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Scale and Social Relations

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Scale and Social Relations

by Gerald D. Berreman

INTRODUCTION

Scale or size as a variable in social organization first received my attention in an explicit way when I was invited to participate in the Wenner-Gren symposium on the subject which resulted in this paper. With the topic thus thrust before me, I set to thinking about what I had read and what my own research suggested about it. My thoughts turned first to the Wilsons' (1945, 1971) discussions of scale, then to a wide variety of theorists' societal typologies and contrasts which, if not explicitly based on scale, have depended at least partly upon variation in the sizes of the societies discussed. I thought also of the literature on urban society, notable among which are Wirth's (1938) discussion of urbanism and Sjoberg's (1960) work on the preindustrial city. I compared these with what I know of the ethnographic literature, in an attempt to judge critically the cross-cultural validity and relevance of the typologies and contrasts and to assess the contributions they might make to clarification of the concept "scale" and its application to the comparative analysis of social organization. Finally, I thought about my own field research, first on social

1 This paper was originally prepared for Burg Wartenstein Symposium No. 55, entitled "Scale and Social Organization," organized by Fredrik Barth and held July 31-August 8, 1972, under sponsorship of the Wenner-Gren Foundation for Anthropological Research. That symposium, including my paper, is to be published as a book under Barth's editorship (Barth 1978). The present version resulted from revision undertaken while I was a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, Calif., 1976-77. I wish to thank the Center and the National Science Foundation, which contributed to my stay there, as well as the Wenner-Gren Foundation.

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The present paper, submitted in final form 22 VIII 77, was sent for comment to 50 scholars. The responses are printed below and are followed by a reply by the author.
disparate inferences I have drawn in my own research that seem germane to scale and social relations. I say that my thoughts on scale are disparate because I have no “theory of scale.” In fact, I doubt that so gross a concept can be very useful in social analysis. At best, I have a few specific, empirically derived intuitions about some of the limits imposed and the possibilities offered in their relationships with one another as a result of the scale of the societies in which they live.

**ABSTRACT OPPOSITIONS: FOLK-URBAN AND THE LIKE**

My interactionist predilections impel me to ask: How does scale affect the nature and quality of social interaction in societies? This question is relevant here because social organization is inevitably expressed in interaction, and analysts discover it by observing interaction or by listening to statements about interaction. It does not preclude inferences about structure, for structure too is an abstraction deriving from interaction. Thus, for example, social stratification (the ranking of categories of people so that they have differential access to valued things and exhibit hierarchical patterns of interaction [cf. Berreman 1967a; 1968; 1972c:401; 1977; n.d.]) does not occur in the smallest societies. In fact, it is often described as a product of the urban revolution, with the occupational diversification, specialized manufacture, and external trade which accompany it, and as based on the agricultural, food-producing revolution, with its capability for supporting populations larger than are required to produce their food (Childe 1950, 1965; cf. Braidwood 1964; Fried 1967). This does not mean that stratification is inevitable in large societies or even in urban or agricultural ones, but only that it is common among them and is not found among foraging peoples (hunters and gatherers) except where, as on the Pacific Northwest Coast of North America, such pursuits are uncommonly productive and reliable and the society is commensurately more complex and larger in scale. There is thus an empirical association among size, specialization, and hierarchy. In addition, the characteristic kinds of interaction and the characteristic structural arrangements of stratified societies are inseparable and mutually reinforcing (cf. Berreman 1967a, 1967b, 1972c, 1973, 1977, n.d.), and both are evidently influenced by scale.

Social science and social philosophy have produced an abundance of concepts, mostly taking the form of bipolar ideal-types which describe differences between small and large, simple and complex, societies. Here we immediately confront a difficulty inherent in the concept of scale: Is it a matter of size alone, as Barth seemed to imply in the invitation to the symposium for which this paper was written? (If so, is it a matter of total population in a society, and if that is so, where and how does one draw boundaries?) Is it a matter of size and intensity or closeness or pervasiveness of interaction, as the Wilsons suggest? (If so, how does one weight the two?) Is density of settlement in a population a crucial component? (If so, is this simply a precondition for intense interaction, or is it a distinct variable?) Is it a matter of size and complexity? (If so, how does one weight the two? If not, how does one separate the two?) Is it a matter of size, density, and heterogeneity of population, as Wirth (1938) maintained in defining urbanism? (If so, how are they to be calculated and weighted?) Is it a matter of the segmentation of small, isolated, nonliterate, with a strong sense of group solidarity. The ways of living are conventionalized into that coherent system which we call "a culture." Behavior is traditional, spontaneous, uncritical, and personal; there is no legislation or habit or experiment and reflection for intellectual ends. Kinship, its relationships and institutions, is the type categories of experience and the familial group is the primary action. The sacred prevails over the secular; the economy is one of status rather than of the market. These and related characteristics may be restated in terms of "folk mentality." . . . The principal conclusion (of the comparison of some communities in Yucatan) is that the less isolated and more heterogeneous communities . . . are the more secular and individualistic and the more characterized by disorganization of culture.

This formulation of the continuum has been revised, refined, and expanded by the addition of the intermediate "peasant" category (Redfield 1953), but the original statement is a concise version of the central features of the dimensions with which Redfield was concerned. Clearly, scale is closely associated with the characteristics he listed, and no consideration of scale can afford to overlook them.

One might go through the literature and identify a broad spectrum of descriptive tenets, generalizations, and characterizations which have been or can be treated as bipolar oppositions describing social and political organization, culture, or aspects and attributes thereof which apply more or less to the poles of the continuum described by Redfield and which therefore imply differences in scale. I have done so very roughly in tables 1 and 2, simply to call them to mind. I have hedged contrast between Gemeinschaft and Gesellschaft (Tönnies 1940), Maine’s status and contract (Maine 1861), Durkheim’s mechanical and organic solidarity (Durkheim 1933). We are familiar with efforts of social commentators since the classical Greeks to identify the distinguishing characteristics of “civilized” or “complex” societies as compared with “primitive” ones (in anthropology the unilinear evolutionists come to mind, as do the names of such relatively recent figures as Goldenweiser [1922], Childe [1950, 1965], Kroeber [1948], Redfield [1953], Kluckhohn [1949], Steward [1955], White [1959], and the historian Toynbee [1947]). More recently, some of these issues have been addressed insightfully by Wolf (1966), Service (1966, 1975), Fried (1960, 1967), Sahlin (1968), and Krader (1968), among others. Wirth (1938) drew upon Simmel (1950), Weber (1958), and Park (1925), among others, when he set forth his classic definition and description of urbanism as a way of life associated with, but not restricted to, cities. His own summary (p. 1, italics mine) bears quotation (some of its shortcomings will be mentioned shortly):

While the city is the characteristic locus of urbanism, the urban mode of life is not confined to cities. For sociological purposes a city is a relatively large, dense, and permanent settlement of heterogeneous individuals. Large numbers account for individual variability, the relative absence of intimate personal acquaintance, the segmentation of human relations which are largely anonymous, superficial, and transitory, and associated characteristics. Density involves diversification, and specialization, the coincidence of close physical contact and distant social relations, glaring contrasts, a complex pattern of segregation, the predominance of formal social control, and accentuated friction, among other phenomena. Heterogeneity tends to break down rigid social structures and to produce increased mobility, instability, and insecurity, and the affiliation of individuals with a variety of interesting and tangential social groups with a high rate of membership turnover. The pecuniary nexus tends to displace personal relations, and institutions tend to cater to mass rather than to individual requirements.

Perhaps the best-known and most widely debated anthropological attempt to deal with scale is Redfield’s characterization of the folk-urban continuum, originally summarized by its author as follows (1947:293, 307):

The ideal type of primitive or folk society [as contrasted with ‘modern urbanized society’] is small, isolated, nonliterate, with a strong sense of group solidarity. The ways of living are conventionalized into that coherent system which we call “a culture.” Behavior is traditional, spontaneous, uncritical, and personal; there is no legislation or habit or experiment and reflection for intellectual ends. Kinship, its relationships and institutions, is the primary action. The sacred prevails over the secular; the economy is one of status rather than of the market. These and related characteristics may be restated in terms of “folk mentality.” . . .
on use of a general term by labeling them "Type 1" and "Type 2" societies, but the first are obviously small and simple, the latter larger and more complex. Anyone who looks at the listing will dispute, delete, add to, and refine the contrasts presented, and this is as it should be if we are to think critically and constructively about the concept of scale. I do not defend the inclusion of each and every pair of concepts, but I do believe that the overall listing is illuminating. It is remarkable the extent to which the terms in fact reflect their creators' assumptions, impressions, and convictions more than they do empirically derived generalizations. Most have been disputed, for critics delight in the anthropological and sociological game of citing exceptions, as Redfield and Wirth quickly discovered (cf. Sjoberg 1960: 14-22). Nevertheless, it is remarkable the extent to which the terms in fact group together in their usage along the lines suggested in the listing—lines approximating extremes of scale.

I will not here undertake a critical evaluation of these contrasting concepts (there is already a vast literature on some of them), but anyone hoping to look into scale definitively would have to do that. Otherwise, one would be likely to reproduce the errors and insights of others and to overlook important data and ideas. If one wished to improve upon the work of others, one would have to test systematically and cross-culturally each of the criteria postulated as varying directly or indirectly with scale. A modest attempt at such testing is that by Freeman and Winch (1957), who tried, by Guttmann-scale analysis of Human Relations Area File data, to find out whether the phenomenon described by Tonnies, Redfield, and others and identified by Freeman and Winch as "complexity" was in fact unidimensional. They came to the conclusion that it was, based on the scalability of six criteria (in order of increasing correlation with complexity: presence of [1] money, [2] governmental punishment for crime, [3] full-time priests, [4] full-time teachers, [5] full-time bureaucrats, and [6] written language). We might debate the adequacy of the test, but it is suggestive of the kind of test that might be applied. How the dimension they identified as "complexity" relates to scale would depend, of course, upon the definition of scale—a matter to which I now belatedly turn.

