for the protection of these children no distinction is made between the legitimate and illegitimate, and the fact of illegitimacy is not publicly recorded.

Maternity benefits are paid to the married and the unmarried alike under the Health Insurance Acts. The same principle was adopted by the Defence Force Authorities, separation allowances and dependants' allowances being paid to women who had been living with men joining the Forces for over six months at the time of enlistment.

In the wider field the damage done to all homeless children who were deprived of substitute parental care and reared in large institutions has led to public recognition for the need of a radical change in policy and to the appointment of a Departmental Committee

charged with the responsibility of formulating practical measures that will embody admitted needs.*

The Children and Young Persons Act provides that young people "in moral danger" or who are "in need of care and protection"—a group which includes many young unmarried mothers—may now be placed under the guardianship of the Local Authority, and may be given accommodation in a home with their infant, at public expense. This is particularly helpful for those who are of sub-normal intelligence and in danger of drifting into social disaster because they cannot earn enough to keep themselves and also share the cost of supporting a child.

The old customs, which were injurious to the child, are dying out, but the essential values remain. Illegitimacy is recognised as bad both for the country and the child. To-day, every endeavour is made by voluntary and official organizations to provide assistance for the unmarried mother in ways which will enable her to bear her child under healthy conditions and give it the advantage of her personal care during the early months of its life. In 1917, deaths of infants under one year old were 90 per 1,000 among the legitimate and 201 per 1,000 among the illegitimate; by 1936 these proportions had fallen to 57 per 1,000 legitimate and 88 per 1,000 illegitimate. There is still a marked difference in the chance of life given to the child, but the improvement is real.

The Legal and Social Position

Legal machinery has been devised to enable the economic responsibility of the father for his offspring to be better enforced, but while the principle embodied in the law is right in its present form it is not fully effective. Only a small proportion of the affiliation orders given are enforced, as the State does not take the initiative to secure payment.

Nothing can alter the injury inflicted on the child by the irresponsibility which deprives it of a stable home and the care of both parents. Society, if it is to persist, must protect the family, and must therefore discourage those who deliberately ignore their obligations both to the child and to the community. To-day we try to place

*Already the subsequent marriage of the parents does legitimize the child (provided they were legally free to marry when the child was born). The alteration has still to be completed to ensure that the registration of birth is in such a form that the stigma of illegitimacy no longer follows the child into adult life, whenever—to enter a college, Defence Force or profession—a birth certificate has to be produced.

the burden of the community's displeasure where we think it belongs. All are agreed the child is innocent, therefore laws have to be altered.

In many cases the young unmarried parents do not deserve all the blame. Absence of emotional training in childhood, lack of parental guidance in sex behaviour, ignorance of the factors which cause difficulty in maintaining self-control and an absence of positive values, are conditions under which no young man or woman should be required to face the complexities and difficulties of adult life. Parents and teachers are in such cases largely responsible for the consequences.

Consider the following true story and see if you would blame the girl. Her mother had given her no sex instruction whatsoever; in fact, the subject of sex had never been mentioned. In response to her childhood questions she had been told babies were brought by storks or found under gooseberry bushes. She fully believed babies were of supernatural origin and arrived in the world complete, a gift from God on marriage. At sixteen years old she went to a doctor and complained that she was not feeling well. After a brief examination he told her that she was about to have a baby, at which she laughed, saying it was impossible, as she was not married. The baby was born within a few hours. Later when the girl was questioned by the doctor, it was discovered that she had, about nine months previously, had a flirtation and sex intercourse with a man whom she had never seen since that day and whose name she did not know. After further questioning the doctor discovered that she really had no idea that her behaviour with the man had any bearing on the matter at all. Admittedly an extreme case, but it happened within the last few years.

Care for the Irresponsible

There is another group of men and women for whose actions the community must recognize that it shares responsibility. Take the following story of a girl just above the standard of certifiable mental deficiency. Her parents had had great difficulty with her at home and had called in the help of the moral welfare worker. Employment had been found, but the girl ran away and became friendly with a young man who showed a passing interest. Traced later by her parents, she was found as an expectant mother sharing home and occupation with a prostitute. With their consent, she was placed in a home where in due course she became the mother of an illegitimate child. In certain directions the girl showed intelligence, but emotion-

any one was quite unbalanced and uncontrolled. Until such persons are recognized as needing special care and psychological treatment they will continue to be a danger to posterity and to themselves. The community as a whole must take the responsibility for the mentally sub-normal and particularly for the certifiable mentally defective who have been left unprotected at large in the community.

There are to-day some 300,000 people in Great Britain whose mental condition is such that they are or could be certified as mentally defective. There is probably a still larger number of sub-normal intelligence—"border-line" cases as they are called—emotionally unstable, or physiologically abnormal (this last would include the few who through glandular defect are oversexed or inverted). No reliable estimate of their number has been made, as their existence is only officially recorded when the struggle of life proves too much for them and they appear in voluntary Homes and Institutions, before the Public Assistance Authorities, in the Courts, or as defaulters at Free Treatment Centres. These types the scientists can now recognize, but society has not yet devised adequate measures of social protection for them, or provided the necessary facilities for the treatment of those among them whose condition could be improved or cured.

We tacitly expect these inherently or temporarily unfit people to be capable of managing their own lives without help, and tend to blame or penalise them for their inability to do so. Many are the cases of mentally defective (but not certifiable) women in public assistance institutions who revisit the maternity wards from year to year bearing illegitimate children they are unfit to rear or to educate. After the second illegitimate child, if, in the opinion of medical experts, in addition to their lax sex behaviour they are also of a definite degree of sub-normal mentality, they can be certified and protected. Some of these women or their partners suffer from forms of mental deficiency that are hereditary. In these cases their children swell the numbers of those who are handicapped throughout life and are an economic burden on the community.

There are also a number of men who are mentally sub-normal or physically abnormal, and as such are entirely irresponsible in their sex behaviour. Illegitimacy involves anti-social behaviour on the part of both partners—a point which has been recognized by the law in its economic aspect, but not yet by either law or public opinion in its social or racial aspect.

III. THE MENTALLY DEFECTIVE

To provide for mentally defective and sub-normal persons in such a way that they themselves may live reasonably happy lives and at the same time that their sex life does not lower the general standard of behaviour, is among the most difficult social problems we have to face to-day.

The term "mental deficiency" in its legal sense only applies to that section of those of sub-normal intelligence who fall within a particular legal definition. There are in addition numbers of persons who are "dull" or "backward" or "unbalanced" or "uncontrolled." These persons are a cause of great anxiety and worry to their relatives; often they offend against the law, they fill the juvenile courts, and, in normal social conditions, form a high proportion of the solicitation and prostitution cases dealt with by the police.

Society offers them no special form of protection. Many of them can be adjusted to life by psychological treatment and re-education. Many cannot. In adult life these latter are unable to support themselves in any ordinary occupation owing to lack of intelligence coupled sometimes with uncontrollable outbursts of temper, or other peculiarities. Many of these conditions are similar in origin but less in degree to the "mental deficiency" that brings the more marked cases under the legal care prescribed by the Act.

Mental deficiency is due to a variety of causes. There are forms which are hereditary, and are passed on from parent to child. These include not only those whose parents are defective but the offspring of normal members of families of whom some are defective. There are also those biological "sports" where one inherently mentally dull or defective child may appear as the offspring of normal parents among a family of normal brothers and sisters.

It is usually acknowledged that, whatever the cause, those who are defective are not fit parents for the next generation. While all may not transmit the defect to their children, none would be competent to shoulder the responsibility of maintaining, educating and rearing a family.

Need of Complete Notification

It has been seen that large numbers are involved; but less than half the mentally defective have been officially notified by local authorities. In 1938 only 86,500 were under any form of protection, including the 44,200 in institutions. There is no official estimate of the number of border-line cases or of the sub-normal uncertifiable group whose defect is due to hereditary causes.

The mentally defective or sub-normal father or mother is too often the cause of the broken home from which comes the promiscuous girl or the prostitute, the light-fingered boy or the seducer. That there should be in the country half a million people who are a danger to posterity if they become parents, and who are unaffected by the standards of sex behaviour demanded by society must, and does, lead to serious trouble.

Though considerably less than half of those who need it actually have protection, statutory powers exist for the protection of all. In London and other places where the local authority has made adequate provision, those children who need special care and protection can be recognized during their school years and placed in Special Schools, where they are given special training, and medical treatment if their condition can be benefited thereby. By the time they leave school, which, in their case, is at sixteen, if their condition is that of certifiable mental deficiency they can be passed on at once to the care of the Board of Control and sent to an institution or placed under guardianship. If well taught, many can attain sufficient manual skill to earn part of their keep. When they are placed under guardianship those who have charge of them are responsible for seeing that they are not themselves placed and do not place others in moral danger. Under the L.C.C. there have been very few cases of illegitimacy among or due to the certified mentally defective.

A number of local authorities, however, have not provided Special Schools and have not ascertained how many of those who are not benefiting by education are mentally defective within the meaning of the Act. When such children leave school they are not passed on to the Board of Control. Once pupils have left a Special School or the "backward" class of an ordinary school without having been passed on to the care of the Board of Control, they cannot be certified until either their parents apply for them to be trained or they have become guilty of a criminal offence, or, in the case of a mentally defective woman, until she has given birth to two illegitimate children in a public assistance institution. In fact, until both the individual and the community have been injured nothing can be done. Obviously, during the difficult war and post-war period, there has inevitably been deterioration rather than improvement of the position.

Local authorities are the representatives of the public, therefore if the voters understand how much it costs them when the administra-

tion of the Mental Deficiency Act is neglected they will surely insist that the protection available is used to prevent damage rather than, as at present, used only after the harm has been done.

Not long before the war a girl on leaving a Special School at 16 went on the streets and contracted venereal disease which she is known to have passed on to three people—how many more she infected one can only surmise. It was not until she was 24, when she went to a public institution to have a second illegitimate child and to be given ante-natal treatment for syphilis that she was at last certified and placed under protective care. Eight years of misery for the girl and damage to the community which could have been prevented.

Sterilization

There are those who build great hopes on sterilization as a means of wiping out mental deficiency. A Departmental Commission was appointed in 1934, with the approval of the Minister of Health, to enquire fully into the question, and to ascertain what advantage had been experienced by those countries that had legalised sterilization. The report of the committee recommended that, under strict safeguards, voluntary sterilization should be made legal. The operation should only be performed under the written authorization of the Minister of Health, and applications for such authorization should be signed by two doctors, both of whom had examined the patient and one of whom should be the family doctor. If the Minister was not satisfied he could require a further medical examination.

