

## CLASSIFICATION OF INDIAN CITIES BY THE OCCUPATION PATTERN OF WORKERS—A COMMENT

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RECENTLY Sanjeevani Gadgil has attempted a classification of Indian cities and town-groups.<sup>1</sup> She has used the 1961 Census data. Her analysis covers 113 cities and town-groups and 9 major occupational groups. She has ingeniously modified and adopted Stone's 'Distance method' of sequential criterion for the purpose of grouping.

The distance method of sequential criterion as Sanjeevani Gadgil rightly feels, works well when the total number of units to be classified is small; it, however, involves much laborious numerical work when this number is large. She has therefore attempted to simplify the procedure. After working out the 'distance matrix', which is the first step in the sequential procedure, she adopts a different method for forming initial nucleus groups based on the method of 'mutually nearest pair'. The next step she follows is to calculate the distance between each of the nucleus groups and the remaining cities. At this stage, if a city is nearer to a nucleus group, it is added to that group provided the city-group distance is not very large compared to the within-group distance. She continues this process and takes six similar steps to exhaust all the 'remaining' cities and brings them under the fold of the expanding nucleus groups.

In Stone's original procedure, an arbitrarily chosen constant is made use of while deciding the admission of a remaining unit in the nucleus group. If the distance between the nucleus group and the remaining unit is smaller than the arbitrarily chosen constant, that unit is admitted into the nucleus group. The author, therefore, would not have obtained a significantly different result even though she would have adopted the laborious calculational procedure of the method of sequential criterion; and hence, she is quite right in working out an ingenious way of simplified procedure. This commentator, however, contends that her new simplified procedure is not really so simple. As already said, it takes six laborious steps of numerical work to arrive at the final groupings. It is however possible to reduce the burden of numerical work still further, make it really simple and yet arrive at nearly the same results.

<sup>1</sup> Sanjeevani Gadgil, "Classification of Indian Cities by the Occupational Pattern of Workers," *Artha Vijnana*, Vol. 14, September 1972, pp. 221-47.