## SCALE

I have mentioned that scale has been identified with size and that it has been seen as a function of the number of people interacting and the closeness or intensity of interaction. The problems in operationalizing such definitions are many. If size alone is the criterion, then we are presumably dealing with the maximal networks in which people are involved, and the concept is so broad and general as to be of little analytical utility. As Firth (1951:50) has reminded us, "the isolation of any

### TABLE 1

**Pairs of Analytical Terms Implying Differences in Scale**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th><strong>TYPE 1 SOCIETIES</strong></th>
<th><strong>TYPE 2 SOCIETIES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Simple, Small-Scale?</td>
<td>Complex, Large-Scale?</td>
</tr>
<tr>
<td>Redfield (1947)</td>
<td>folk society, rural-folk</td>
<td>urban</td>
</tr>
<tr>
<td>Wirth (1938)</td>
<td>Gemeinschaft</td>
<td>urban-urban</td>
</tr>
<tr>
<td>Tonnies (1940, 1957)</td>
<td>status</td>
<td>Gesellschaft</td>
</tr>
<tr>
<td>Maine (1861)</td>
<td>mechanical solidarity</td>
<td>contract</td>
</tr>
<tr>
<td>Durkheim (1933)</td>
<td>sacred</td>
<td>organic solidarity</td>
</tr>
<tr>
<td>Durkheim (1954)</td>
<td>[normative integration]</td>
<td>profane</td>
</tr>
<tr>
<td>Durkheim (1951)</td>
<td>band</td>
<td>anomie</td>
</tr>
<tr>
<td>Steward (1955)</td>
<td>band, tribe, chieftdom</td>
<td>complex society</td>
</tr>
<tr>
<td>Service (1971)</td>
<td></td>
<td>primitive state, industrial state</td>
</tr>
<tr>
<td>Goldenweiser (1922)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Krooeb (1948)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kluckhohn (1949)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roysee (1947)</td>
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<td></td>
</tr>
<tr>
<td>Braudwood (1948)</td>
<td></td>
<td></td>
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<tr>
<td>Childe (1950, 1965)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sjoberg (1960)</td>
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<td></td>
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<tr>
<td>Spier (1949)</td>
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<tr>
<td>Marx (1964)</td>
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</tr>
<tr>
<td>Mannheim (1940)</td>
<td></td>
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</tr>
<tr>
<td>Henry (1953)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merton (1968)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ralph Turner (1956)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riesman (1950)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parsons and Shils (1951)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. Douglas (1970)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallace (1961)</td>
<td></td>
<td></td>
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<tr>
<td>Faris (1932)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barth (1960)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fried (1960, 1967)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garfinkel (1967)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husserl (see Farber 1943)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schutz (1962)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor Turner (1969)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Barman:** *Scale and Social Relations*
community nowadays is only relative, and even remote Tikopia is not completely self-contained.” How, then, would one calculate the scale of an Indian village, which is incorporated significantly into networks including well over half a billion people and yet is to a large degree self-contained (cf. Opger 1956, Singh 1956)? How would one compare the scale of such a village with, for example, that of Tokyo? How does one compare in scale two very different kinds of cities (e.g., Benares and Cleveland) or a small contemporary American town and a large preindustrial city? If closeness or intensity of interaction is added to size as a criterion of scale, how is independent variation in the two to be handled? If, as usually seems to be the case, increased size of the interactional network is associated with diminishing intensity of interaction, is this an increase in scale? If so, what is the point of including intensity of interaction in the definition? Are the 1,200 Aleuts of today, in half a dozen isolated villages which are loosely but indisputably incorporated (on the periphery) into mainland, mainstream American society, “larger-scale” than the 20,000 who populated the shores of their islands 200 years ago in relative isolation? I would think so, but again extent of the network is correlated with diffuseness of interaction, and scale seems to vary inversely with intensity of interaction, as it does also in the comparison of preindustrial and industrial cities (cf. Sjoberg 1960). The question here is whether size and interactional intensity are distinct criteria and, if so, whether separately or together they comprise a manageable, defensible, or useful axis along which to measure social organization. I am not here judging the answer, only raising the question.

The characteristics listed in table 2 as typifying Type 1 and Type 2 societies make it clear that size and interactional intensity are only two of many criteria of scale that have been postulated by social scientists. Yet if we take any characteristic of Type 1 society at random, we will find that it contrasts not only with its designated polar opposite, but almost equally well with any characteristic of Type 2 society chosen at random. Similarly, any number or combination of characteristics in either column contrasts equally well with any or all combinations of those in the opposite column. That is, within each column each term is roughly definable in terms of the others—-is to a significant extent redundant of the others—and is contrastive to those in the opposite column. Therefore, there would appear that Freeman and Winch were on the right track in identifying folk-urban and Gemeinschaft-Gesellschaft as describing a single dimension, and some such descriptive terms as the ones they investigated (“folk-urban” or “complexity”) may prove to be preferable to the more ambiguous term “scale.”

With these reservations in mind, we can nevertheless agree, I think, that (1) there is some residual consistency, legitimacy, and analytical utility in the kind of bipolar, ideal-type categorization represented in the table as Type 1 societies contrasted with Type 2 societies; (2) although many of the putative characteristics are debatable, stereotypic, and perhaps wrong, social complexity is a major dimension which underlies them; (3) size is a major correlate and enabling condition for such complexity; and (4) “scale” can be used to refer roughly to the size of a society as size influences the nature of social organization (including its complexity). If we wish to determine precisely how scale affects social structure and social relations, we will first have to agree upon a consistent and operationalizable definition of scale and then undertake detailed comparative, empirical ethnographic study of the kinds of variables indicated by the terms in table 1, constituting possible concomitants of scale. That, presumably, is one of the ultimate goals toward which this paper, and the symposium for which it was prepared, were early steps.

I will now beat a hasty but strategic retreat from these rather cosmic and sketchily presented considerations and advance in another direction: toward modest suggestions and inferences about the effects of scale on social organization, based on my own comparative field research. I use “scale” to mean the maximal size of the social, political, economic, and ideological-communication networks which significantly involve and affect the members of a social entity. That my suggestions and inferences are rather miscellaneous will be emphasized rather than concealed by the format of my discussion, for there is little logical progression to my remarks. They represent simply a variety of ideas about scale which come out of my fieldwork. In each instance (Aleuts, Indian villages, Indian city) I will present summary data, followed by the inferences I draw from them.

TABLE 2
CHARACTERISTICS ATTRIBUTED TO TYPE 1 AND TYPE 2 SOCIETIES

<table>
<thead>
<tr>
<th>TYPE 1 SOCIETIES</th>
<th>TYPE 2 SOCIETIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>small population</td>
<td>large population</td>
</tr>
<tr>
<td>sparsely settled</td>
<td>densely settled</td>
</tr>
<tr>
<td>isolated</td>
<td>incorporated into vast networks</td>
</tr>
<tr>
<td>homogeneous</td>
<td>heterogeneous</td>
</tr>
<tr>
<td>simple</td>
<td>complex</td>
</tr>
<tr>
<td>equalitarian</td>
<td>stratified</td>
</tr>
<tr>
<td>inequality simply organized (kin and role ranking)</td>
<td>inequality complexity organized (class and ethnic ranking)</td>
</tr>
<tr>
<td>communalistic</td>
<td>individualistic</td>
</tr>
<tr>
<td>stable, slow-changing</td>
<td>fast-changing</td>
</tr>
<tr>
<td>self-sufficient</td>
<td>dependent upon other units</td>
</tr>
<tr>
<td>culture</td>
<td>subcultures, contracultures (Vinger 1960)</td>
</tr>
<tr>
<td>consensus-based conformity</td>
<td>power-based conformity part-societies</td>
</tr>
<tr>
<td>total society</td>
<td>fragmented visibility of persons</td>
</tr>
<tr>
<td>total visibility of persons</td>
<td>specialized, fragmented social knowledge</td>
</tr>
<tr>
<td>total social knowledge</td>
<td>situational accountability modern</td>
</tr>
<tr>
<td>total accountability</td>
<td>impersonal or depersonalized distant social contacts</td>
</tr>
<tr>
<td>traditional</td>
<td>primary relationships</td>
</tr>
<tr>
<td>personal</td>
<td>secondary relationships</td>
</tr>
<tr>
<td>close social contacts</td>
<td>mass or group relations</td>
</tr>
<tr>
<td>primary relationships</td>
<td>secular (cf. Barnes and Becker 1938)</td>
</tr>
<tr>
<td>individual relations</td>
<td>great-traditional “plastic” status and territory</td>
</tr>
<tr>
<td>sacred</td>
<td>literate role segmentation</td>
</tr>
<tr>
<td></td>
<td>status fragmentation</td>
</tr>
<tr>
<td></td>
<td>specialized roles uneven distribution of social knowledge</td>
</tr>
<tr>
<td></td>
<td>power concentrated social disorganization (cf. Bloch 1952)</td>
</tr>
<tr>
<td></td>
<td>personal disorganization conflict</td>
</tr>
<tr>
<td></td>
<td>intensive interaction extended interaction</td>
</tr>
<tr>
<td></td>
<td>mutual knowledge anonymity</td>
</tr>
<tr>
<td></td>
<td>power diffuse diversity</td>
</tr>
<tr>
<td></td>
<td>social integration mobility</td>
</tr>
<tr>
<td></td>
<td>personal integration ambiguity</td>
</tr>
<tr>
<td></td>
<td>cooperation ambiguity</td>
</tr>
<tr>
<td></td>
<td>intensive interaction ambiguity</td>
</tr>
<tr>
<td></td>
<td>mutuality knowledge ambiguity</td>
</tr>
<tr>
<td></td>
<td>conformity ambiguity</td>
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<tr>
<td></td>
<td>rigidity ambiguity</td>
</tr>
<tr>
<td></td>
<td>structure ambiguity</td>
</tr>
<tr>
<td></td>
<td>informal controls and sanctions formal (bureaucratic) controls and sanctions</td>
</tr>
</tbody>
</table>

CHANGE AND SCALE IN THE ALEUTIANS

I have elsewhere reviewed the history of the Aleuts with special attention to the 200 years since European contact (Berreman 1955). Suffice it to say here that the Aleuts were a maritime hunting people of Eskimo stock whose 16,000–20,000 members, until the middle of the 18th century, had...
known and interacted primarily with one another, although they had casual contacts with neighboring and culturally similar Southwestern Alaskan Eskimos and occasional contacts with seagoing parties of Northwest Coast Indians. In the mid-18th century, they were first contacted and then overrun by Russian commercial fur seekers, who massacred many of them and introduced devastating diseases which together reduced their population at once to one-third of its total before contact and within 70 years to one-twentieth of that number. At the same time, their skill and labor were exploited by the entrepreneurs, who took most of the men far from their homes for all but the winter months. The total effect was devastating, a fact I do not want to gloss over. By the early 19th century, however, sea-mammal trapping had ceased to be profitable, Russian commercial interests had left, the violence, exploitation, and the most deadly of the epidemics were over, and Aleut lifeways persisted to a remarkable extent among the meagre population remaining. A few Russians lived among them, and a famous and respected priest (Bishop Ivan Veniaminov) converted them to Orthodox Christianity, as his less perceptive and empathetic predecessors had failed to do, but the Aleuts were not forced to become Europeanized in their social organization, family life, language, socialization, or economy. The few who had survived had managed to do so as Aleuts, self-sufficient in their homeland.