Where the application for sterilization was due to hereditary disease or the probability of the patient transmitting such disease, the patient should where possible sign a declaration that he or she was willing to be sterilized. Where the mental condition of the patient was such that he or she could not understand the position, then the written consent of parent or guardian must be obtained. Subject to these and other safeguards the Committee unanimously recommended that voluntary sterilization be legalised for (a) "a person who is mentally defective or who has suffered from mental disorder," (b) "a person who suffers from, or is believed to be a carrier of, a grave physical disability which has been shown to be transmissible," (c) "a person who is believed to be likely to transmit mental disorder or defect." Further important provisions were added to the effect that social care would be needed after sterilization in the case of the mentally defective, and that all proceedings should be confidential.

While the danger of parenthood might be removed, the danger, both to the individual and the community, of the mental defective drifting into conditions of sexual promiscuity, and possibly contracting and transmitting venereal disease is not removed. The need for social and economic protection still remains.

To be enabled to live in the community, the mentally defective must be specially taught, trained in an occupation and protected, after leaving the Institution, from sex or economic exploitation. Posterity can undoubtedly be safeguarded by the sterilization of those of a degree of deficiency which would render parenthood on their part damaging both to the offspring and to the community. If and when the necessary legislation is enacted, much misery and suffering will be prevented, and in the long run it will reduce the financial burden on the community.

It would appear that, if we are to apply our growing knowledge to human welfare and happiness, we may find in voluntary sterilization, under adequate safeguards, the solution of the problem of providing a normal sex life for the half million or more abnormal and sub-normal people who in the interests of the present and the future should be debarred from parenthood. It is one of the laws of human attraction that "like tends to like," and so those of a low mentality tend to drift together. Without human intervention a deteriorating stock will die out in a few generations, but in the process many will suffer. The form of sterilization recommended by the Committee prevents procreation but does not affect the sex functions.

If companionate marriages between the sterilized were encouraged, these individuals would be able to have companionship, normal sex relations and a human interest. One additional safeguard, however, would be necessary. It must be remembered that marriage between a normal and a sub-normal person, even if the afflicted partner is sterilized, would usually be disastrous from the individual and always from the racial standpoint. Normal persons would be prevented from making proper contribution to posterity, and the denied urge to parenthood would make for personal unhappiness.

Until the law is altered, the position is ambiguous, and the doctors are inadequately protected. Public opinion was proving steadily more favourable to progress along these lines, and in a democracy, public opinion in the end is crystallized into action, but the terrible demonstration of the abuse of science given by the Totalitarian Powers may considerably delay action in this field.

IV. THE SUB-NORMAL AND ABNORMAL

Excluding the mentally defective, there is always a number of those who are biologically known as "sports"; these are extreme examples of the family stock; of those who, from some accident of circumstance since birth, have been injured in mind or body to such an extent that their adjustment to every-day life is impossible until the defect (if curable) has been cured. There are also a few individuals who, owing to certain glands being hereditarily over-developed or injured through illness grow into giants, or do not grow, and remain dwarfed.

The lives of giants are a misery to them, as not only are all beds too short, doors too low, buses and trains uncomfortable, but the fact that they are always conscious of being different from their fellows gives them a feeling of inferiority which expresses itself either in continuous depression or in over-assertiveness. It is often impossible for them to marry, and their choice of a partner is in any case very limited. Often their only opportunity of a career is to show off their peculiarity by going on the stage or appearing at fairs—a form of life that accentuates their difference from others and their unhappiness.

Dwarfs are slightly better off, as there are certain stocks that breed true to dwarfism; these families drift together and form a small community. They are intellectually perfectly normal, and some of the families are noted for their musical and histrionic ability. Sometimes a single dwarf appears in a normal family. These also tend to join the groups of dwarf families; the troupes of dwarf entertainers who tour Europe and America are recruited in this way. This is natural, for dwarfs are deprived of normal family life except among their own kind.

Giantism and dwarfism are far simpler to understand than are variations in sex and in sex behaviour. The range of possible variations is much greater. The close inter-relationship between the sex glands and the emotions, and the extent to which control and direction of the intelligence are required to enable a person to conform in sex behaviour to the requirements of his own welfare and of society, result in anti-social behaviour in the sex field arising from many causes, ranging from the emotional starvation of an intelligent person in early childhood to the physiological over-development of the sex equipment in one of sub-normal intelligence.

Hitherto offences committed against society have been dealt with by meting out the same punishment to all those committing the offences. No cognisance has been taken in law of the fact that many

are caused by conditions in the offender that are either hereditary or that need a doctor's care for mind or body.

Take, for example, the exhibitionist—often a man well on in years—who terrifies and shocks children and young girls in country lanes and public parks. There have been cases of such men who have been given twenty or thirty short prison sentences for repetitions of the same offence. It is known now that most of these cases are due to an enlarged prostate gland and that as prison cannot alter the abnormality, when the exhibitionist regains freedom he cannot help again committing the offence. A clear example of the anti-social use of sex that can be prevented by the application of scientific knowledge.

The Homosexual

Take again the difficult problem of homosexuality. In Great Britain it is a criminal offence for men to associate with each other, but the law takes no cognisance of the same behaviour between women—commonly called Lesbianism. Society, quite rightly, discourages both practices, but in its lack of understanding of the contributory causes has often adopted cruel and ineffective measures to attain the desired end.

On general grounds of human welfare it is necessary to recognize the abnormal as such. If the race is to be preserved and to progress, it must be based on the family, and on society devising customs which will select the fittest in character, physique and intelligence as the parents of the future. Each generation must therefore care for and protect society from damage from its own crop of abnormalities, giving them the happiest individual lives possible without jeopardizing the standards of health and welfare of the community.

The difficulty that confronts society is to devise laws and conventions which will be applicable to all cases, and to create a public opinion based on scientific knowledge. For one large group, active condemnation of the practices, by creating a strong expectation of, and encouragement to, normal behaviour, will help those who, by positive effort, can help themselves to remain normal or to return to the normal. There are a few people whose sex equipment is physiologically abnormal; the variations range from those whose glands so alter during life as to change the sex of the individual completely to those who have more or less hair growth than is usual for their sex.

Knowledge as to how these glandular conditions can be treated is growing slowly; in the future it may be possible to enable such people to attain normality. The community should now recognize

the relatively small number of victims of these conditions as the accidents of biology. They can no more be held morally responsible for their temperaments, in so far as these are affected by their physiological make-up, than can the mentally defective, the giant or the dwarf.

They must, however, be recognized as abnormal, and they must not be allowed to draw the normal youth and girl within their influence. There is nothing in the abnormality that need affect their intellectual capacity, and many homosexuals and lesbians have made valuable contributions to art, music and literature. The problem is to give such people the opportunity of making their full contribution to the intellectual life of their generation without their abnormal sex development lowering the general standards of sex behaviour.

There is a far larger group of those who follow homosexual and lesbian practices whose condition is due to psychological and emotional causes. Many of these are potentially normal people in whom the condition could have been prevented by right handling during adolescence. In some the tendency can be cured or ameliorated by psychological treatment if this is applied in the early stages. It is for this group that the expectation of normal conduct is helpful if wisely expressed by public opinion.

It must be understood that in the early years of adolescence all normal boys and girls are more attracted to members of their own than of the opposite sex. It is not until the later teens that the interest of the boy in the girl and the girl in the boy is fully awake.

In quite a number of homosexuals the attraction for members of the same sex is simply a persistence of the condition which was normal at twelve years old but becomes abnormal when at maturity it becomes involved with sex relationship. When neither the childish adults nor their fellows understand this, the former recognise that they are "peculiar" and brood and worry over it. The worry is intensified as they realise that their inclinations lead them to desire behaviour sternly condemned by society. They meet young people of their own sex—young either in years or in development—and in an atmosphere of secrecy and excitement and under stress of feelings of guilt give rein to their desires under the very conditions that will intensify and fix them in the emotions of both partners. The psychologist can often help the individual to "grow up," but the willing co-operation of the patient is essential to success, and at present facilities for such treatment are few, it being long and expensive.

In the course advocated by some, which is for society to tolerate pervert behaviour, lies grave danger. It inevitably leads to a rapid increase in the number of individuals so affected. This was shown by the swift development of clubs and dance halls for perverts in Berlin in the nineteen-twenties. The sub- or abnormal individual, whether man or woman, seeks a boy or a girl partner. An abnormal experience of this kind thrust on youth or girl often does severe damage to sex adjustment. They too may drift towards the pervert attitude and thus lower the general standard of behaviour.

It cannot be too strongly emphasized that the marriage of such persons, before they have been cured by psychological treatment, will not bring about a cure but will create a very unhappy marriage. This difficult subject has already found its place among the problems of the unmarried, so that aspect is omitted here. The policy of "hush-hush" will help no one; the more widely it is understood that sex perversions of this kind are either due to physiological abnormality or persistent juvenilism the sooner public opinion will express itself in suitable and healthy forms of treatment, protective measures and right education.

The Physiologically Over-Sexed

The physiologically over-sexed provide another problem. Professor Cyril Burt is fully convinced that of all the factors making for sex delinquency in girls, an over-sexed constitution is at once the commonest and most direct. Furthermore, "the most striking fact is the prevalence of sexual irregularities among the parents and other relatives of the girl." While all cannot be attributed to heredity, and there are other factors such as bad environment, bad example and the early violation of the girl herself, one cannot resist the inference that an oversexed constitution often runs as an hereditary taint through certain branches of a family. Other investigators in other countries have found that a large proportion of professional prostitutes are either mentally sub-normal, physiologically over-sexed or emotionally unbalanced. Were similar investigations undertaken into the life and family histories of persistently promiscuous men, similar causes would undoubtedly be disclosed.

V. SYPHILIS AND GONORRHOEA

One of the most serious consequences of the anti-social use of sex had been the neglect, both in medical administration and in popular health education, of two serious diseases. This neglect has persisted until quite recent times.

Early in the present century, scientists discovered that syphilis and gonorrhoea were each caused by a separate organism, just as are the majority of other infectious or contagious diseases. A specific remedy was found for syphilis nearly 40 years ago, but until 1939 no equally effective treatment had been discovered for gonorrhoea.

For generations it was believed that there was one "venereal disease," showing varied symptoms, which was a direct punishment for sin. Among those who were known to suffer from it were men and women of immoral life, and so the moral and medical issues were inextricably confused. Following the usual human behaviour in face of the unpleasant and unknown, which is to turn aside and ignore it, hospitals forbade the acceptance of patients known to be suffering from these conditions, women and young people were kept in complete ignorance of their existence, and the general male public had only the most hazy notions about them.

The weird ideas that have derived from ignorance of the nature and consequences of these diseases have materially affected social custom and public administration. The old fears of sex and horror of the curse of disease have proved difficult to remove, but to-day, in most countries, syphilis and gonorrhoea are recognised as public health problems that need to be handled as part of the general health policy of a country, although their dissemination and their after-effects are directly related to social behaviour.