The United States took over the Aleutians with the purchase of Alaska in 1867 but largely ignored the region until the turn of the century. Then, as furs of the plentiful foxes became valuable and livestock raising seemed promising, the Aleuts found themselves again the objects of outsiders' greedy attention. There followed a period of increasingly rapid "Americanization" of the Aleuts and their homeland: introduction of wage labor and consumer goods, which before long replaced the traditional subsistence economy; introduction of compulsory education in English up to the eighth grade (and the possibility of further education in mainland boarding schools for the best and most acquiescent pupils); takeover of virtually all land, including village sites, by outside ranching interests, whose only feedback to the Aleuts was a small number of unreliable jobs at low pay; confiscation of fishing rights and depletion of fishing resources, including the areas adjacent to Aleut villages, by outside commercial interests, whose only input to the Aleuts, again, was a few jobs; and supervision of all kinds of village and individual activities and enforcement of alien codes by poorly informed and often unsympathetic U.S. government agents. There had been a brief period of relative prosperity for Aleuts in the 1920s, when they were able profitably to trap foxes, but this ended abruptly when the Depression combined with changes in women's fashions to destroy the market for fox furs. During World War II the Aleuts were removed by the government, under the threat of Japanese invasion, to the alien safety of the Alaskan mainland, from which many did not return (because of an unprecedentedly high death rate and emigration), while others were returned unhappily, after the war, to consolidated villages which included many strangers and which for many were located on unfamiliar islands. Still others found their villages a shambles as a result of off-duty looting and vandalism by soldiers. All found it hard to return to life in the Aleutians with their numbers depleted, their livelihood largely destroyed, their lives dominated by outsiders, and their life-ways forgotten, despised, or rendered inappropriate by changed circumstances. Since that time the islands have been dominated by the American military and a few alien ranchers, the seas by commercial fishermen, and life for the Aleuts has been a living Hell of want, frustration, and social and personal disorganization (cf. Berreman 1964; Jones 1969, 1976). Some have sought escape through emigration; those who have not succeeded in this have sought it through alcohol.

Incorporation into Alien Networks

Although cultural change can occur without a change in scale, and therefore the two must not be confused or treated as synonymous, change in scale seems inevitably to entail cultural changes. One reason is simply that, as contrasted to the small-scale situation, interaction among more and different people increases the number of potential innovators, the number of novel situations, and the likelihood of the "conjunction of differences" which leads to innovation (Barnett 1953:46-56). Another, broader reason is that increased size and density of population and greater territory over which interaction occurs entail adjustments and changes in social structures and social processes.

It is clear that, with European contact and with increasing incorporation into the dominant American society (albeit as peripheral and exploited members), the Aleuts experienced changes which included a drastic change in scale. They entered a vast economic and political network wherein they were acutely vulnerable to remote but fateful events in Europe and the United States. It is also clear that different aspects of Aleut life were affected differently by the various components of the change in scale. Aleuts' incorporation into the epidemiological network of the foreigners was physically devastating (as was the fact that they were subjected to the aliens' violence and greed). The imposition of Orthodox Christianity seems to have been quite thorough but remarkably benign in its effect, partly because of the humanity and wisdom of the priest who introduced it and his skill in adapting it to Aleut conditions. The imposition, after 1900, of a money economy, schooling, and governmental control by the United States—in each case utilizing alien values and offering rewards derivable only from outsiders—did more than the previous 150 years of outside contact to change the Aleuts' ways of life and their aspirations.

Vulnerability and Dependence

One consequence of incorporation into networks of vastly increased scale is likely to be the acquisition of material, political, and/or psychic dependence upon, and vulnerability to, institutions and resources outside of the small-scale community and beyond its control or understanding. People become subject to the definitions of themselves held by remote others and to the needs, aspirations, and values of people they do not know or understand. Their new dependence and vulnerability are often without reciprocal influence, without effective recourse, without choice, without knowledge of the fact, nature, or extent of their dependency or vulnerability, and without awareness of the motives or morality of those who deeply influence their lives. Traditional methods of ensuring predictability or coping with unpredictability are rendered inoperative; social control, together with the traditional values it enforces and the traditional rewards those values offer, is likely
to be undermined. This is the experience not only of the Aleuts, but of rural people confronted by city life anywhere. Social disintegration, personal disorganization, and emigration have been the common results, for rarely are the rewards of the large-scale society available in the isolated, rural small-scale milieu. Often these conditions carry over to the city, where, as in the case of most Aleuts, the racism and ethnic or class prejudice in the dominant-group urbanites combine with lack of employment opportunities in the city and lack of economic sufficiency, education, job training, and social skills on the part of the immigrants to preclude integration into the urban milieu or the reaping of the rewards thought to inhere in urban life.

**Deprivation, Relative and Otherwise**

A related aspect of change in scale exhibited by the Aleuts is the acquisition of new aspirations and new standards of value compounding their new dependencies. In part this takes the form of acquisition of alien reference groups (Berreman 1964; cf. Merton 1968, Ralph Turner 1956). “In the process of judging themselves by White man's standards, Aleuts are led to adopt many of the White men's values, perspectives and behaviors” (Berreman 1964:233). They are led as well to aspire to the rewards those values, perspectives, and behaviors appear to bring to Whites. They are prevented, however, from reaping the rewards, because they are ineligible for membership in their reference group—it proves to be an ascribed group which excludes them. This disparity between valued reference group and membership group is frustrating and disheartening. It results in both the feeling and the actuality of deprivation. In some cases, this is relative deprivation, since the standard by which it is judged is based on the example of outsiders, while traditional rewards are presumably still available even though undesired. Since traditional rewards and values are commonly relinquished and the means to achieve them removed or discarded at the same time that new ones are embraced, the deprivation is likely (as in the case of the Aleuts) soon to become absolute. The process is a familiar one: incorporation into a larger, and especially an alien, network of interdependence brings it knowledge of different ways of doing things—ways which become preferred because they seem to bring new and highly valued rewards. This is especially common when the increase in scale entails an educational system controlled from outside and when mass media tout the values and rewards of the large-scale society at the expense of traditional ones. If the rewards are not available in the small-scale context, emigration (especially of the young) is the common result, as the experience of tribal peoples, peasants, villagers, and small-town people in many societies confirms. If people are thwarted in such mobility, they are likely to seek solace or escape in behavior which is disruptive of the life-style they seek to escape and yet which is not rewarding in itself. Thus it must not be overlooked that the human costs of these changes have been enormous. The Aleuts are alienated both from their traditional culture and from the imposed culture as they have experienced it. They are personally frustrated and disorganized as well as socially disorganized and anomie (Berreman 1964, Jones 1965, 1976; cf. Horton 1964, Bloch 1952, Blumer 1937, Bodley 1975).

**Exploitation, Independence, and Alien Control**

That the first 150 years of contact with the alien large-scale societies did not have these consequences for the Aleuts is a result of the fact that during that time they remained relatively independent; the outsiders did not control or interfere with Aleut socialization, social organization, political organization, or subsistence economy in such a way as to render these traditional ways inappropriate or unproductive or to render traditional rewards irrelevant. They exploited the people, they killed many of them, but they did not destroy their independent way of life. After 1900, it was precisely in this regard that the situation changed. Aleuts were placed in a position where control was in alien hands: the rewards offered were alien ones, their attainment was contingent upon behavior alien to Aleut traditions, and they ultimately proved unavailable in any case. The sacrifice had been for nothing; the old ways had been forsaken for new ways which did not work; the Aleuts had been betrayed.

This, again, was in part a result of change in scale—more accurately, of a partial and thwarted change in scale. It was to a more important extent a result of the greedy exploitativeness and callousness of those who engineered that change in scale. It would have been equally possible to make available to the Aleuts the rewards which they thought would accompany the changes which overtook them. If this had been done, the recent history, present condition, and future prospects of the Aleuts would have been very different, as the case of their fellows under Russian and Soviet administration demonstrates (cf. Antropova 1964).

**Variations in Scale in India**

In India I have conducted research in a small and isolated mountain village and its region (Berreman 1972a) and have contrasted it with larger, less isolated plains villages (Berreman 1960c). I have also worked in a good-sized city, contrasting social relations there with those of villages (Berreman 1972b). Inferences drawn from these experiences about the influence of scale on social organization comprise the remainder of this paper.

**Small versus Smaller**

In contrasting mountain (Pahari) with plains (Desi) villages of north central India, I have elsewhere pointed out that mountain villages are small, scattered, and mutually isolated (Berreman 1960c). The topography largely dictates these characteristics. As a result, intense and frequent interaction occurs primarily within the village. Intercaste interaction is relatively frequent within the village (some castes have very few representatives in a given village, so if these people are to interact at all it must be, perforce, with members of other castes). A single water source, a single shop, the need for cooperation on heavy and urgent tasks all facilitate or require such interaction. Intervillage interaction is relatively infrequent because of the barriers of distance and terrain.

On the plains, by comparison, villages are close to one another and the flat terrain and presence of roads make even distant ones accessible. Population density is much greater, caste composition within a village or locality is more diverse, caste boundaries are more closely guarded, and social separation is more rigorously enforced than in the mountains. Intense and frequent interaction on the plains occurs predominately within the caste, and it easily crosses village lines to incorporate caste-fellows of other villages, including those at considerable distance.

Communication and homogeneity. Intensive interaction leads to common culture and, in turn, is facilitated by it. Accordingly, in the isolated, small-scale mountain society, common culture is localized and to a lesser degree stratified; in the larger-scale plains society, common culture is stratified and to a lesser degree localized.

In the hills there is little opportunity for cultural differences to arise or to be maintained among castes simply because there is little
intercaste isolation in any one locality. On the plains the situation is reversed; caste isolation is the rule and intercaste cultural differences, especially across the pollution barrier, result. Common culture, like common language, depends upon the interaction of those who share it [cf. Gumperz 1958]. As Bloomfield (1933:46) has noted, "the most important differences of speech within a community are due to differences in density of communication." [Berreman 1960a:785]

Obviously, then, the kind and intensity of interaction is important. It is in this respect perhaps even more than in frequency, that Pahari intercaste relations differ from those on the plains. Characteristically, such contacts on the plains are formal, "contractual," restricted in scope and content, and are accompanied by a good deal of inhibition on both sides. In contrast, in the Pahari area there are more often informal, intensive and extensive. Plains castes exclude one another from knowledge of, and participation in, their problems and ways of life; Paharis exclude outsiders but are little concerned with concealing their affairs from local members of other castes. Pahari castes are thus not "closed subgroups" to the extent that plains castes tend to be. . .

Interaction in plains culture tends to be horizontal (i.e., within the caste and across local boundaries), while Pahari interaction tends to be vertical (i.e., within the local area and across caste boundaries). [p. 786]

Thus, the degree of cultural difference found among the castes, areas, and perhaps even the sexes, . . . varies directly with their degree of isolation from one another, defined in terms of rate and quality of interaction and determined by social and physical accessibility. [p. 787]

Scale, expressed as size of network, is central in the above discussion, as is intensity of interaction. The small scale of Pahari society—the isolation of its local units—throws people upon one another, despite social differences, in a fashion not found in the plains. There, larger scale makes possible (but does not require) social separation—mutual social isolation—of the constituent groups within local communities, with resultant maintenance of social differentiation. Density of communication is both a product of, and a means to, cultural homogeneity. If everyone communicates uninhibitedly and effectively with everyone else on a full range of topics and in a full range of contexts, cultural homogeneity is assured. This is a characteristic of small-scale societies. It might also result from widespread and effective use of mass media and public education in large-scale ones, as governments have often hoped, but so far this has not occurred to any very conspicuous extent. Social barriers, both self-imposed (e.g., as a manifestation of ethnic pride) and externally imposed (e.g., as a manifestation of ethnic discrimination), as well as cultural, linguistic, and physical barriers often prevent the kind of communication which would lead to cultural and social homogeneity.

Distribution of social knowledge. In small-scale societies, the distribution of social knowledge is relatively homogeneous. Pahari villagers, for example, know a great deal about one another and about the internal affairs and internal organization of one another's castes. There are few secrets in the intimacy of small-scale life. This is less true in larger, more diverse, less culturally homogeneous plains villages, where service castes of low rank know those they serve but those served have a rather casual knowledge of their servants. The contrast is more evident and better documented in the contrast between villagers and urbanites. In urban society, people often know very little about most social groups to which they do not themselves belong. Those who do know are those who have to: the poor, the vulnerable, and the marginal, whose welfare, livelihood, and even survival are dependent upon others more powerful than themselves. They learn the habits and capabilities of the powerful in order to deal with them as effectively as possible. Those who are powerful need know only their own social group and their own power, its use and its effect, and this is generally all they do know. My urban research led me to the conclusion that "people know well those who dominate them, but know little about those they dominate" (Berreman 1972b:573).

Caste and scale. It has been suggested that "there is necessarily a close-set limit upon the size and complexity of a society organized through a caste (jati) system" (Bailey 1963:113). Caste, in other words, cannot function or be impaired in a large-scale society, where there is no obvious racial basis for social distinctions, because of the mobility, diversity, and consequent likelihood of misidentification and ease of simulation that obtain in such a society. I have noted elsewhere that (1962:395-96)

It is probably true that in the anonymity and mobility of contemporary urban life, rigid ethnic or caste stratification is increasingly difficult to maintain when the indicators of identity are learned, for learned characteristics can be unlearned, suppressed, or learned by those to whom they are inappropriate. To manipulate these indicators is often difficult, as the persistence of the [physically indistinguishable] Burakumin of Japan makes clear, because the identifying characteristics may be learned very early (language, gesture), and may be enforced from without as well as from within (dress, deference, occupation), but it is possible, as instances of passing make clear (DeVos and Wagatsuma, 1966:245-248; Isaacs, 1965:143-149, et passim). The more personal relationships of traditional, small-scale societies, together with their formal and informal barriers and sanctions against casual or promiscuous interaction militate against the learning or expression of inappropriate status characteristics. There individuals are well known, family ties are not concordant, dissimulation is a virtual impossibility and physical mobility (to a new setting) is almost as unlikely as social mobility. Biological or other conspicuous indicators of status are thus largely unnecessary. Reliable, immutable and conspicuous indicators of identity are thus much more important to systems of birth-ascribed stratification in the anonymity and mobility of the city than in the village, but the internal pressures of ethnic pride combined with the external pressures of ethnic discrimination and the vested interests which sustain it make such systems possible in even the most unlikely-seeming circumstances.

I would here suggest that caste, as it is defined and organized in India, works most efficiently within a certain range of scale, limited at both ends. Evidently Pahari villages are too small and isolated for it to work easily. They are not only unable to support the full range of castes expectable in North Indian villages (and desired by many Paharis themselves), but unable to sustain or enforce the kind of rigid hierarchical social separation and differential social behavior expected by people of the nearby plains. Paharis are therefore accused of being unorthodox in their caste organization; they are ridiculed for being uncivilized (jangi) and lax in their caste behavior. Accordingly, they are regarded as being inferior in purity, and hence in rank and status, to plainsmen of corresponding castes. They explain these deficiencies in very pragmatic terms, namely, that they have not the range of castes, the population, the wealth, the facilities and amenities, or the leisure to observe the niceties of a complex, rigid, orthodox caste system.

On the other hand, contemporary cities seem to be too large and complex for India's caste system to work easily or well. City folk are unable to recognize and deal in an orthodox way with the wide range of strangers who cross their paths or to attend correctly even to the many people whose castes they do not recognize, or suspect. There are simply too many, their contacts are too brief or limited, the necessary information is too incomplete, the occasions are too public and uncontrollable, the opportunities for dissimulation are too great, and the opportunity to protect oneself from polluting contact is too often missing. As a result, like Paharis, urbanites are often regarded and treated as compromised, polluted, and leaders of a loose life by their orthodox rural brethren, even when they are of corresponding castes.
Thus, in the one case, the scale is too small to support the caste system in all its complexity; in the other, the scale is too large and the population is too heterogeneous to permit the intricate and controlled interaction which the system ideally requires. It is in the intermediate scale of the densely populated rural regions of most of India, composed of many small, nearby, mutually accessible multistate villages, that the system reaches its full oppressive flower.

**Small versus Large**

Having looked rather closely at the small end of the continuum of scale in India, I turn now to a more general characterization of large-scale urban social relations in India, based on my research in Dehra Dun, a city of nearly 200,000. I will utilize the rural villages of mountains and plains discussed above as contrastive cases and will again resort to the expedient of providing background data by quoting from a recent paper of my own. More sophisticated statements might have been derived from the literature or constructed, but the following have the advantages of being first-hand and of having been prepared in another context in which scale was not at issue, so that they are unlikely to be influenced by biases regarding scale that may have been generated in the preparation of this paper.

The village comprises people whose statuses are largely a function of their membership in corporate groups (families, sibs, castes). They tend to remain in their "home territory"—the familiar setting of the village and its local region. Villagers interact in terms of their total identities on a personal basis with others who know them well. Status summation is the rule: well-to-do people are powerful people of high ritual and social status; poor people are relatively powerless and of low status (with the exception of some religious roles where poverty is defined as consistent with or even necessary to high ritual status). As a consequence of these facts, there is relatively rarely a novel interactional situation to be figured out; rarely status discrepancy to be reckoned with; rare interaction with strangers. In the city, on the other hand, ethnic diversity is great. A large proportion of one's interaction is outside the "home territory" of one's neighborhood, and is with strangers or casual acquaintances. Even those who are not strangers often know little about one another and see one another in limited, stereotyped situations. Therefore, a large proportion of interaction occurs in contexts where only specific statuses—parts of the social identity—are relevant or even known, and the elements of individual status (ethnic, ritual, economic, occupational, political statuses) are not as highly correlated as in the village. People therefore have to figure out how to interact on the basis of minimal information in highly specific, impersonal situations rather than responding on the basis of thorough knowledge, consistent statuses and generalized relevance.

City people usually know very little about the corporate groups to which their fellow city-dwellers belong and about the internal structure of those groups. This does not mean that the city is socially unstructured or even less structured than the village, but rather that its structure is less conspicuous. The structure lies largely in the regularity of behavioral responses to subtle cues about social identity and its situational relevance which come out of face-to-face interaction which is impersonal and often fleeting. This is reflected in the stereotypic differences between the social knowledge and skills of the country bumpkin and the city slicker, each of whom is a laughing stock in the other's milieu where his hard-won social knowledge and skills are as inappropriate and irrelevant as they are effective and appropriate on his home ground. Both survive socially by reacting to the social identities of others, but the expression, definition and recognition of those identities and the appropriate responses are quite different. The villager is well-versed on corporate groups, the individuals who comprise them, the history and characteristics of the groups and their members, and the traditional social, economic, political and ritual interrelations among them. He depends on ramified knowledge rather than superficial impressions. The urbanite is well-versed in the identification of a wide variety of strangers as representatives of both corporate and noncorporate social categories. He knows the superficial signs of their identity, their stereotypically defined attributes, the varieties of situations and the social information necessary for interaction with them, and methods of defining and delimiting interaction in the impersonal, instrumental world of urban interaction. He knows also when situations are not impersonal and instrumental, and how to act accordingly and appropriately. Urban residential neighborhoods are often relatively homogeneous ethnically, and stable over time, so that interaction approximates that in the village. Indian cities have for these reasons often been described as agglomerations of villages. What I have noted above about urban interaction applies, therefore, to the work-a-day world of the city—the bazaar and other public places. It is less applicable to interaction within residential neighborhoods, and relatively "private" settings.

In the urban situation, where status summation is less and is less relevant than in the village, and where livelihood is not dependent on high-caste landowners, power and privilege are not tied so closely or necessarily to traditional ritual status. People of low ritual status who have essential services to offer may be able to organize themselves, for they are in a position and situation with economic influence and to acquire or demand social amenities. Thus, the Sweepers of Dehra Dun, one of the most despised groups in the society, have been able to organize and surpass other low-status groups in security of employment, standard of living, and morale, because they are the exclusive practitioners of an essential service: providing the city's sewage and street cleaning systems. They are also a significant political bloc and a self-confident people. This is a distinct contrast to the situation of their caste-fellows in surrounding villages where their uncontouchability and dependence upon farming castes of high status insures deprivation, discrimination and all of their consequences. [Berreman 1972:580–82, italics mine]

Situational differences in the use of [social] terminology [in the city] are . . . complex. . . . A man of merchant caste who is involved about matters of ritual purity and pollution will thus wish to know all about an impending wedding with detailed reference to the caste, subcaste, sib and family affiliations of the participants, the caste and religion of those who will be hired to provide services, the region and social class of guests. A wide range of statuses will be important to him. In his drygoods shop, however, he will categorize customers only in ways relevant to the customers themselves—stereotyped situations; he will know what to say about the honesty, tight-fistedness, propensity to bargain, and buying preferences of various social categories he encounters. . . . A teashop proprietor, on the other hand, will look at potential customers in terms of religion and major caste categories because he has to attend to his customers' notions of ritual purity and the jeopardy in which inter-dining puts them. A barber will attend to certain categories of class, religion and region in order to assure that he can please his customers in the hair styles they prefer and expect. Customers behave in complementary fashion. It is clear that these relations are not defined by the "whole persons" involved—by the sum of the statuses of those interacting—but by those segments of the social selves which are relevant in the situation. The relations outside of one's own ethnic group are impersonal and fractionated; they are what sociologists have often termed "secondary relationships." They contrast with the personal, holistic, "primary" relationships in the family, the village and other traditional settings where all of one's statuses are known, relevant and likely to be responded to (cf. Paris, 1952)—relationships found in the city only within the ethnic group or neighborhood, if at all. [pp. 573–74]

Farther on (pp. 582–84) I note that, in the city, where status summation or status consistency is far from perfect, People expend considerable effort trying to assure that the statuses they regard as advantageous and appropriate for themselves are conveyed in particular contexts, and they expend considerable energy in trying to discern and respond to the relevant (if possible the most significant) and appropriate identities of others. This is where knowledge of the meaning attached to attributes and behaviors in various social and situational contexts is crucial to successful interaction, and where the manipulation of these meanings is crucial to identity maintenance. This is the crux of urban social organization.

The insight and understanding upon which successful social behavior depends, therefore, includes not only knowing the characteristics of groups and their members, but also understanding the relationship of group membership to privileges, to the power
which confers those privileges, and to the sanctions which enforce them. On the individual level this means knowing the social capabilities as well as the social identities of those one meets: what they expect and what they can be expected to do; what resources they have at their command; how they can be expected to act and react in particular circumstances and with what effect. To the extent that inter-group relations are characterized by stability, it is primarily a consequence of balance of power, not consensus on the desirability of, or the rationale for, the system. No stigmatized, oppressed or even relatively deprived ethnic group or social category that I encountered in Dehra Dun or in its rural hinterland accepted its status as legitimate. But many—perhaps most—individuals in such statuses accepted that status as fact and accommodated to it while cherishing a hope or nursing a plan or pursuing action to alter it.