Both are contagious diseases. That means that each is caused by contact with the infected discharge of someone who already has the disease. In the contact with an infected person, germs which produce these illnesses are passed on from the body of an infected person to that of a healthy one.

Syphilis is caused by a worm-like organism called *spirochaeta pallida*. The organism of gonorrhoea is called *gonococcus*. Both are so tiny that they can only be seen with the aid of a microscope.

With very few exceptions, infection takes place during sexual intercourse, as germs may be present in discharges and secretions from the vagina of the infected woman, from the bladder passage in both men and women who are infected, and from the seminal fluid of the infected man. The germs are not carried by air and infection is always by contact.

Indirect infection through the medium of cups, pipes, W.C.s, etc., which have been soiled by infected material, is theoretically possible; in practice it rarely occurs. One exception is in the case of little girls, who can acquire a form of gonorrhoea from coming into contact with

infected material, usually through sleeping in the same bed with an infected adult.

Once the infected person is under treatment indirect infection is still more unlikely. Sexual intercourse itself cannot bring about venereal disease, and married people who keep to each other need never have any fear of these conditions arising.

If treatment for either disease is begun promptly there is every prospect of a speedy cure of gonorrhoea, and of a less speedy but no less effective cure of syphilis, always provided that the doctor's instructions are followed to the end. Failure to obtain treatment, however, or to complete the observation period advised by the doctor may bring serious results.

So important to public and individual health is the treatment and cure of these diseases that in all progressive countries the Governments provide treatment. In Great Britain there are a number of free treatment centres run hitherto under the aegis of the County and County Borough Authorities in England and Wales, and by the Burghs in Scotland, now being transferred to the Regional Hospital Committee under the Health Services Act, 1946. When treatment centres are distant from the home of the patient, and the cost of repeated bus and train fares is a heavy tax on the weekly budget, the money for the fares can be recovered by the patient from the Medical Officer at the treatment centre.

Owing to the social stigma that still clings to these diseases, all treatment is carried out under conditions of secrecy. Each person seeking treatment is known to the clinic attendants by a number only, and it is illegal for any doctor to give a patient's name to anybody—parent, employer, or marriage partner—without the consent of the individual concerned. In the case of a marriage partner, it is highly desirable that this consent should be given, as he or she is also likely to require treatment. For a husband to refuse to tell his wife—if he is living with her—that he is under treatment, will not only endanger the health of his wife and children, but he will himself, in all probability, become re-infected from his wife. Similar conditions, of course, apply to the infected wife.

While retaining the general plan described above, in 1940, Regulation 33B gave power to the Medical Officer of Health to seek out and bring to treatment any person who was reported by two or more patients as the source of infection. Also, of much more effect in bringing those needing treatment under medical care, Government authority was given, to include an almoner or trained social worker

on the staff of the clinic to enable every contact to be discreetly followed up and invited, confidentially, to seek treatment.

Great strides have recently been made in the use of penicillin and other new drugs in the treatment of syphilis, which has greatly reduced the time necessary for cure, but it is vital that patients should remain under observation for some months after treatment as if cure is not complete, both the individuals and their future offspring may suffer serious consequences.

Gonorrhoea has until recently been a very troublesome ailment to cure, particularly in women. The symptoms are practically indistinguishable without expert examination from those of the many harmless discharges from which women suffer, and this has led only too often to long delay in seeking expert medical advice. Delay makes ultimate cure much more difficult. Sometimes a woman does not know that anything is wrong until she has severe internal pains. These drive her to the hospital, and an operation may then be necessary, as the germs of the disease have penetrated far into the body and caused inflammation or abscesses in the fallopian tubes.

The only safe course to follow is for any unmarried woman who has exposed herself to the risk of infection to visit the nearest treatment centre at once, and for any married woman to do so on the appearance of any discharge and ask to have it examined. In the majority of cases it will be found to be nothing serious and the mind will be set at rest, while if it is serious early treatment should bring a speedy cure.

So important is the cure of the individual to the welfare of the race considered to be that anyone who has at any time suffered from either syphilis or gonorrhoea may obtain, free of charge, a special examination at any treatment centre before marriage.

During the last war, syphilis and gonorrhoea did so much damage both to the Defence Forces and the civil population that for the last 20 years there has been a determined effort to wipe it out. In 1914 it was estimated by the Royal Commission which enquired into the subject that 10 per cent. of the population of all cities were or had been infected with syphilis. Gonorrhoea was much more prevalent but no accurate figures could be quoted. Since the free Treatment Centres were opened, directly after the war, and a widespread campaign of public enlightenment instituted, the incidence has fallen rapidly. New infections of syphilis by 1939 had fallen by over 50 per cent. and there was evidence of a definite decline in gonorrhoea.

It was then estimated that the total new infections of syphilis in the country amounted to 10,000 per annum and that gonorrhoea was

about four times as prevalent. There were therefore about 50,000 persons a year newly infected by these diseases. A serious number, but that progress has been made can be realised when we remember that, between 1914 and 1918, 400,000 men of the Defence Forces contracted one or other or both of these diseases, with the result that the equivalent of three divisions were constantly on the sick list from this cause. In the recent war, great attention was paid to the treatment of those infected in all serving personnel, but among the civil population a serious increase was indicated.

A word to married women who contract disease from their husbands. It must not be thought that because the partner has passed on the disease he must necessarily have had a recent affair with another woman and that its incidence is evidence of his having been unfaithful to his wife. A man may contract the disease in one escapade in early youth, years before marriage. If he was not treated or was insufficiently treated, the symptoms would disappear and he would think he was cured. What really happened was that the germs remained latent, and only re-awoke years later, perhaps on marriage. He would be completely innocent of any intent either to distress or to injure his wife.

To banish these diseases from the community we must think honestly about them. For every reason, social, ethical and moral, lax and irresponsible sex behaviour is to be discouraged, but the medical and moral issues must not be confused. Men or women may be lax in sex behaviour but careful to avoid infection, may break hearts and homes and yet remain popular in the social circle. Though they expose themselves many times to the risk of infection, and will probably eventually contract disease, for a time they escape, and during that time, although their behaviour damages family life, themselves, and their partners, their irresponsible promiscuous behaviour is not condemned by society. The man or the girl who is constantly having "affairs" is in fact often envied by contemporaries. On the other hand, a youth or a girl may make but one mistake, may, very possibly, under the influence of alcohol, be led once into foolish behaviour, and thereby contract disease. He or she is then condemned, because the eleventh commandment has been broken.

It is one of the most tragic features that a large number of those infected are married women and children who are innocent of any social offence and often quite unaware that they have been exposed to infection until disease has them in its grip. To encourage a high standard of sex behaviour is in the interests of all; it promotes happy

marriages and provides a stable family background for the children of the future.

To condemn only the minority of the promiscuous who contract disease, usually the young and inexperienced, or the innocent married woman, does not improve the standard of behaviour, but through tending to concealment of his or her condition by the victim leads to the wider dissemination of disease in the community. To make it easier to understand the difficulties involved, a brief outline of the diseases supplied by medical authorities will be included.

Emphasis has been laid on the importance of avoiding the risk of venereal disease which is always present when there is irregular and promiscuous sex conduct. Public Health is, however, also concerned with any possibility of preventing the development of disease after a risk has been taken. There is no moral reason why the misconduct of any individual should be allowed to make him a menace to public health, as he will be if he contracts such disease.

Nevertheless, there has been considerable controversy, partly on moral grounds, and partly on that of public policy, on the advisability of giving information about certain measures which may be adopted in order to lessen the risk of contracting venereal disease even if intercourse takes place with an infected person.

It is contended by those who deprecate the giving of any such information, whatever its effectiveness, that to remove the danger of contracting disease will make promiscuity safer and lead to an increase in immorality. Others take the line that fear is not a moral virtue, and that prevention of disease is a personal responsibility and a public duty. Such people agree in deploring irregular and promiscuous sex conduct, but believe that such information should be available.

The position is further complicated by controversy regarding the merits and demerits of the particular measures to be recommended. There are those who believe that the use of a sheath by the man and certain disinfecting processes afterwards will lead to a large diminution of venereal disease, and that packets containing the necessary materials and instructions should be available to the public. Others, including a considerable body of medical opinion, are of the opinion that while disinfectant measures, applied promptly and efficiently, will ward off many cases of disease, the sale to the public of packets purporting to give the means of safety would increase venereal disease by giving false assurance of security to many who would not be competent or who would not have the facilities to disinfect themselves properly.

It will be seen in other sections of this book that the advocacy of a high standard of sex conduct is based on more far-reaching considerations than fear of disease. If venereal disease were no longer a menace, the positive and constructive case for moral behaviour would remain equally strong and the arguments against promiscuity equally convincing.

Syphilis may be (1) acquired, or (2) hereditary or congenital. In acquired syphilis the time elapsing between infection and the first appearance of the disease varies from ten days to six or seven weeks or even longer. The disease proceeds in three stages. The first is characterised by a sore (chancre) at the site of infection; its appearance varies in different cases and according to its position on the body, but it should be pointed out that there is no relation between the severity of the chancre and the gravity of the later stages.

The second stage, which usually occurs from six to nine weeks or more after the first stage, is marked by a rash on the body, which may be slight or profuse, and sore patches, particularly in the throat and on the lips. Though this stage may be so slight as to be unrecognised, it is important to realise that the sores are infectious in the highest degree, and that it is particularly in this stage that patients are liable to spread the disease by indirect contact through drinking vessels, towels, shaving brushes, pipes, and so on.

The third stage occurs in cases where treatment in the early stages has been neglected or insufficient. It may develop within a few months of infection, but its onset is more usually delayed, it may be for twenty or thirty years or even longer. No organ of the body is immune from its attack, and severe and repellent deformities may result, or fatal consequences ensue.

Hereditary or congenital syphilis is due to infection of the unborn child through the blood of the mother. This may occur when either parent is infected, and in many instances the infection is so severe as to cause miscarriage, the birth of a stillborn child or of one which survives only for a short period. The child in whom a parent has sown the seeds of syphilis is weakly because of the effect of the disease upon its internal organs, and often wastes away. It commonly suffers in infancy from rashes and sores, especially round the mouth and buttocks, it may have fits, become blind or mentally defective, and is much more liable than a healthy child to catch and die of any other infantile complaint. Some children show in infancy few or none of the symptoms mentioned above, but later, most usually between the ages of fifteen and twenty, develop eye disease, deafness, mental defect, locomotor ataxy, or general paralysis.

It cannot be too widely known that congenital syphilis can be prevented by proper treatment of the mother before *and* throughout pregnancy. If this precaution has been neglected, timely and regular treatment of the infant will usually prevent the more serious effects. In many ante-natal clinics a simple blood test is now taken as a routine measure: this enables syphilis and other conditions to be detected in the expectant mother, and treatment to be started in time to ensure the birth of a living child free from infection.

Those concerned with the care or education of children are sometimes apprehensive of the danger of infection from congenital syphilitic children. Infants with congenital syphilis can be very contagious until treatment is begun: then the danger to others rapidly decreases. After infancy there is little or no danger of infecting others, particularly when treatment is being undergone.

Gonorrhoea is an infection by a germ which attacks the lining membranes of the private parts. It causes the formation of pus or matter which appears as a discharge from the pipe through which the urine flows from the bladder, and in women also in the other vaginal passage. The disease manifests itself from one day to three weeks (usually three to four days) after infection, and the first symptoms are tinglings in the pipe, with perhaps some discomfort in passing water, and shortly afterwards the appearance of a thick yellow discharge.

If the disease is promptly and efficiently treated under the new methods, a cure can be obtained in a comparatively short time, but otherwise, if tests or cure are not sought, the disease becomes chronic. In this latter stage there is usually no pain or great personal inconvenience, and the discharge becomes scanty, intermittent and clear in character, giving rise to what is known as "gleet." The presence of "gleet" suggests incomplete cure and the possibility of transmission of the disease to others; its cause should always be investigated.

Complications are frequent. In men gonorrhoea may cause abscess in the prostate gland, and inflammation of one or both testicles, often resulting in sterility. In women it often blocks the upper tubes, which are necessary for fertility, and may be a cause of chronic pain and ill-health. Gonorrhoeal rheumatism may affect any joint in the body, and the eyes may be affected directly by the pus even to the extent of destruction of sight.

The best method of prevention of these diseases is adequate education and enlightenment of the public, especially of young people regarding their nature and cause and their relation to conduct. Among the 50,000 to 60,000 new infections in England and Wales

every year, the large majority are young people, and many of them have not even heard of these diseases until they have contracted them. Until recently, little mention of venereal disease was made in the home, or in the press and never on the radio. The working knowledge of most diseases given in other ways is not available for young people.

The duty of giving this enlightenment is laid by statute on Local Authorities. Most of them discharge this duty, but some fail, entirely or partially, to do so, and their younger citizens are left ignorant of the dangers they may incur. The kind of instruction given under Local Authority auspices has already been indicated. It will be seen that, while adequate information on the subject of disease is given, the whole attitude to the subject of sex is dealt with, and we believe that, whatever merits disinfection and preventive treatment may have the best preventive is a constructive lead to a high conception of sex conduct.

Another question that has given rise to controversy has been that of compulsory notification of venereal disease.

When compulsory measures follow immediately on the abolition of regulated prostitution, experience shows that the compulsory measures are used mainly against prostitutes, and tend to reduce the efficiency of the medical measures. These, to be successful, need the willing co-operation of the infected, and so long as any stigma or penalty attaches to treatment, so long will the facilities provided be avoided, not only by the amateur or clandestine prostitute—whose numbers are always far greater than those of the known professional women—but also by the infected married women.

These objections do not obtain in Great Britain, the Dominions or the countries where regulation has long been abolished. In Great Britain medical opinion is divided on the subject, but the Ministry of Health and a considerable body of scientific and administrative opinion believed that up to 1935 our present voluntary system gave the best results. The countries which had compulsory systems did not show better.

From 1939 to 1945 the country has suffered the experience of total war. Its young man and womanhood were separated from home life either in the Services or industry. Adolescents were sent into war work and exposed to unwonted strain, and innumerable married couples were separated for long periods under conditions of emotional stress. Extra-marital relations, and with them the infections with syphilis and gonorrhoea inevitably increased. For the civil population, particularly the women, treatment facilities of an acceptable and

effective kind were inadequate. Many men and women treated by the new methods did not complete their observation period. As there is a definite proportion who are not cured by one application of the new treatment, a number, including men from the Services, will relapse and become a danger to themselves and their future offspring.

Some further protection to public health will probably be needed unless the efficacy of the new methods of treatment cancel present indications. The original objections to notification have largely been met. The administrative difficulty has been reduced by the shorter time now needed for cure, while the standard of general knowledge of the dangers of neglect of treatment has risen.

From 1914 to 1940 some £63,000 was spent from voluntary funds by the British Social Hygiene Council on the national and international aspects of popular enlightenment. As the recognised agency of the Local Authorities, much propaganda was undertaken by the Council in the areas of those willing to finance it. Since 1940 the campaign of popular education has been financed by the Government on a more adequate scale. The Council pressed for additional provision that was beyond the scope of voluntary resources and on condition the trained personnel and machinery for propaganda was handed over to the Government's agency—the Central Council for Health Education—the Ministry of Health undertook that finance for general health education, including sex guidance and V.D. propaganda, should be provided on an adequate scale. The population have now a general knowledge sufficient it is believed to create a public opinion that will support administrative measures designed to prevent the terrible results of war damaging the health of the next generation.

Much of the ground gained between the wars has been lost, but we have knowledge which, if applied, will prevent a recurrence of the damage to the childhood of the nation.

Untreated or inadequately treated, gonorrhoea is seriously damaging to health in women and is a cause of sterility in both sexes. Untreated or inadequately treated, syphilis can have devastating effects on the individual, and, in addition, any children may suffer from congenital syphilis, the consequences of which have already been described (see page 473). It is hoped that new administrative measures will be closely interlinked with provision made for general health. The treatment of women under the scheme in operation for the first 20 years has not been adapted to their needs.

Gonorrhoea is at least eight to ten times more prevalent than syphilis in Great Britain, yet only about 7,000 women sought treatment in 1939 in contrast to 20,000 men. A woman cannot herself

diagnose her condition, as the main symptom—a discharge—is one common to a number of conditions, which have nothing to do with promiscuity. Only the medical practitioner with the resources of a laboratory at his command can find out if the gonococcus is present in the discharge. What is needed is a treatment centre where all women's ailments can be treated; it is hoped their establishment will be the next step.

While public opinion may be ready to accept the recognition of syphilis and gonorrhoea as notifiable diseases and to impose on the infected the responsibility of obtaining treatment until cured, there are several points to be borne in mind if the community is to attain the results all desire—the restoration of the health of the individual and the protection of posterity—one of the outstanding problems is to bring under medical care those married women and others *who do not know* they are infected. Notification only operates *after* the condition has been diagnosed.

Many cases of syphilis and gonorrhoea are contracted within marriage, and in ways unconnected with promiscuous sex behaviour. With the more accurate evaluation of the position now possible, the term "venereal disease" should be dropped. Venereal derives from Venus, and implies moral laxity. Moral judgments are always dangerous and to confuse them with medical administration in this case is a barrier to progress.

Let syphilis and gonorrhoea take their place with the other scourges to human health for purpose of medical administration. Promiscuous sex behaviour—even when disease does not result—is damaging to the individual and to the family. The social structure needs constant adjustment if ethical values are to be related to knowledge.

The misuse of sex has been the major cause of the spread of syphilis and gonorrhoea. Now we have knowledge which, if applied effectively, can eliminate these diseases within a generation. Their removal will not, however, effect the major problems of attaching a sense of personal responsibility to the use of the sex function, of directing the vital power derived from sex, to the service of personal and racial development.

VI. PROSTITUTION

Prostitution has been designated as "the oldest profession in the world" and described as "the non-selective purchase and sale of facilities for physical sex relations."

What is the distinctive feature of prostitution? In what does it

differ from other sex relations outside marriage? The fundamental difference is that the woman does not choose or select her partner but offers to render service to anyone who will pay, while the customer limits his choice to those willing to sell and is himself ready to purchase for cash what he requires, recognising no personal responsibility beyond the cash transaction.

Prostitution existed in cultures and civilizations of the past, and flourishes in many different parts of the world to-day. Wherever and whenever it occurs, the causes from which it arises are the same, and the types of men and women involved are similar. Here we will limit ourselves mainly to prostitution as it exists now in our western civilization.

There are among men always some who do not fit into the family system, those who, as we have seen in the previous pages, remain adolescent and irresponsible in their sex life, who separate the physical from general sex expression; these drift towards the prostitute. This group also includes many of the unhappily married—over half the customers of prostitutes are married men. Even more than those actually unhappy are those who are bored in their married relations (often because they are maladjusted) and who, when removed from their home background, whether by occupation, or recreation, seek irresponsible sex adventure, largely because it is traditional to do so, though in their case tradition and inclination join hands. Then again there are those who are separated for a considerable length of time from their homes by their calling, such as seafarers, commercial travellers, and adults away from home and those who are unable to marry until late in life—though these last are more likely to form more stable liaisons with someone for whom they feel affection and are, in the main, repelled by the degradation of human personality involved in commercial prostitution. In addition to, and underlying these diverse causes are lack of sex education, emotional starvation in infancy and childhood, and the absence of a secure home background.

What type of woman takes up this form of life? In all countries and in all ages, mainly those with no homes, from broken homes, or separated from their people. It must be remembered that so long as the effective demand exists, that is, so long as men are prepared to pay, the supply—that is the girls—will be forthcoming. For a few years a commercially promiscuous girl can earn more than those in skilled and semi-skilled occupations, though, on the average, only for a very few years.

To-day, in Great Britain and the non-regulationist countries—that

is, in those countries which do not allow girls to be recruited and exploited for prostitution to the financial benefit of others—they are mostly drawn from two groups. First there is the sub-normal or abnormal girl who has not the mental capacity or physical energy to make her way in ordinary commercial and industrial life and who finds in the sale of herself the easiest method of earning sufficient to meet her needs.

The second and larger group is made up of potentially normal girls with a broken home background, who have been starved of love in infancy and childhood and therefore have no emotional stability in life. Many enquiries into the life histories of prostitutes have been made in the last 30 years, in this country, in Sweden, in America and in Germany, and all tell the same story. Those who come under the care of social workers, Local Authorities, or the police courts, are either of sub-normal mentality, have some glandular maladjustment that makes them physiologically over-sexed, or they come from broken homes, have been brought up in institutions, have step-parents, have lost their mother or both parents in early life, or show in their family histories certain hereditary traits. Poverty, which used to be thought the major cause, takes a low place in the scale of causation.

Much has been said recently as to the number of girls entering the lower ranks of domestic service who tend towards promiscuity. The main reason is that many "dull and backward" girls, and those brought up in homes and institutions are placed in domestic service because it is an occupation for which no standard of training is required and there is an almost unlimited demand; a secondary reason is that the single-handed maid has a very lonely life, and if she has no home background, can only satisfy the needs of her starved emotional nature through making casual acquaintances in her few leisure hours. Those who are weak in character as well as lonely tend to drift from this to prostitution.