Increased availability of education, mass media, and political participation, together with conspicuous consumption of luxury goods by the well-to-do, and callous disregard for the needs and desires of the poor by many of the well-to-do contribute to and accelerate the likelihood of change through enhancing awareness of alternatives, providing an understanding of the means to change and increasing the accessibility of those means. Urban India is the arena in which this is happening most rapidly. There the social structure is loose enough to allow experimentation with various alliances and social structures which have been elsewhere inhibited by the rigidity of traditional, rural social organization and the unitary relationship between the social organization and the distribution of its characteristics and "involute" statuses (those consisting of more or less rigidly defined clusters of compatible and mutually reinforcing elements [cf. Barth 1960:142, 144]) to define interaction. A person may find the city to be a place where he can enter milieux in which his ascribed statuses are irrelevant or secondary; where he can acquire identities and play roles to which he aspires that would be denied him in a small-scale environment. In short, mobility may there be legitimate—even expected. The individual may be able to acquire or emphasize statuses or aspects of status which he values or finds rewarding and conceal or hold in abeyance others which bring painful consequences. In the city, achieved statuses may override traditional ascribed ones (in some situations and for some purposes, at least); claimed statuses may be difficult to challenge effectively.

In small-scale societies—villages, tribes, and bands—strangers are few and are regarded warily. The individual cannot legitimately escape his status. He is known in his totality to his fellows, is held accountable to them, and is responded to accordingly. His interactions with others are continuous and total; his statuses are well known, inviolate, inseparable from one another, and inseparable from his personal biography. He may escape some of their implications by experiencing a drastic, public change in his social role, but this is quite different from the private, publicly unremarked, and sometimes clandestine changes which occur in urban settings. Thus, I knew a young untouchable in the Pahari village of my research who became a spectacular success as the vehicle for a powerful regional deity and thereby avoided many of the consequences of his untouchability (Berreman 1971; 1972a: 379-96). I knew another who was regarded as having gone crazy (Berreman 1971; 1972a:396-97). Both were allowed freedom of action denied their caste-fellows. An observer might believe, as I do, that the individuals affected had a hand in the divine or fateful events which excused them from the full implications of their inborn statuses. But the ideology is (and must be, in an ascriptively stratified society) that such escape is involuntary and is, in addition, rare. Therefore, the first individual was said to have been divinely "chosen," the second to have been unfortunately "stricken." One may also be expelled from a valued status in a small-scale society, e.g., relegated to the social isolation of pariah status in village India or driven out of the village to become a lonely, feared, and despised "outside man" in the Aleutians. These, too, are rare, imposed, and publicly recognized status changes, not voluntary or clandestine efforts at mobility or escape such as occur in the anonymity of the city.

In rural India, an individual can rise in ascribed status only if his caste does so, and a caste can rise in status only by receiving public acknowledgment that a mistake has been made theretofore in identification of its rank. This acknowledgment is accomplished through persistent status emulation ("Sanskritization") by the caste's members to justify the
status claim (cf. Srinivas 1966), combined with the acquisition and application of power to enforce that claim (cf. Berman 1967b, 1972c, 1973). The caste does not "rise"; instead it becomes redefined (correctly defined, in the view of those concerned both in and out of the caste). No individual social mobility occurs, and no deception, misinformation, or ambiguity is involved. This is quite different from the urban phenomenon of individual mobility.

The crucial difference is that in a small society, one is under constant and close surveillance by others, including authority figures. In large ones, one may be unnoticed and unaccountable—or noticed and accountable in such disparate situations and roles that no one comprehends or cares about one as a person. In small societies, mistakes and deviations are quickly seen and reacted to. In large ones, they may go unseen, unnoticed, and unremarked, for the individual is less intimately tied to others and less conspicuous to them, and his actions are defined as less relevant to their lives and fortunes. In small societies, the deviant individual's aspiration, success, or eccentricity may be regarded as a challenge to the moral order; in a large one, it is more likely, if noticed at all, to be regarded as an inconvenient, laughable, or perhaps enviable personal deviation. In a sea of variation, no one deviation is so conspicuous or seems so important as it is in the case in a pond of conformity.

**Totality, status fragmentation, and role segregation.** Small societies share with Goffman's "total institutions" the fact that people live most of their lives in one another's presence, open to one another's scrutiny, subject to one another's evaluative responses (cf. Goffman 1961:3-124). They interact in primary relationships—as total persons with known statuses, known personalities, known biographies, all of which are inseparable and all of which are relevant to the interaction. Thus, in the village, Ram Lal is Ram Lal the untouched Blacksmith, who, like most of his caste-fellows, is poor and regarded as lazy and dissolute, but is also unusually intelligent and witty, like his father, not addicted to hashish, unlike his brother, and uniquely capable in divination. All of his relationships are conditioned by this knowledge, which everyone shares. A man for whom he works is Shiv Singh, the arrogant, cantankerous, and dishonest but high-status Rajput farmer, who cheated his brother out of an inheritance and lost his first wife to a rival; thus in the village, Ram Lal is Shiv Singh the landowning taxpayer who cheated his brother out of an inheritance and lost his first wife to a rival. All of his interactions are approached by others in terms of this crucial fund of knowledge about him.

In the large-scale urban context, these two men would be responded to in very specific ways on the basis of the limited knowledge which comes from casual, role-specific contact, with its limited relevance for those involved. In fact, whereas village interaction takes account of both person and status, urban interaction is often role-specific, taking into account neither person nor status. Statuses are fragmented, roles are segregated, stratification is complex, its criteria are often inconsistent, social identities are many. Ram Lal is in the city likely to be perceived as Ram Lal the bumpkin cloth customer, Ram Lal the poor man asking a slightly known shopkeeper for credit, Ram Lal the tailor dealing with a customer, Ram Lal the laborer looking for work, Ram Lal the untouchable seeking a place to eat or worship. Shiv Singh will be regarded as Shiv Singh the mountain villager seeking a ration of cement, Shiv Singh the asthma sufferer as Hakim's patient, Shiv Singh the naggingly demanding customer, Shiv Singh the landowning taxpayer (or tax-evader), Shiv Singh the Rajput temple-goer. Ram Lal and Shiv Singh as temporary or permanent urbanites are likely to be unknown to those around them except in these specific roles, in these situations, pursuing these particular ends. Not surprisingly, in large-scale societies, institutions dependent upon detailed personal knowledge and face-to-face interaction are less prevalent, or at least less pervasive relative to the total social network, than in small ones. Sufficient mutual information is simply not available for it to be otherwise.

**Indexical and objective behavior.** In the small-scale society, therefore, people relate to one another on the basis of extensive and intensive mutual knowledge. In the large-scale society, many of their relationships are based upon superficial mutual assessments. As Wirth noted (1938:12), "the contacts of the city may indeed be face-to-face, but they are nevertheless impersonal, superficial, transitory, and segmented." The first of these kinds of interactional behavior is describable as "indexical," whereas the latter kind can be termed "objective." These terms are derived from Husserl (cf. Farber 1943:257-358) and Garfinkel, one of Husserl's contemporary sociological advocates. According to Garfinkel (1967:4),

Husserl spoke of [indexical expressions as] expressions whose sense cannot be decided by an auditor without his necessarily knowing or assuming something about the biography and the purposes of the user of the expression, the circumstances of the utterance, the previous course of the conversation, or the particular relationship of actual or potential interaction that exists between the expresser and the auditor.

I am asserting that such thorough, contextual knowledge is characteristically utilized in small-scale social interaction. In large-scale social interaction the available data are fewer and less necessary—the behavior is more stereotyped, impersonal, and conditioned by obvious and significant characteristics of person and circumstance. "Typically our [urban] physical contacts are close but our social contacts are distant. The urban world puts a premium on visual recognition. We see the uniform which denotes the role of the functionaries and are oblivious to the personal eccentricities that are hidden behind that uniform" (Wirth 1938:14). This is a difference of degree rather than kind between urban and rural interaction.

**Communities, personal and impersonal.**

Henry (1963:147) has noted that "in many primitive cultures and in the great cultures of Asia, a person is born into a personal community, a group of intimates to which he is linked for life by tradition; but in America everyone must create his own personal community." I would add that the situation in America is essentially that of any large-scale, impersonal, complex postindustrial society as contrasted to small-scale societies. Just as "every [American] child must be a social engineer," so must every postindustrial urbanite, for "no traditional arrangements guarantee an individual personal community." Henry continues (p. 148), "Elsewhere it is unusual for a child to be surrounded by friends one day and deserted the next, yet this is a constant possibility in America"; and so it is in the large-scale industrial society. This, Henry insists, is stress-producing for Americans. I think that it is universally so.

As a consequence of the stress of impersonality, people seem to construct personal communities even in the unlikeliest of circumstances. The city is a distinctively impersonal community, yet it teems with personal communities, fragments of personal communities, and people seeking to construct personal communities (cf. Rowe 1964).

Here an important distinction must be made between small-scale and large-scale environments within the city, for while the tribal settlement and rural village are uniformly small in scale, the city has elements of both small and large scale. One of the shortcomings of the characterization of urban life set forth by Wirth and others is the failure to make this distinction. The characteristically urban, large-scale interaction in the city (feeling, fragmented, anonymous) takes place in the marketplace, in bureaucracies, in many occupational settings—in short, in the impersonal milieu of "public places," as Goffman (1963) calls them. At the same time there exist in cities...
personal milieux, "private places" (Goffman 1963:9)—families, homes, neighborhoods, and social clubs. The former are the large-scale, impersonal, exclusively urban environments of which I have written above and in which my urban research was carried out. Those environments are the source of Wirth's characterization of urban society. Private places were excluded from my urban research because I wanted to discover how ethnic relations occur in the impersonal setting of urban places in India (Berreman 1972:568). But private places are important to city people, as they are to people everywhere.

In Dehra Dun, every occupational group, small business interest, and regional and linguistic category has its formal association, every neighborhood its small-scale relationships. Even gigantic Bombay has been described as a city of villages or, perhaps more accurately, a city of villages. City people spend much of their time in the impersonality of secondary relationships, status fragmentation, role segregation, casual or stereotyped interaction, and part-personhood. Yet they return at night or mealtime, at times of illness, trouble, crisis, or celebration, to more intimate environments reproducing the small societies from which they came and to which they often look back with more nostalgia than realism, overloading them with pressures and attractions which took them away in the first place. Similar circumstances frequently bring urban migrants back to the peasant villages from which they came, and for similar reasons. In family, neighborhood, club, ethnic association, union, teashop, pub, and street-corner gang, small-scale society and its concomitants are sought, generated, and preserved. The very terminology which epitomizes small-scale relationships—the terminology of kinship—is often adapted to such groups, furthering the illusion and the effect. (See Vatuk [1969] for an excellent analysis of fictive kinship in an urban neighborhood of an Indian city and Vatuk [1972] for the analysis in its full context. Wirth has commented: "In view of the ineffectiveness of actual kinship ties we create fictional kinship groups. In the face of the disappearance of the territorial unit as a basis of social solidarity we create interest units" [Wirth 1938:23].)

In small societies, the personal community is congruent with the total community. In large societies, the personal community is a small and often fragile part of the social world of those within it; its functions are circumscribed: it may be fractionalized in that individuals may participate in several role-specific personal communities. Its existence is therefore precarious. But it is invariably important to those who comprise it. This is another manifestation of the fact that in small-scale relationships, virtually all constituents of social organization coalesce: roles, statuses, and personalities; formal and informal relations; expressive and instrumental activities; collective and self-orientation; ascription and achievement; economics, politics, social relations, and religion, etc. In large-scale societies, these all tend to diverge from one another as social relations become situationally and temporally fragmented.

In a small-scale society, people know too much about one another to separate the person from his status; in a large-scale society, they know too little about one another to attend consistently to either, much less to both. Either of these situations can be psychically costly, for total visibility and accountability can be experienced as total vulnerability, just as total anonymity can be experienced as loneliness or even nothingness.

There is a rather poignant motto engraved in letters of heroic size across the facade of the University of California's venerable Hilgard Hall at Berkeley: "TO RESCUE FOR HUMAN SOCIETY THE NATIVE VALUES OF RURAL LIFE." It reflects accurately the nostalgia for small-scale life in large-scale societies and the yearning for the presumed stability, security, and "authenticity" of small-scale social organization which underlies the recurrence of such organizations within large-scale environments (cf. Slater 1970). The same yearning is expressed in Western utopian communities of many sorts and in the proliferation of rural and urban "communes" which is part of the contemporary American youth culture (cf. Davis 1971)—a counter-culture (Yinger 1960) whose advocates are alienated from, and reject, many of the manifestations of large-scale society.

Davis (1971:12) has suggested, in his discussion of "youth subcultures," that the proliferation in the modern world of mass bureaucratic organizations, of closely calculated schemes of production and control with their minutely specified procedures and regulations, has greatly contributed to the felt divorcement of activity from product and of role from being, namely, the classic Marxian definition of alienation. As Mannheim [1940] argued, whereas these organizational schemes possess considerable "functional rationality," i.e., they manage to get the work done efficiently, they nevertheless lack too frequently "substantial rationality," i.e., they fail to address themselves to the body of human sentiments and meanings with which particular acts are invested.

The consequences of large-scale social relations seem to be humanly costly (p. 12):

Whereas it is possible to exaggerate, as many social scientists have, the anonymity of life in the metropolis, the fragility of the modern kin-isolated nuclear family, the psychic dislocation resulting from geographic and social mobility, and so forth, it nonetheless cannot be gainsaid that big cities, massive organizations, and an intense circulation of persons and ideas do make for more than marginal differences in how people relate to each other, in how they conceive of themselves and their fellows. Compared to what anthropologists have noted for village and tribal societies, modern urban existence does give rise to impersonality, experiential relationships, social distance, opportunism, and personal isolation. Despite the greater intellectual and artistic creativity fostered in cities, despite the enhanced personal freedom and opportunities for social advancement that urban-based modern technology has made possible [Simmel 1950], it is also true—or so the weight of sociological evidence seems to indicate—that modern man does feel more lonely, more anomic, more unsure of who he "really" is and what he should aspire to than did his preindustrial forebears.

The very ambiguity, flexibility, permeability, anonymity, and tolerance which characterize large-scale society and which attract many people to it in an attempt to escape the total accountability of small-scale life are in the end anxiety-provoking for many people, who seem often to yearn again for what they or their ancestors once sought to escape (Davis 1971:20–21):

Hippies wish somehow to declare—or perhaps merely to believe—that life can be whole again, that identities can be made secure and relationships meaningful through a return to the little community, through direct engagement with the land and its products, through communal collective enterprise that abjures conventional status distinctions, and through allegiance to some more altruistic (if humberl) scheme wherein, true to the great Christian and communist philosophers, the quinessential rule of life is to be—from each according to his abilities, to each according to his needs.

To suggest, however ... that these "new forms" [the communities of various kinds] are but a simple recreation of the small peasant community of preindustrial times, a naive rediscovery, as it were, of the "underlying" organic bases of social life, is to misread the true character of hippie communalism as much as if one were to deny it all significance whatsoever. Questions of sheer economic viability aside, much of the charismatic milieu of that animates the hippie commune is positively anathema to village life with its provincial mentality, mundane routines, and taciturn forms of social relations.

Davis quotes a 1922 observation of Schmalenbach (1961:338) that community and communion are not the same thing,
that "much of the present-day yearning for communal coherence... is directed less toward a specific community than toward coherence as such."

Since Tönnies published on *Gemeinschaft and Gesellschaft* in 1887 (Tönnies 1940, 1957), considerable sociological attention has been directed to the importance of community in complex societies, and especially to the role of community, communal sentiments, and primary-group experience in social action and morale (cf. Berreman n.d.). Thus, in recent times, Shils (1957) has emphasized the crucial importance of "primordial attachments" and of the primary group in the context of *Gemeinschaft,* and, together with Janowitz (Shils and Janowitz 1948), has analyzed the workings of such ties in the Wehrmacht in World War II. Later, Geertz (1963) described the role of primordial sentiments in the internal politics of the "new nations"; Isaacs (1975) discussed such ties and commitments in a variety of social and political settings; Whyte (1973) directed attention to the role of small groups in the People's Republic of China; Sharma (1973) directed attention to the role of small groups in formulating and enacting public policy in American society. These authors and others imply agreement with Homans's. comment in the final chapter of the *Human Group*: "At the level of the tribe or group, society has always found itself able to cohere. We infer, therefore, that a civilization, if it is in turn to maintain itself, must preserve at least a few of the characteristics of the group...." (Homans 1950:456). And again, "Brotherhood, of the kind they get in a small and successful group, men must have" (Homans 1950:459).

SUMMARY

The discussion above demonstrates my belief that size alone is difficult to apply as an analytical concept, both because it is a relative matter and because it occurs in so many cultural, ecological, and historical contexts. On the whole and in general, size is no doubt an important variable in limiting and permitting some varieties and characteristics of social organization—but in specific instances its influence is difficult to gauge because a wide variety of other variables is simultaneously operative, masking its effects. Size is at best a broadly limiting factor of relatively little use in comparative studies. It seems to me more useful to make "controlled" comparisons (cf. Egan 1954), taking into account a variety of factors—depending upon the comparison being made—and, since as size, complexity, sources and modes of communication, agencies of socialization, types of interdependence, forms of social organization, value systems, cultural traditions, history, etc. This is something I have attempted to do cross-culturally or cross-temporally in several papers cited herein (cf. Berreman 1955, 1960a, b, 1962a, b, 1964, 1966, 1967b, 1969, 1971, 1972c, 1973, 1977, n.d.).

Accepting for the time being, however, the general notion of scale as something which can be roughly operationalized and which does have social consequences, I would say that in general large-scale societies differ from small-scale ones in ways identifiable with complexity, diversity, and the resultant differentials in individual visibility and accountability, in social flexibility and permeability—in short, in ways suggested by the central tendency of those contrasts I have listed, between Type 1 societies and Type 2 societies, in table 1. I believe that scale has a tendency to vary directly with the impersonality of social interaction, the impersonality of social control, the complexity of social and cultural differentiation, the possibility of social mobility and individual redefinition of identity, and the anonymity of personal life—little more than that.

In closing, I will simply list in summary form some of the specific ways I have suggested in which scale influences social relations:

1. "Scale" as a concept to be used in the analysis of social organization is most easily definable as the size of the maximal network(s) in which people in the social entity under study are significantly involved. This definition is so broad as to be of questionable analytical utility. Complexity of social organization is closely associated with size and, like intensity of interaction, is generally implied in the term "scale." If "scale" is to be used in social analysis, its referents must be clearly spelled out, and the manner in which its constituent dimensions are to be operationalized and weighted must be specified.

2. There have been many generalizations made by social commentators which relate more or less to scale as a variable in social organization. Some of these have been cited here and grouped around two polar types designated "Type 1 societies" and "Type 2 societies," corresponding roughly to Redfield's by-now-venerable folk and urban types respectively. Further consideration of the legitimacy and accuracy of these descriptive typologies is recommended.

3. For present purposes I regard Type 1 societies as small-scale, Type 2 societies as large-scale.

4. Increase in scale makes people vulnerable to forces beyond their control, experience, and even comprehension and often makes them dependent upon similarly remote institutions and resources.

5. Increase in scale often leads people to value and seek rewards that are not attainable within their society (i.e., to acquire reference groups in which they are barred from membership). At the same time, they are likely to abandon irrevocably preexisting rewards which may still have been attainable. The barriers to attainment of the new rewards are often imposed by others rather than being inherent.

6. The results of (4) and (5) include both the feeling and the actuality of deprivation, which, when unresolved, leads to personal and social disorganization.

7. Change is likely to be more pervasive, more rapid, and more readily tolerated in large- than in small-scale societies.

8. Large-scale societies are occupationally more diverse than small-scale ones; they contain more statuses, roles, and situations, more belief systems, a wider range and greater number of social interactions, and more barriers to communication between groups, and consequently they are socially more heterogeneous. Therefore, they exhibit social strata, ethnic pluralism, cultural diversity, etc.

9. The distribution of social knowledge is likely to be more uniform in small- than in large-scale societies.

10. Large-scale societies are likely to be ideologically more diverse than small-scale ones, with less value consensus and more dependence upon power and bureaucratic enforcement to maintain values. Perhaps as a result, counter-cultures are more characteristic of the former than of the latter.

11. Birth-ascribed social stratification—especially in the absence of physical distinguishability among the strata—functions most efficiently in a society that is intermediate in scale (i.e., where scale is neither too small nor too large, where social relations are neither overwhelmingly personal nor anonymous).

12. Statuses in small-scale societies tend to be inviolate; those in large-scale societies tend to be disparate, fragmented, internally inconsistent, and situationally variable.

13. The quality of small-scale and large-scale social interaction and the kinds of social knowledge and skills each requires differ significantly. The first is intimate, total, and takes into account both the individual (his biographies and personalities) and their statuses; the second is impersonal, fragmented, and takes into account specific roles in specific situations.

14. As a consequence of (13), interpersonal behavior in

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small-scale societies is conditioned by deep knowledge of the individuals involved and broad knowledge of the context. That in the city is conditioned by stereotypic responses to superficial cues about categories of persons and types of interaction situations.

15. Large-scale societies offer their members more anonymity and mobility than do small-scale ones, and they are more permeable, flexible, and manipulable. Hence, people can change, escape, or dissemble their identities in ways, and to extents, impossible in small societies. People can disappear in large-scale societies; they cannot in small-scale ones.

16. Small-scale societies offer their members more predictability, solidarity, and social support than do large-scale ones, at the cost of total visibility and total accountability, with resultant social inflexibility.

17. As a consequence of (16), the mechanisms by which people may escape the consequences of stigmatized identity differ in large- and small-scale societies. The former include voluntary and often clandestine efforts at mobility or passing; the latter may be restricted to publicly visible and putatively involuntary status changes.

18. More personal diversity and eccentricity are found and tolerated in large-scale societies than in small-scale ones.

19. In large-scale societies, formal procedures for keeping tabs on people and for ensuring conformity replace the informal ones of small-scale societies and counter the tendencies described in (15) and (18).