It must not be imagined that any large proportion of the girls who are lax in their sex behaviour become commercial prostitutes. Nor do most men become prostitutes' customers. The general trend is away from casual commercial prostitution. The annual average of women coming before the Courts in Great Britain for offences connected therewith between 1910 and 1914 was 12,759; this number had fallen by 1935 to 3,589. In the same way the number of persons dealt with for brothel keeping over the same periods had fallen from 1,189 to 249.

Police Court cases do not always reflect the prevalence of the

offence; they may also reflect the drive behind the administration exerted by public opinion. In this connection there has been no relaxation in the support given by public opinion in so far as brothel keeping is concerned, but the laws affecting solicitation are recognised to be in need of amendment. Administration varies somewhat in different parts of the country. However, as both kinds of related offence show a similar fall, the figures may be taken to confirm the general statement that the demand for and supply of commercial sex relations were decreasing until the temporary social upheaval of war. The fall will, it is expected, be resumed with the peacetime readjustments.

In earlier sections the questions of sex experience in anticipation of marriage, companionate marriage and the various forms of transitory but partially responsible sex relationship have already been discussed.

Difference Between Prostitution and Promiscuity

Both these and commercial prostitution are to be distinguished from the large number of casual non-commercial and irresponsible relationships, many of which consist only of an evening's companionship terminating in intercourse, which take place between young people. These differ from commercial prostitution on two points—they are based on some selection on the part of the individuals concerned, and no money passes. On both counts such behaviour is less degrading to the individual and somewhat less harmful to the community.

Many of the girls and young men involved are drawn from the same general types as those who constitute the supply and demand in prostitution, but a larger proportion are drawn from the normal young adults on whom present social practice imposes a delayed marriage age. Of these, many have more or less frequent sex adventures. While not paid in cash the girl expects to be fed and entertained for the evening, thus taking payment in kind. It may show the emergence of a better standard that the partners themselves, while prepared to admit promiscuity, are indignant at such adventures being classed as prostitution.

An enquiry in this country as to the future of nearly 2,000 girls who had passed through the hands of social agencies owing to sex delinquency of one kind or another revealed that the majority of those who were normal had not passed into regular promiscuity or prostitution. Quite a number of girls coming to the large towns from the country—often after losing their first situation—link up for a

time with an older woman, and lead a life of general promiscuity or of open prostitution. Among these the risks of pregnancy and disease are high; they provide the bulk of the unmarried clientèle of the abortionist, and many of the patients of the venereal treatment centres.

In foreign countries, where prostitution is regulated, the effect of physical and emotional abnormality is more clearly seen. The normal girl who in such countries becomes a prostitute, only remains on that register for an average of about three years, while the others cannot free themselves from the toils of the machine.

Britain is gradually devising alterations in law and custom to check commercial sex relations. Already personal and public opinion among the educated and economically self-supporting is at one in recognising the accuracy of the description of the practice; it is indeed a *prostitution* of what should be life's greatest asset. Once the elements of the problem are appreciated its solution can be sought along lines that will be effective—not by penalising the individual for the shortcomings of the community but by equipping the normal individual adequately for a responsible sex life and by providing protection for the abnormal; by facilitating early marriage and by recognising that laxity and irresponsibility in sex behaviour is bad for the individual and the race, whether practised by man or woman.

In times of social upheaval such as war, the conditions that favour lax behaviour are widespread and a considerable increase in commercial sex relations and in general promiscuity is to be expected.

Regulation and Traffic in Women

From the social standpoint the reasons against the regulation of prostitution are:—

1. That the recognition of prostitution as a legally protected profession encourages many anti-social abuses of which traffic in women and girls is perhaps the most serious.
2. That legal protection given to those concerned creates large financial interests damaging to public welfare.
3. That the state recognition of prostitution embodies the acceptance of a lax standard of sex behaviour damaging to the stability of the family and injurious to youth.

One of the gravest forms of the mis-use of sex is its commercial exploitation at its crudest and cruelest in the international traffic in women. While the British Empire and the Scandinavian countries

penalise heavily third party profits in prostitution, the profits involved are such that the constant pressure of public opinion is required to secure active law enforcement. In regulationist countries, the open brothel provides a permanent market for the trafficker, and up to the beginning of the nineteenth century the supply of girls was a lucrative and widespread international industry. During the last 40 years, however, there has been real improvement. A series of international conventions have been entered into by the Governments of all the leading countries under which they agree to recognize the transfer of girls from one country to another for purposes of prostitution as a criminal offence, and machinery has been created for the official rescue, care and return of such girls to their own countries. An increasing number of countries have made brothel keeping illegal. Up to the outbreak of war the combined national and international advance was gradually reducing the volume of the traffic. During the years of its active life the Social Section of the League of Nations worked untiringly to improve conditions.

The demand to close the brothels, made by those who wanted to check the Traffic in Women, is now also supported by those who wish to check the spread of venereal disease.

In the old days, when the cause of venereal disease was unknown, it was thought that the health and stability of the family would be protected if special provision was made for men to purchase their sex experiences from a certain group of women set aside for the purpose. In some cases in the Middle Ages such women were dressed in special uniforms, excluded from residential areas, had no citizenship rights and no protection in law—it was no offence to steal their possessions—they were, in fact, complete social outcasts.

Even in England public opinion decrees it an offence to supply, but not to demand, commercial sex relations. The prostitute is a social outcast, her customer, through whose demand she is called into existence, is not. Man is indeed an illogical being.

As medical knowledge grew, an endeavour was made to segregate the women and place them under medical care. In the early days of regulated prostitution no effective form of curative treatment was known, as the germs that carried the diseases had not been discovered. All that could be done was to remove to hospital those in the brothels or on the municipal register who were obviously infected until the symptoms of disease were no longer visible.

Until the end of the nineteenth century, many of those who were opposed to the recognition of prostitution on social grounds thought it gave protection from disease to the general population. Claiming

the position of "realists," they maintained that as people could not be deterred from purchasing sex relations indiscriminately and for cash, it was better to supply the demand under conditions that would be as little damaging as possible to the general community, and that this could best be done by placing all brothels and registered women under medical inspection in order that those who were infected could be withdrawn from their occupation during treatment. This system made no attempt to bring the customers under treatment, and naturally led to the constant infection of wives at home and the re-infection of the women in the brothels.

With the increase of knowledge about syphilis and gonorrhoea, it was realised that the medical inspection of women once or twice a week was quite useless to prevent the spread of disease. Even after the discovery of an effective form of treatment for syphilis and of a method of treatment which, under good conditions, was more or less effective for gonorrhoea, the examination system proved, from the medical standpoint, to be not only useless but dangerous.

A medical inspection of women in which 30 or more women are looked at in an hour, once or twice a week will enable active symptoms to be detected, but with both diseases there are long periods where the patient is infective but shows no symptoms. The presence of the disease can be detected only by a blood test or by an examination under the microscope of the growth in culture of the elements in a discharge. The result of such a procedure would not be known for forty-eight hours or more.

In addition to the impossibility of detecting the infected women in a general examination there is the danger that a woman may be a carrier of the disease from one customer to another.

The method of regulation is in itself conducive to spreading disease. The women are highly infected, and the method of housing them all together, or making them known to the public as "Registered women," directs a large proportion of the custom to this group. Each woman receives a number of customers, each of whom she may infect. Even if the woman is free from infection one day she may infect a considerable number before the next medical examination, even if such an examination were effective. Wherever regulation has existed or still exists it has proved a barrier to the reduction of these diseases in the general population.

A number of investigations into this subject have been made and all swell the evidence. In San Francisco, where brothels were abolished by law in 1917, it was claimed that the inmates had all been under medical examination and that those in the houses at the

time of their closing were therefore free from infection. When the houses were closed, the girls from them were taken to various homes for care, and there given full and proper medical tests. These disclosed that over 90 per cent. of them were in fact suffering from one or other or both the diseases. It cannot be too widely known that in any regulationist country the girls in brothels and those on the town register as well as the "amateurs" are dangerous centres of infection.

We have seen that instructed social and medical opinion in most countries opposes the organisation in any form of commercial facilities for sex relations. Even in abolitionist countries there are a number of professional prostitutes working independently. What then can be done to rehabilitate and bring back to a life of useful citizenship those who have hitherto been the victims of exploitation or have followed this occupation? It has already been shown that many of these girls are of sub-normal mentality, others are without home backgrounds, others again have been tainted and degraded by their experiences and would need a long period of re-education.

Rehabilitation of Prostitutes

The League of Nations stimulated all countries to report what was being done to prevent the drift of girls into prostitution and to facilitate their return from it. Great Britain reported on her experience of the successful rehabilitation of many women and girls through the almoners at the free treatment centres for venereal disease. The particular feature of this line of approach is that assistance is given to all seeking treatment as sick persons. Only a minority are prostitutes, and that they are is known only to themselves. The normal girl can be advised in confidence and helped to regain her self-respect and economic independence, while the sub-normal, with their consent, can be put in touch with protective voluntary or official agencies.

In July, 1939, it was reported at Geneva that progress in rehabilitation in the various countries had been attained chiefly by the use of the psychiatric examination of prostitutes who had come in contact with the police, by the special care of those who were feeble-minded, and by placing others on probation. Several countries were preparing more humanitarian and practical legislation.

Although in certain countries, including our own, professional prostitution is declining, a fall in the number of prostitutes does not necessarily mean that the volume of sex intercourse outside marriage is less, but that self-respecting, educated men and women are repelled

by such a crude and degraded relationship. A fully-developed person seeks another individual for whom some mutual attraction is experienced, for whom affection is aroused.

VII. THE TERMINATION OF PREGNANCY OR ABORTION

One of the current social problems which causes much misery is that of illegal abortion. In the past much maternal mortality has been due to illegal or ignorant attempts to secure the miscarriage or abortion of an unwanted child. A notable case of the rape of a young girl leading to pregnancy which was medically terminated and resulted in the trial of the well-known and respected medical man involved, did much to form public opinion on the need for action.

Although local authorities may now provide free information on contraception to married women whose health would be impaired by further pregnancies, these facilities are by no means available in all parts of the country. A large number of married women still try various ways of procuring miscarriages, as do also unmarried girls to whom it often appears essential that they should escape maternity. Added to these are the involuntary miscarriages from various causes.

The concentration of attention on questions affecting the welfare of the family led to the careful examination of the problem by an inter-departmental Committee appointed by the Minister of Health in 1937, which reported in 1939. It was, of course, impossible for any enquiry into the prevalence of abortion to obtain exact information as to the different kinds and causes, but they were able to obtain some idea of the prevalence of the trouble. For the purposes of the Report the term abortion was used for all pregnancies terminated voluntarily or involuntarily up to the twenty-eighth week of pregnancy.