20. The personal community in the small-scale society is more or less congruent with the society; that in the large-scale society is a small segment of the total society and is often relevant only to limited spheres of activity. Hence, in large-scale society there may be multiple but shallow or fragmentary personal communities. However, people show remarkable tenacity in creating satisfying personal communities even in unlikely circumstances.

21. People in small-scale societies are likely to envy those in large-scale societies their personal flexibility, anonymity, freedom from informal controls, diversity of experience, and diversity of opportunity.

22. People in large-scale societies tend to envy those in small-scale ones their presumed intimacy, security, and freedom from formal controls.

23. People in small-scale societies tend to idealize, and to emigrate to, large-scale milieux.

24. People in large-scale societies tend to idealize, and to construct small-scale milieux.

25. Other things being equal, the above statements about the relationship between scale and social organization are true.

26. Other things are never equal.

Comments

by YEHUDI A. COHEN

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Bravo, Berreman! "Scale and Social Relations" provides an extremely important frame of reference for the analysis of a variety of problems, especially in historical and comparative research. For instance, many students and I have found Wright's (1971) concept of "the stranger mentality" useful in studying a variety of questions in American urban settings. A puzzle that has often stymied us is the presence of pockets of "personal worlds" in urban centers where the stranger mentality (or what Wright also calls "urban ground rules") prevails. Though there are several explanations for this, the frame of reference provided by Berreman adds an indispensable dimension.

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Most importantly, Berreman has presented us in this article with some of the important realities of social ecology. Consistently one of Berreman's major professional concerns has been to show us the ways in which groups of different size and with different power impinge upon each other and the practical human and cultural effects of such interaction (in his words). Beyond this main contribution, he has reviewed a major part of the literature on social scale, and has done this in a cross-disciplinary way which will be useful to other writers, despite his necessarily summary handling of the different authors' ideas. These are the important contributions in an article which is essentially sociological, and I agree with Berreman in all of the main conclusions he draws from his examples. I would add a comment on his treatment of strictly cultural items, however—a comment occasioned partly by his choice, in much of his presentation, of an approach which focuses on people as "they choose among alternate behaviors" guided by "cognitive worlds... which underlie behavioral choices and are the subject of study." There does not seem to be a clear analytical separation of situations in which the microcosm and the macrocosm are on different cultural continua, as in the Aleut example, and those in which micro- and macrocosm are on the same cultural continuum, as in the examples from India. Sociologically there is much similarity in all these cases, but culture-area membership is still analytically important. This importance is underscored by Berreman himself in his citation above of Eggan's (1954) article on "Social Anthropology and the Method of Controlled Comparison." One cannot minimize the importance of the enormous differences in social situation and cultural contentassailling a mountain village on a visit to Dehra Dun; nevertheless, the villager and the Dehra Dun native are both participants in local and situational variants of a broad North Indian culture. The ultimately (although not always proximately) unifying effects of such a shared
may enrich the anthropology of larger-scale societies is suggested by Berreman's final points 21-24, with the common theme that "the grass is always greener on the other side of the fence." If under certain circumstances there is a strain toward intimacy in larger-scale social structures, what means may people use to create an illusion of smallness? I have touched on the question elsewhere, in a study of political communicative style (Hannerz 1974); I think it could be a focus of interest to a symbolic anthropology of scale with many varied applications.

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Berreman surprises me when he writes in the summary of his article that "size is no doubt an important variable in limiting and permitting some varieties and characteristics of social organization—but in specific instances its influence is difficult to gauge because a wide variety of other variables is simultaneously operative, masking its effect." In reading the body of the text, I thought he was arguing for the opposite view. While he cautions the reader in the introduction that he is not seeking a general "theory of scale" and in the summary that "size is at best a broadly limiting factor of relatively little use in comparative studies," he discusses at some length in the body of the text some two dozen social characteristics that vary with size and scale or, to use his typology, small-scale and large-scale societies.

In this synthetic account of scale, size, or level of complexity, Berreman tries to combine two traditions: (1) Simmel's conception of size and interaction and (2) the tendency to classify "whole" societies or communities according to bipolar ideal types. While he seems at times to oppose the division of social realities into idealized types, he dialectically follows the same mode of analysis, i.e., the formulation of typologies that sum up the distinguishing social characteristics that vary with small-scale and large-scale societies. Personally, I doubt the value of such a scholarly exercise for two reasons. First, it subsumes an evolutionary model of analysis reminiscent of the 19th-century unilinear evolutionists' approach, which helps us neither to discover nor to explain social realities, behaviors, and actions. Second, as a foil of anthropological or sociological inquiries, social behaviors, relationships, and collective actions cannot be accounted for by classifying "whole" societies or communities into opposing idealized types. The social characteristics associated with a particular ideal type can themselves be considered ideal types possessing the characteristic feature of smallness. The same argument can be made about large-scale society and the characteristics associated with it—diversity, heterogeneity, complexity, etc. In the final analysis, this is an exercise in the lexicography of social characteristics.

To test the value of size or scale and assess its uses in comparative studies, it is necessary to examine a given field of interaction (leadership, ritual, employment, etc.) in two settings of different scale. The analysis must focus not on the social characteristics of smallness or largeness, but on the ability of the actor to use different cultural strategies in different settings, thus combining opposing idealized types in a single system of action. In social action and behavior, especially in urban studies, "small-scale" and "large-scale" groupings, primary and secondary relationships, closed and open aggregates, etc., coexist side by side within a single field of interaction.
theory. There is, for example, a small but interesting literature on the relation between social complexity and differences of population size and density of which he has taken little note. Missing also are the emergence of clanship and the development of the state, both of which matters are macroinstitutional and structural. Berreman wisely sticks to his framework, and if there is one criticism that can be made it is perhaps that his treatment has not been restrictive enough. What he has done has been to make a major step towards a synthesis of evolutionary and interactionist theories, rescuing the former on modern, industrial society—its alienation, shallowness, anonymity, depersonalization, fractionation, and loneliness. Berreman is aware of the lack of freedom and privacy of the small-scale society, but his heart is with those simple social worlds in which everybody is famous. In the final analysis, Berreman is a romantic, which, after all, is still the first qualification of the anthropologist.

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Scale is a concept which most anthropologists use in a fuzzy and unanalysed manner. We speak of "small-scale" and "large-scale" societies as if they were clearly identifiable entities with self-evident characteristics. Berreman has made a worthwhile and suitably skeptical attempt to clarify just what the notion of scale is all about; the exposition is certainly useful in this respect but leaves me feeling that the concept has virtually no analytical value in its own right and might best be discarded for any serious social-scientific purpose.

Berreman himself is quite ambivalent about the idea, although he finally urges that scale be accepted as "something which can be roughly operationalized and which does have social consequences." Possibly so, but his argument fails to convince. He rightly grapples with definition. Is scale simply size? Or size plus some other characteristic such as the nature of social interaction? He opts for "the maximal size of the social, political, economic, and ideological-communication networks which significantly involve and affect the members of a social entity" (my emphasis). This is a promising direction, even though the problem of identifying the significant involvement upon which the definition turns is not discussed.

Earlier in the paper Berreman notes that no community is totally isolated nowadays and asks how one would calculate the scale of an Indian village which is incorporated significantly into networks including well over half a billion people and yet is to a large degree self-contained (my emphasis). He further asks how one would compare the scale of such a village with that of a city such as Tokyo. This is an intriguing question which might have been illuminated by trying to identify the types of social networks mentioned in his definition of scale. What are the diacritical differences between the social networks of people in villages and those in cities even when ultimately they may embrace roughly equal numbers of people? Berreman, unfortunately, abandons this approach when analysing his own ethnography and falls back on such notions as the folk-urban dichotomy and the face-to-face rural isolate. While much of his discussion and explanation is quite enlightening, I believe it renders the concept of scale superfluous.

Again, many of the generalizations put forth in the summary are provocative and worthy of further research; yet often they are not at all clearly related to the question of scale. Is it really the case, for example, that people in "small-scale" societies tend to idealize "large-scale" milieux and emigrate to them on this basis? Or is their emigration really indicative that the "small-scale" society is part of a "large-scale" social entity and of the pressures within it?

Is it really correct that an increase in scale, of itself, makes people vulnerable to forces beyond their control and experience? This seems to be undeniably so for the Aleuts who were incorporated in some manner into American social, political, and economic networks, but was it also true for the Americans whose scale was presumably increased by the addition of the Aleuts?

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I propose to comment primarily on Berreman's observations on Indian villages (mountain and plains types) and cities. In the comparison between the two types of villages, it appears that he adds another dimension to scale, i.e., physical terrain, which affects the size of networks, which in its turn guides intercaste or intracaste interactions. He is conscious of the limitations of his generalisations, but I would like to explain these limitations in the light of my data from a plains Indian village which I studied between 1954 and 1971.

Elsewhere (Sharma 1975:114) I have pointed out that "in the absence of caste panchayats and effective caste leaders, the division of castes into several lineages and the pressure of conflicts, arising in joint families, have made castes much less cohesive groups than one would presume. The introduction of the village panchayat and the cooperative society have necessitated the forging of ties across caste boundaries." In analysing the formation of groups in the context of formal organisations, I have held that "the impact of caste on the formation of these groups is overshadowed by the considerations of self-interest of individuals" (p. 136).

In any analysis of the direction of flow of interaction (intracaste or intercaste), one has to keep in mind not only the physical conditions of the terrain and demographic considerations of size and composition of population, but also the structural characteristics as well as the context of interactions. Each jati is influenced by both centripetal and centrifugal tendencies. Unfortunately, social anthropologists working in India have not paid much attention to the latter. Besides, there are many structural pressures which bring persons belonging to differing jatis into intimate interaction. Traditionally, the jajmani system supported intercaste functional interdependence. Modern democratic institutions like the village panchayat and the cooperative society in a multicastrate village contribute to the establishment of intercaste ties. In addition, other factors, such as classmatsipship, adjacency of either house or land, etc., may also bind people belonging to differing jatis in intimate friendship, and I have noted a number of such cases of intimate friendship across caste boundaries in the village (1975:119). It may not be out of place to mention that I have also found a number of cases of amorous sex relationship, undoubtedly cases of most intimate interaction, across caste lines. In one case such ties led to living together by a Brahman woman and a Kshatriya man without formal marriage. In another case a Brahman man eloped with a widowed tei (oil-presser) woman.

I generally agree with Berreman's characterization of social interaction in an urban milieu in India. In this case also, however, the "other things" are not the same everywhere. Cities vary in size and functions, and both may affect the nature of social interaction. Chandra (1977), studying social participation in urban neighbourhoods in Kanpur, examined an upper-class and a working-class neighbourhood and a former village which had been assimilated into the city. He divided his subjects into three categories: upper-class settled
residents, quasi-migrants, and natives. He found a persistence of caste, kin, etc., in social interaction in all three categories, but to a lesser degree among the upper-class urbanites than among the others. It is evident from this and similar studies that the urban milieu does not alter the Indian cultural milieu, with few exceptions such as intracaste marriage, etc., fundamentally. Therefore, one has to appreciate the limits of the change which may be expected to be brought about by a change in scale.