It is estimated that 16 to 20 per cent. of all pregnancies are terminated every year. This figure works out at 500,000 to 600,000 abortions procured, and includes all kinds, those arising from spontaneous or natural causes, those undertaken by qualified medical practitioners in the interest of the life or health of the mother, and those procured by interference or illegal operations. Of this total 40 per cent., or from 110,000 to 200,000 each year are attributed to criminal interference.

While the proportion of abortions to births does not appear to have increased during recent years it is believed that there is an

increase in the proportion due to illegal interference. When it is realised how much human suffering these figures represent, it is clear that concerted efforts must be made to alter conditions.

The Russian Experiment

Many were impressed by the experiment on a wide scale made in Russia from 1920 to 1936 where a free medical service under hospital conditions was placed at the disposal of those women who wished to terminate pregnancy. The service was widely used. The proportion of maternal deaths was negligible (about 1 in 10,000 cases), and it was agreed that "the risk of death in the case of a healthy woman in such circumstances is very small."

However, there are consequences other than those directly related to the operation which were proved by this experiment to be sufficiently serious for the policy to be reversed in 1936, and Professor Flhevitch explains the medical considerations which led Soviet doctors to approve this reversal of policy, and which appear to outweigh the advantages of changing from suppression to encouragement by replacing clandestine abortion with a free hospital service. The situation was carefully reviewed before the law was changed, and the authorities "were appalled at the growing evidence of serious pelvic and glandular disturbances, sterility, trouble with subsequent pregnancies and a large increase in invalidism among those who had suffered the operation."

There is no support here for general encouragement of the surgical termination of pregnancy on a large scale. It would certainly not serve the cause of maternal health. Conscious and wanted parenthood must be secured by other means.

Legal and Administrative Changes Advised

There still remain certain conditions under which the legal termination of pregnancy is the lesser evil, and the Committee recommend that the law should "be amended to make it unmistakably clear that a medical practitioner is acting legally when in good faith he procures the abortion of a pregnant woman in circumstances which satisfy him that continuance of pregnancy is likely to endanger her life or seriously to impair her health." Certain safeguards are recommended, as for example that a medical practitioner should call a colleague into consultation and that such operations should be notified to the Medical Officer of Health. More than one judge and magistrate has expressed the view that in cases of rape and incest, permission should always be given for the operation.

The Committee were anxious to authorize the termination of pregnancy arising from rape and incest but were confronted by practical difficulties. If action could not be taken until the case had been proved in court it would often be too late, while if the operation were authorized before the trial it would be evidence that the case had been prejudged. The matter was therefore left to medical discretion.

For the major problem, that of reducing the large number of induced or criminal abortions, the recommendations were in the direction of suppressing the sale of certain drugs and advertisements and suggesting the notification of pregnancy (some members dissented from this latter proposal); for the improvement of the midwifery service, the promotion of co-operation between the public, the medical practitioner and the police in bringing to justice those who practise criminal abortion for money, the increase of facilities for the social care of the unmarried mother, and the need for making more widely known the dangers to life and health involved in induced abortion. These recommendations are certainly a step forward, and the fact that such a report can be published and discussed is an indication that a more scientific attitude is being adopted, but there is still evidence throughout its pages of a conflict between the traditional and the modern outlook.

The first step towards progress is to appreciate that a particular law, custom or value is resulting in the misuse of sex; the second is to analyse the causes. We may then be in a position either to remove the social cause or to apply current knowledge of the biological sciences in the service of the individual in order to remove or ameliorate the specific and personal cause. It is already clear that much can be done to prevent the misuse of sex and its attendant personal and social suffering. It remains for the individual citizen to assume responsibility for securing constructive action in every department of human and social life concerned.

CHAPTER NINETEEN
SEXUALITY IN RELATION TO SELF, SOCIETY
AND THE SPECIES

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THE recent history of mankind is very largely the narrative of the applications of scientific knowledge to human and social affairs. Science has grown because it has satisfied the needs of man and of society. It has given to man in increasing measure the power to control the forces of inanimate nature and to harness these to his own advantage, to mould his environment in accordance with his needs, wishes and whims. Through science, too, man has gained, though not as yet to the same extent, the power to control the vital processes of living things. He has reshaped a multitude of species to serve his interests, creating new breeds and varieties of domesticated animals and cultivated plants out of their wild progenitors, even taming bacteria and moulds and using them in his service. This he has done through the applications of his accumulated knowledge of, and his resulting control over, the mechanisms of sexuality, reproduction and organic inheritance. Man is indeed the dominant species on this earth and the instruments of his domination are the tools that scientific knowledge of things animate and inanimate has forged. Science, latterly, has grown with such explosive violence that it is now quite impossible to set limits to the directive capacity of man or to predict how far he may extend his mastery over his external world and over himself.

We who have lived to see the harnessing of the energy of the nucleus to man's purposes are frightened by the magnitude of the power with which science has endowed us. We are frightened, too, by our pessimism concerning human nature and human motives. Yet there is no danger inherent in the nucleus, nor is there in human nature itself. It is eminently possible both theoretically and practically for mankind to build a world based on common effort for common good in which the power which science has given us will be used solely for beneficent purposes. We have to remember that our knowledge of the components of our external world far outstrips our knowledge of ourselves, and that man, who has gained such amazing conquests over physical nature, is only now beginning to

marshal his forces for the control of himself. The sciences of human and social biology are still in their infancy. This great difference between the degree of development and of application of the physical sciences as compared with that of the biological sciences is largely responsible for the fact that the new tools that science has fashioned, far more easily misdirected on a large scale than were the relatively primitive instruments of the past, have worked so much misery and devastation.

It must never be forgotten that science has yielded to man treasures of infinitely greater value than mere materialities that can be used by him for the enhancement of his comfort and the enlargement of his life, or, alternatively, for his destruction. In the dark days not so long ago man was indeed the helpless, hopeless creature of his environment. Fear chilled his heart and superstition blinded his mind. He felt himself to be a puny pawn in some incomprehensible game played by a malicious and overwhelming force, natural or supernatural, awaiting an awful doom which was to be postponed, or perhaps avoided, only by the exercise of some propitiative ritual.

But following upon the promulgation and general acceptance of evolution theory there came a great liberation of the human mind and spirit. Man found his own place in nature, he saw himself as part of organic nature itself, the unfinished product of a long evolutionary process, and came to entertain the view, timidly at first, fiercely later, that through the exercise and expansion of his own intelligence, knowledge and skill and of his innate tendency to co-operate with others of his own kind, he could snatch the red cord of his destiny from the capricious hands of Clotho and henceforward spin it for himself.

It is this view that neither man nor the social institutions he has invented are final, static things, that everything is in a state of flux and change, that man can, if he wills, guide the rate and direction of this change, which lies behind so many of our attitudes and actions to-day. This is the faith of modern man: we who, as a species, have by our own efforts crawled out of the slime that cradled us can, if we wish, seek and secure infinitely greater advancement and betterment. The terrestrial destiny of our species rests in our hands. We have acquired the eyes of science with which to explore the structure of nature and to guide our inventive hands towards the intelligent control of our external world and of ourselves.

We who spend so much of our time and energy in the pursuit of that which is pleasurable and profitable to ourselves know that we

are as capable of co-operative and collective action as we are of aggressive competition with our fellows. We know that to something above and beyond ourselves we yearn to attach our loyalty and to render service. We are now beginning to know that the greatest possibility of adventure is to be found through the identification of the individual in the struggle of his own species, since in this the individual can partake in a mighty continuance, satisfy all his psychological needs and achieve ennoblement.

Before the individual can truly serve his species he must surmount, through understanding, a number of barriers built out of certain human attributes which doubtless claimed great usefulness in the earlier days of human history: among these, not the least important is an uncontrolled sexual urge, useful no doubt to a species whose sole means of continued existence is unrestrained multiplication, but an undesirable embarrassment to a human population such as ours which has reached that stage of its development when it can devote its energies especially to the tasks of social amelioration.

Though much remains to be discovered concerning the nature and causes of sexuality, we do know enough already to permit us to control and manipulate it, if we so wish, in our deliberate strivings after human and social betterment. Let us examine what we know.

We know that sexuality and reproduction can be separated. Asexual reproduction, the production of offspring without mating; is as widespread among the species as is reproduction with mating. Sexuality is not essential for reproduction, though in our species the two are intimately interrelated. In our own case we know that to sexuality there is a personal value and a value to the species; it is pleasure-giving to the individuals indulging in its exercise and from the point of view of the species it contributes notably to the possibility of evolutionary progress. Its personal value is not necessarily reduced after sterilisation either in the male or female. Its pleasurable concomitants have no relation to reproduction, for they are present whether sexual intercourse is fruitful or abortive. Courtship, the display of the art of loving, can add greatly to the pleasures of intercourse, bring about a greater degree of physiological and psychological adjustment between the partners and evoke a fuller development of the reproductive system, but it is not a prerequisite for procreation, since this is made possible only by the availability of an ovum recently extruded from the ovary of the female partner. Ovulation in the human female normally occurs only once during the menstrual cycle. Quite commonly she herself is completely unaware of this event and as far as is known sexual activity in the

human species in no way affects the rhythm of ovulation, though this rhythm would appear to affect the intensity of sexual desire. In us it is not the pleasure and excitation of intercourse that is a means of making fertilisation more probable, it is the frequency of intercourse, this being determined largely by the pleasurable properties of the act, that can make fertilisation more likely. Since the possibility of fertilisation is dependent upon the availability of an ovum, since an ovum is available only once during the menstrual cycle and since if fertilisation is to occur it must take place within a few hours following ovulation and also following the deposition of the spermatozoa within the reproductive passages of the female, it follows that the more frequent the intercourse the greater the probability of fertilisation. By frequency is not meant extravagant indulgence resulting in distress and enfeeblement. Intercourse thrice weekly evenly spaced should be sufficient in the case of healthy couples to make fertilisation certain. In the case of older males past the peak of sexual activity intercourse for the purpose of fertilisation should be restricted to the week on either side of the midpoint of their partner's menstrual periods. The sexual athlete and he who is afraid of impotency will find no justification for their behaviour in biological fact.

Sexuality in its purely personal aspects, if wisely exercised, is health-promoting and can certainly enrich the association of the male and female partners. It is established, however, that its exercise for such purposes, though certainly conducive to the achievement and maintenance of health and of full development, is not essential to the well-being of individuals. We are able to transform the sexual motive and to find great pleasure and satisfaction in the expenditure of energy in other and compensating ways which yield serenity and contentment of a quality not less than those which follow upon the exercise of sexuality. In us there is no rutting season, no restricted breeding season during which the sex-drive in both sexes is all-compelling and beyond the individual's control. In us it is comparatively gentle and constant, never being so violent, save in the abnormal and in the uneducated or ineducable adolescent, as to override all tenderness and consideration for others. Sexuality is sufficiently strong in us to draw us together, but not so strong as to lead to physical violence between competitive males. So it is that we, unhindered by our sexuality, have been able to build a society in which there is much co-operation, public service, philanthropy and care and tenderness for the less favoured. Our culture owes much to the fact that sexuality in us is gentle and consistent in character and is transmutable into other

forms of energy expenditure which can claim great social value. The exercise of sexuality for the attainment of pleasure and personal well-being and without any reference to procreation can indeed be joyous and beneficent to the individuals concerned. But not, in the opinion of those who are in a position to examine these matters impersonally, dispassionately, if it involves selfishness, furtiveness, ugliness, inequality between the partners in respect of maturity, standards of values, a sense of social responsibility, fastidiousness. The disillusionment that can result from casual sexual activity is more harmful to the individual and especially to society in its struggle for advancement than is the disease that so commonly attends the sexual intimacy of comparative strangers. Sexual intercourse is not to be regarded as a form of athletic exercise that benefits an individual, a kind of medicine that keeps one well; it should remain a symbol of the mutual affection and regard that a male and a female have for each other, a joyous gesture of their yearning to lose their identities in the entity of which each is but a part. It is what we choose to make of it, a thing of beauty or mere beastliness. It can soil and degrade; it can enrich and enlarge; in it itself there is no quality, what quality it has is brought to it by the pair that engages in it.

But save for the effects it has upon personality, and through this upon society, sexual intercourse that is divorced from reproduction is relatively unimportant when compared with the exercise of sexuality for the deliberate production of offspring. In this connection sexuality has a very different meaning.

A male, in the ultimate analysis, is an individual who is equipped for the production of male-type gametes, for indulgence in sexual congress, for the conveyance of the spermatozoa towards the site of fertilisation and for the protection and the elementary education of the offspring that result from mating. A female is one who is equipped for the production of female-type gametes, for indulgence in sexual congress, for the reception of the spermatozoa of the male, for the conveyance of the ovum and of the sperm to the site of fertilisation, for the retention, protection and nourishment of the fertilised egg during its intra-uterine development into embryo and foetus and for the postnatal care, protection, elementary education and nourishment of the infant during the earlier stages of its immaturity. There is a sexuality of individuals, male and female respectively, and a sexuality of gametes, male and female. But though male and female differ in these respects they are alike in that they

are human beings. Commonly far too much attention is given to their dissimilarities and too little to their fundamental similarity.

The development of this sex-dimorphic equipment has been, in the evolutionary history of our species, associated with a great reduction in the number of ova available for fertilisation at any one time and therefore with a corresponding reduction in the number of offspring produced by a mated pair.

The development of this reproductive economy which results in relatively few offspring, who are therefore more precious to the species, has been attended by the development of a number of devices that render fertilisation more certain and the survival of the offspring more probable. Psychological devices include mate-selection and courtship with its stimulation and excitation. Physiological devices include the development of the relationship of other components of the endocrine system, for example the pituitary, with the sex-organs which renders the functioning of the latter more precise and efficient, whilst anatomical devices are such as are concerned with internal fertilisation. These are the instruments we can manipulate intelligently and deliberately in our attempts to produce offspring. There is, however, one deficiency in our knowledge of ourselves in so far as reproduction is concerned. We do not know when, in the case of any given woman, she ovulates. Manifestly coitus in the absence of a fertilisable ovum cannot result in conception. It would seem that the actual time during the menstrual cycle is variable from woman to woman and from time to time in one and the same woman. It is desirable that a mated pair should know the time of ovulation in the female partner so that conception, when desired, may occur. Then frequency of intercourse as a means of ensuring fertilisation can give place to timing of intercourse and undesirable extravagance in physical sex expression avoided.

Doubtless there are many who fear that the possession of such knowledge would be used by others for the avoidance of conception more frequently than for its achievement. On the other hand there are many who firmly hold the point of view that conception should never be allowed to be accidental but that it should always be deliberate for the reason that a child is wanted.

But before pursuing these matters further it is desirable to examine a more fundamental question. Is it really in the interests of our species and also in the interests of our small 'national' group that there should be continuance? Why should we have children? It would appear that most men and women, for reasons that pertain to their biological nature and have nothing to do with social con-

siderations, are more or less strongly inclined to cohabit with a member of the opposite sex and to beget offspring. This inclination can be, and often is, overwhelmed by other interests and inclinations but it is present and deep-seated. Is it to be encouraged and unleashed or is it to be held in check? We can do either.

We know that in the recent past developments within the economic and social structure of our world have provoked a reaction on the part of hundreds of thousands of men and women which has taken the form of a deliberate control of their own reproductive activities. The result has been that the birthrate has progressively fallen. The number of children now being born is no longer numerically sufficient to maintain the size of our population. We are an ageing population heading towards a steady, progressive diminution in our total numbers solely for the reason that individual men and women in their thousands have deliberately decided to have no children, or so few that their numbers are insufficient for the maintenance of our population size. From the point of view of a mated pair who desire children one or two can satisfy their needs, but this is not enough for population maintenance, let alone increase.

Evidence is accumulating which seems to show that, quite apart from the effects of deliberate contraception, there has been a real decline in potential fertility and an increase in sub-fertility and sterility in many human stocks. This is a matter that demands the most careful attention, for only when its causes have been revealed can its effects be remedied.

But is it a matter of any moment to our species that whilst we diminish numerically the Russians or the peoples of India, for example, multiply? Perhaps not. But we as a people have contributed so greatly to the culture of the world, we are relatively so far advanced in our political and sociological development and in self discipline that possibly if our influence diminishes the world and our species will be the poorer. The strength and quality of this influence are not determined merely by our total numbers, of course. Small nations have had and can have an influence in world affairs quite out of proportion to the relative size of their populations. But would not the world be a better place than it is if, for example, there were more Norwegians in it to carry to other parts the stock and the culture that is Norway? If this point of view is reasonable, if we have something of value to contribute and if we can find satisfaction in the advancement of our species then there can be no greater service than the begetting of healthy offspring who, inheriting our social traditions and aspirations, shall enlarge our contri-

bution to the progress of mankind. If we have no faith in ourselves, in mankind, in the future, then there is no point in multiplying. If we regard man's control over his own terrestrial destiny as a grand adventure and wish to share in it then for its complete achievement there must be continuance. If we wish to contribute to the continuance of our own stock then we must exploit all the scientific knowledge we possess to the advantage of our species.

We know how and when the sex of the individual is determined. We know a great deal about the mechanism that in its workings yields males and females among the offspring of a mated pair. Though the male-determining spermatozoan is to be distinguished from the female-determining it has not yet been found possible to ensure that fertilisation shall be effected by one rather than by the other kind. Many attempts to do so have been made, usually by controlling the degree of acidity or alkalinity of the secretions within the female passages, the idea being that by so doing one form of sperm is advantaged in the race toward the ovum. But no method so far devised has been successful. It is most desirable that we should possess the knowledge that would permit a mated pair to determine to produce not merely a child but a male child or a female child at will.

We know that in its association with reproduction sexuality is a biological device which greatly aids the dispersal of mutant genes among a population. Mutant genes that have appeared separately at different times in different individuals can, in sexual reproduction, be brought together in one and the same individual. Sex is the mechanism of gene distribution. This being so, those who engage in it for the purpose of begetting a child should ensure that among the genes that are transmitted to it from the parents there is none that can yield serious defect or derangement that must handicap its possessor. To endow a child with a first class hereditary equipment is as important, possibly more important, than to provide it with the best of homes or schools.

We know that the family, that natural group consisting of two sexually dissimilar parents together with their own offspring, is a biological invention and not a social institution. Associated with the reduction in the number of offspring produced at any one time and with the progressive prolongation of the period of post-natal immaturity and self-insufficiency of the offspring there has been the development of this biological unit, the family. The interrelationship of the individuals comprising it would seem to be such as to provide the best possible environment for the immature young who are

dependent for protection, food and education on adults of their own kind.

We know that marriage is a social institution and that it is the means whereby an organised society translates feelings and inclinations into duties, rights and responsibilities, defining and regulating the social relationship of the cohabiting adult parental pair each to the other and of these towards their offspring and of the latter towards their parents. It may safely be assumed that if a community consists solely of one family there is no need for marriage and for rules and regulations (save when the youngsters are grown up and are sexually active and reproductively capable). But when the community consists of many families and is developing a social structure there must be laws and legal sanctions. In the interests of society, children must be provided with parental care, the mated pair must be persuaded or required to remain together at least so long as there are immature young dependent upon them for protection. Marriage is the device invented by human societies to ensure the production and protection of children and to ensure also that these shall receive the best possible attention. It is also the means, of course, whereby property and sexual rights are defined and protected.

If in any society for any reason children are regarded as valuable to the community, for economic, political, military or other reasons, childbearing will be regarded as socially praiseworthy and will be rewarded and all behaviours that tend to depress the birthrate will be condemned as anti-social and punished. Marriage and parentage will command social elevation, the exercise of sexuality, on the part of adults at least, in the absence of the intention to procreate will be held to be a crime or even a sin.

From the point of view of society marriage becomes a necessity if in that society the old must be maintained by their own grown-up offspring or if, as in an agricultural community, the division of labour is such as to demand both a man and a woman in partnership together with their most useful offspring. Our society, as we know it, has grown out of such pre-existing social forms and thus it is that our sex-ethic is what it is. This is why we condemn and punish illegitimacy, not because it robs the dependent child of the protection and care of its own parents to its own great disadvantage which is one of the main reasons why we should discourage it, but because the child is likely to become a burden or an embarrassment to other people. This is why we discourage premarital and extra-marital sexual activity deliberately divorced from conception because such behaviour tends to make marriage unnecessary or unsuccessful and

to depress the birthrate. In our society, though the young still must directly or indirectly support the old (and the very young), the creators of wealth carrying those who do not yet or who no longer create wealth, in the great majority of instances children do not contribute directly to the support of their own parents any longer. Paternalistic governments have taken over this responsibility. It is also the case nowadays that children, because of the limitation of their employment by Acts of Parliament and because of compulsory education, cannot be regarded as an economic asset.

In our society marriage is to be desired and encouraged for the reason that it is only in marriage that parenthood is socially feasible. It alone, under the conditions that exist, can give to the mated pair the facilities they need for the cultivation of their intimate companionship in home and social group. It alone can provide that kind of environment which the child must have if it is to pursue a healthy development. It is established that in great measure the attitudes, prejudices, preferences and behaviour of an adult individual are but direct reflections of his experience as an infant and child. The home is the cradle of the standards of behaviour and of values that will be expressed by the adults who spent their childhood therein. War can be prevented by politicians, it can be outlawed by parents.

As things are it is only in marriage that the mother can easily secure that happiness which is by no means the least important of the attributes of a good parent. Only in marriage can the male child find abundant opportunity for forming his concept of the ideal woman that is the magnification of his own mother and the type of woman that he will seek for his mate, or the female child form her concept of the ideal man, her glorified father, that will guide her in mate selection. This is a matter of some importance since this process of selection tends to ensure that individuals too dissimilar in their genetic constitutions, social backgrounds, tastes and habits shall not marry. The success of the average marriage is made possible by the similarity, genetic and acquired, of the partners.

Marriage is therefore regarded by us as the prerequisite to the foundation of a family; it is the acceptance of certain social responsibilities on the part of those who enter into this relationship. From the point of view of the species the fact that it may yield mutual help to husband and wife is of no direct consequence, save in so far as this affects the environment of the home and of the child. What is important is that it permits and encourages the "increase of mankind with a legitimate issue." Service of the species is not

concerned with the social elevation that marriage itself can confer upon a woman or with the provision to a man of a mistress made respectable, a domestic ornament or an efficient housekeeper. From the point of view of the species it is a matter of no concern that divorce should separate childless couples or those whose children have grown up and scattered. These matters may, however, be of serious moment to society.

Marriage as an institution elaborated in the interests of the family in an organised society must claim the approval of all who are engaged in the tasks of human and social betterment. But it has to be confessed that very large numbers of couples who enter into marriage fail to make a success of it. The fault lies partly with them and partly with society, which is altogether too conservative in the matter of ethical and moral values in relation to sex and parenthood.

We have every reason to know that the attitude of large sections of the general public regarding marriage, reproduction, and the exercise of sexuality has changed during recent years; the relationships of the individuals within the family have been modified as the result of urbanisation, industrialisation, the economic and political emancipation of women and the employment of young persons in industry. Parental authority and filial obedience have become greatly weakened. Divorce has become more easily obtainable. Contraceptive practices have removed anxiety from intercourse and given to woman the control over her own reproductive function. Premarital and extra-marital sexual intercourse is common and probably increasing in volume. There are thousands of young women in our population who can never marry for the reason that among the young adults there are far more females than males. To many women marriage is no longer the first choice of a career, they prefer the independence that gainful occupation in the professions and industry can yield. Many men postpone marriage or avoid it because of the expense and responsibility that it involves. Their sexual needs, like those of the unmarried woman, can be satisfied without marriage and in marriage all too commonly the sexual needs of the partners are very poorly catered for. Love-making degenerates into a drab routine, a source of physical appeasement for the male and an utter disappointment for his mate. The goal in marriage is too seldom high adventure and too frequently mere comfort. It would seem that marriage all too commonly tends to act as a selective agency whereby such as seek comfort, security, domination, res-

pectability can achieve their petty aims. It can be, and often is, a refuge for the weakly and neurotic.

Society is tardy in its recognition of the fact that the personal and the specific aspects of sexuality have been separated through the applications of scientific knowledge to human affairs. Even yet it is unprepared to welcome this separation as it should, for only when it has been accomplished does it become possible to ensure that only children that are really wanted are conceived. Society condemns unchastity in the unmarried woman yet takes no interest in attempts to gain control of the sex-determining mechanism and so solve the problem of the 'surplus' women for whom marriage is impossible owing to the inequality of the sex-ratio. It condemns and punishes abortion, infanticide and illegitimacy and yet takes no strenuous action to encourage the production of safe contraceptives in sufficient numbers and to instruct young women in their use. In the matter of venereal disease social disapproval falls not upon the unchaste but upon the uneducated and the inexperienced. Society is appalled at the very idea of artificial insemination in the human subject, yet there are many hundreds of married couples unable to have a child of their own who ardently wish for children and who can provide protection, security, affection and all the rest of the furnishings of a nursery. The adoption of a child is a real service to the child, to society and to the species, but a child of other parents cannot ever be as much her own as one produced by the woman herself following artificial insemination.

Many of these attitudes must surely change if we as a people are to flourish biologically. It should be accepted that in general there are those among us who wish to cohabit, to raise children and therefore to marry and that there are others who do not, and that those who wish to have children are those who are best fitted to have them and deserve every encouragement, care being taken, of course, to ensure that the prospective parents are not suffering from any disease, defect or derangement that can deleteriously affect the child. In general robust health is a prerequisite for happiness and unhappy parents cannot create the optimal environment in the home. Society should discourage by all possible means the production of undesired children. It should also discourage the production of undesirable children, children who because of their genetic constitutions are doomed to exhibit serious and irreparable defect or derangement, to be a misery to themselves and a burden to society. Equality in educational opportunity must be provided so that the differential fertility of the different socio-economic classes shall be removed. It

is not in the interests of society that the poorer and less educated the parents are the larger is the family. Poverty, social insecurity and ignorance must be eliminated. Through education the broad masses of the people must be taught to wish for and demand that standard of living, economic, cultural, hygienic, which is compatible with a four-child family. That which the people want they will ultimately get. The State should provide that social and economic environment in which the present handicap of parenthood is removed. Furnishing loans, income tax rebates, four-children houses at low rents, communal laundries, maternity and child welfare centres, crèches, nursery schools, maternity benefits, mothers' helps, special food and clothes rations, free school meals, holiday homes for mothers, free medical and nursing services, these are some of the measures which in their operation will surely tend to remove the economic burden of parenthood.

Society must make unnecessary the withdrawal of the mother from an active life outside the home. A mother must not be chained to a home by an umbilical cord. She must be given scope and opportunity in the hope that there may result a greater harmony between her reproductive function and her productive, cultural and political activities. As things are there is a distinct conflict between them.

But the removal from parenthood of economic and social handicaps will never be sufficient in themselves to persuade men and women to have enough children to ensure population maintenance and growth. The economic factor is not the most important factor in determining people's attitude toward marriage and the begetting of children. We must wait upon the rekindling of spiritual values. Men and women must come to believe in themselves and in the society they create. The individual must not only feel but know that he or she is working and living not for him or herself alone but for the group and for the species. The individual must become identified with the species and must know that what he does benefits not himself alone but the community and the species as a whole. The individual must know that one of the major forms of service to the community and the species that can be rendered is the creation of a home and the peopling of it.

So it would seem that the only hope in this matter of relating the exercise of sexuality to a high purpose, of preserving the family, of retaining and enlarging the social significance of marriage, is to be derived from the general acceptance of the view that we are in charge of the further evolution of our own species and of the social institutions that we have created, and that we are deter-

mined to make out of this world an environment in which mankind shall flourish. The task of each generation would then become that of making its own contribution to this end and of preparing its successor for engagement in this grand adventure. Then indeed there would be a reason, and a satisfying reason, for the begetting of children. These continuously knock on the portals of a world filled with optimism and faith; they do not enter a world which is doomed through the people's pessimism and lack of faith to disintegration and disaster. It is when individuals and communities see no delectable horizon towards which they feel impelled to strive, and in doing so find adventure, that marriage loses its social purpose, that families are not produced and that sexuality is 'exercised for purely personal and selfish pleasure.

GLOSSARY

ACCESSORY SEXUAL GLANDS:

Besides the chief glands of sex, the testicles in the man and the ovaries in the woman, there are certain additional, or accessory glands which produce secretions necessary to fertility, or to facilitate sexual intercourse. For example, there are certain glands which secrete a lubricating material which allows of the easier introduction of the male organ into the female passage.

APHRODISIAC:

A drug, or any other preparation that stimulates sexual desire.

CERVIX:

The mouth of the Womb.

CLITORIS:

The small organ in the female, which corresponds to the penis, and is, in fact, a rudimentary penis.

EJACULATION OR EMISSION:

The throwing out of the male secretions at the end of the sex act in a series of jets.

ERECTILE:

Erectile organs are those which, by becoming engorged with blood, swell so as to be tense and erect. These organs are constructed of tissues which are full of cavities like those in a sponge. When the holes in them are empty, the organs are limp and soft; when their cavities are full of blood they become stiff and swollen. Erectile tissue takes a large part in the formation of the external organs of sex, but also exists in the breast nipples and cervix.

EROGENOUS:

This comes from two Greek words meaning stimulating love. There are certain regions of the body which, when touched, tend to arouse desire in a man or a woman. It is, for example, known that kissing, that is to say stimulation of the lips, awakes in a man or woman the feeling of love. There are also other parts of the body that when touched arouse the same feeling, and these are known as erogenous, or love-stimulating zones or areas. Amongst them may be particularly mentioned the breasts, the thighs, the lowest part of the abdomen, and above all the genital organs. Stimulation of these areas plays a large part in preparing a man or a woman for the more intimate contacts of love.

EROTIC:

That which is related to physical love, that is to say love-producing; or anything connected with love.

FUNCTION:

The activity proper to anything. Digestion of the food is the proper activity or function of the stomach; to see things in its neighbourhood is the natural function of the eye. The expression of physical love, and the carrying on of the race, are the functions of the sex organs.

HOMOSEXUAL:

A person who is so constituted that his desire is for a member of his own sex instead of for a member of the opposite sex.

HETEROSEXUAL:

A person so constituted that he has the natural desire for physical relations with the opposite sex.

ORGASM:

The climax of the sex act; a contraction of certain muscles that is accompanied by intense physical sensations and emotional feeling.

PENETRATION:

The act of passing through; in a sexual sense the passing of the male organ into the female passage.

PERINEUM:

When the hand is placed between the thighs, as high up as possible, the palm of it rests on the perineum.

SEXUAL DEVIATION:

A man or woman whose desires are unnatural is said to suffer from a sexual deviation, in other words, a turning aside of sexuality from its natural course. The desire for sexual intimacies with a member of the same sex (homosexuality) is a sexual deviation. A man with such desires is not necessarily vicious; he is generally a man born with a wrongly constituted sexuality. He is therefore to be pitied rather than condemned.

SEXUALITY:

The physical attraction and desire felt by a person of one sex for another. The instinctive longing for intercourse.

SEXUAL PATTERN:

The form that sexual desire takes in a man or woman. The manner of obtaining full sexual satisfaction varies in different people, and these slight variations may be regarded as normal or natural. If, however, a person displays some unnatural form of desire, the sexual pattern of his desire is said to be abnormal.

STIMULUS OR STIMULATION:

That which provokes a certain response in the body. A sudden bright light stimulates the eyelids to close, a fragment of food in the air passage stimulates coughing, and touching the male sex organ may stimulate it to become erect.

TACTILE:

That which is connected with the special sense of touch.

TRAUMA:

Injury to body or mind resulting from violence.

VAGINA:

The female passage leading towards the womb.

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