Finally, I would like to provide supportive evidence for Berreman's ideas on "passing" and social interaction in urban areas. The urban environment provides the most advantages in "passing" to the scheduled castes (Nandu Ram 1976:241). Besides, the government's policy of "protective discrimination" has helped them to acquire education and to secure middle-class or upper-class jobs in government departments. Such scheduled-caste persons do not find their interaction inhibited by their ascribed status.

On the basis of the above observations, I fully agree with Berreman that "it is difficult to apply [scale] as an analytical concept... Size is at best a broadly limiting factor of relatively little use in comparative studies."

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Berreman uses one of the most important inventions of sociological thought, dichotomic thinking, together with field research, in an attempt to apply the folk-urban continuum in the form of the notion of scale. The ranking of societies according to scale, a contribution of Redfield (1953), permits us to consider, in addition to folk societies, tribal societies as well, as the author makes clear, but the effort to use the folk-urban continuum leads us to the field of community studies.

In one of the most comprehensive summaries of this field, Bell and Newby (1971) begin by asking, "Who reads Ferdinand Tönnies today?" It is well known that dichotomic thinking, which became widespread in the English literature, appeared in the form of Gemeinschaft, with face-to-face, personal contacts, common feeling, and ascribed status, on the one hand, and Gesellschaft, with anomic, impersonality, fragmentation, and achieved status, on the other. Even if we consider only the introduction to Tönnies's (1935) work, we discover at once that for him Gemeinschaft was a biological, organic phenomenon and Gesellschaft a result of the generalizing character of the human mind. The preference for Gemeinschaft because of the negative features of Gesellschaft appeared only in the sixth edition of his book. According to Tönnies, the Gesellschaft is a society of which the most important feature is the social contract and in which barter and sale arise, the development of a division of labor begins, and everyone becomes a merchant. Anomie, impersonality, and disintegration are only the results of these features and not foremost in Tönnies's mind. Bell and Newby probably did not read Tönnies in the original. They argue that Redfield was the first to provide the empirical grounding of the folk-urban continuum in Folk Culture of Yucatan (1941), and they go on to mention that Pahl (1966) rejected the dichotomy, finding it reminiscent of the sentiment surrounding Rousseau's "noble savage." Redfield chose four points of investigation, beginning with tribal societies and ending with urban settings, and concluded that the phenomenon of disorganization may be observed in tribal and folk societies as well, as in urban ones. This order of ideas may lead to a recognition that Rousseau not only idealized the savage, but also spoke of human nature's being the same everywhere, thus providing the background for evolutionism (Dahrendorf 1969). Developing this thought, I would point out that the fieldworkers who use the idea of the folk-urban continuum and, even more, the researchers who attempt to analyze the idea have often not read the classic works. As can be seen from the analysis of Tönnies's thought, the order of ideas the author tries to use is a result of a secondary development. The problem has another aspect as well. The English translations "community" and "society" are not quite right, because "community" today includes both village communities and those in urban settings, though the latter belong to the second item of the dichotomy. The recent German literature tends to avoid the term Gemeinschaft for "community" because it involves a value judgment about the character of the society; instead, it uses the notion of Gemeinde (König 1958).

All the same, despite the doubts just mentioned, the folk-urban continuum may be fruitful for empirical research, and the statement of the author may be developed further. About the Indian village community, he writes, quoting Bloomfield, that "the most important differences of speech within a community are due to differences in density of communication." In this connection, Frankenberg (1966) adopts from the field of communication science the ideas of social network and the "redundance" of communication in the case of village communities. The author underlines the importance of interaction for village communities: "A single water source, a single shop, the need for cooperation on heavy and urgent tasks all facilitate or require such interaction." Such interaction may, however, be observed in tribal societies as well, because the organization of large-scale hunting or fishing requires similar forms of interaction.

Reply

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I entitled this paper "Scale and Social Relations" to indicate that it deals primarily with scale and human interaction—with process—rather than with social structure, institutions, and organization. The title differs from that of the symposium for which it was originally written, "Scale and Social Organization," in precisely this respect. Murphy's comments are therefore much appreciated, demonstrating his characteristic ability to see to the heart of matters social, events human, issues theoretical, and arguments academic (cf. Murphy 1971). His brief remarks serve as a succinct and cogent conclusion to my paper. He identifies part of the problem others evidently encountered in the paper, namely that the "treatment has not been restrictive enough." Perhaps I strayed too far beyond social relations and thereby raised ghosts which some commentators then undertook to exercise on the assumption that they were the body of my argument.

The aim of the paper was to assess rather than to advocate the utility of the concept "scale." I addressed the question, Given the term "scale," and the fact that it has achieved some currency in anthropological literature, how and to what ends has it been used, and how if at all might it be used to better advantage in analyzing social relations? In the first part (that which precedes "Empirical Generalizations"), I undertook a brief analysis of the component meanings of what might be called the "socio-terms" or "anthro-terms" in the domain "scale." Perhaps this is what Khuri means by "an exercise in the lexicography of social characteristics"; if so, the first section of my paper is exactly that. I agree with Khuri's misgivings about "scale" and have attempted to make of those misgivings the central theme of the article. I have
chronicled rather than advocated the bipolar ideal-typical treatment of the concept, and, as Murphy has recognized, I have looked at what is essentially an evolutionary problem (in part), without subsuming an evolutionary model. I have not, however, rejected evolutionary analyses when they have proved useful in explaining social realities, as indeed they have (cf. the citations of Fried 1967; Sahlins 1968; Service 1966, 1975; Wolf 1966). If we are to learn more about the utility and implications of "scale" and its constituents, others will have to be more theoretically open-minded and analytically eclectic, I think, than is Khuri in his comments on evolutionary analyses and the role of analysis of "social behaviors, relationships, and collective actions." If these are excluded, there is not much left except social structural analysis, which has not had a very distinguished record in this regard.

In this paper my assessment of the utility of "scale" is frankly, explicitly, and, Philpott affirms, "suitably" skeptical, as I hope will be clear to readers even though it was not so to all of the commentators. As Cohen has suggested, scale is at best only one, and perhaps not the most important, variable affecting social relations. It may make up in heuristic value what it lacks in analytic value.

Confusion on these points resulted at least in part from the fact that the context for the paper was sketchily conveyed, as Hannerz has pointed out. The paper was written for a symposium inquiring into the implications of scale in society. The concept "scale" was therefore given as the topic, and my discussion followed from that. Happily, most of the papers in the symposium are now to be published in a book edited by Barth (1978). Included are essays by F. G. Bailey, John Barnes, Fredrik Barth, Gerald Berreman, Elizabeth Colson, Ernest Gellner, Reidar Grønhagen, David Jacobson, Theodore Schwartz, and Surajit Sinha. There the subject is explored and elaborated from a variety of perspectives, and some of the issues raised by commentators on this paper are more fully treated than they have been here. I hope that the discussion here will inspire attention to the contributions in that book, as well as to other literature on the subject such as the forthcoming paper by Belshaw (n.d.). In this spirit, I welcome the additional citations of relevant works provided by each of the commentators.

Doberty and Philpott call for attention to, and specification of, the nature of social organization and the circumstances of change in the comparative analysis of scale. Doberty emphasizes the difference between cultural continuity and cultural discontinuity when there is change in scale (i.e., the difference between shared and disparate culture, social organization, history, and vested interests in the social situations to be compared). This, of course, is a problem crucial to comparing changes in scale brought about by external imposition (e.g., conquest, colonization) with those brought about by internal processes (e.g., growth, development). Philpott directs attention to the differences between kinds of social organization (e.g., village and city) when size is not a variable. Another factor that must not be overlooked is the matter of social/cultural continuities and disparities within a single society and tradition. The homogeneity of Aleut society and the social fractionation and hierarchical interaction of Indian society are cases in point: surely social processes in these instances differ according to this contrast as well as according to size. Hannerz's remarks on the importance of considering asymmetrical power-relationships and Sharma's informative discussion of cross-caste relations and urban complexity in India shed helpful theoretical and substantive light on these matters. It is in view of such issues that I have insisted that scale must encompass social complexity as well as size.

The call for attention to social, cultural, and historical context in analyzing scale is analogous to the strictures raised 30 years ago regarding acculturation studies, criticizing their authors for overlooking or underestimating the relevance of the circumstances of contact when analyzing its consequences. Those well-deserved strictures contributed directly to the demise of acculturation as a major analytic concept, or at least to a fundamental redefinition of its utility. A similar fate for scale may prove to be equally fitting.

While on the subject of earlier theoretical traditions, I hasten to admit that I have not read Tønnes in the original, as Tagányi surmises. He suggests (and evidently deplores), and Murphy notes (apparently with approval), that I tend to value small-scale social relations over large-scale ones. Despite what may well be a romantic affinity for the simple life, I do not advocate the Rousseauean notion of the noble savage. I am grateful that both Cohen and Philpott have noted my recognition of the fact that all societies today participate to some extent in worldwide networks. This makes return to the primitive condition an irrelevant idea, but does not preclude learning from the contrast between small- and large-scale social relations, social organization, and social processes and acting upon what we learn (cf. Bodley 1975).

In this regard, it will be interesting to follow events in Cambodia. The ambassadors to China and Cambodia of Sweden, Finland, and Denmark recently toured that country for two weeks and reported their observations to the press. They were told that the present population of the capital city, Phnom Penh, is 20,000, but said that "it appeared to be much less." The report continues, "Side streets and pavements were blocked off and vegetables were growing on them. The impression was that Phnom Penh was at least self-sufficient in food. . . . The officials were told the whole country had been divided into cooperatives, each averaging 500 to 600 families" (Reuters 1978). Here is clearly a planned effort at reduction in scale.

In her comments, Gates calls for operationalization of scale, expresses concern about my methodological approach, and advocates some techniques of analysis. I am reminded by her remarks of the adage invented, or perhaps repeated, by Berger (1963:13) that "in science as in love a concentration on technique is quite likely to lead to impotence." Nevertheless, I am bound to agree that more and better research would clarify the issues I have raised in my paper. I would be interested to see "graph-theoretic and qualitative product-set analyses of possibility combinations," and in fact any other treatments of empirical phenomena associated with scale, and would welcome any contributions they might make to replicability, reliability, and especially validity in studies of scale and social relations or social organization. My paper will have succeeded beyond my fondest hopes if it inspires such research. As to the experimental method Gates suggests, I can only say that the "natural experiment" is the most anthropologists can expect or ethically undertake in studying scale. It was in the tradition of such experiments and "controlled comparisons" that I cited the experience of the Aleuts before and after colonization, Indian peasants in contrasting geographical and ecological circumstances, and contemporary Indian society in general in both rural and urban social settings.

In sum, "scale" is a concept that is widely used in anthropology, both explicitly and implicitly, and is therefore worth looking into, if only to call it into question or lay it to rest. Most likely it will be salvaged or abandoned as a result of more precise definition—specification of its constituent elements, the precise conditions in which they appear, the processes by which they occur, and their consequences in social behavior and experience. I hope that in the effort to comprehend the relationships among size, complexity, social organization, and social relations in societies around the world we will be concerned for the people who live in them; that is, that

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we will not sacrifice human insight, humane relevance, and social responsibility in the quest for scientific replicability or an illusory scientific objectivity. I hope, therefore, that in assessing the utility of the concept “scale,” we will exercise the "sociological imagination" as Mills defined it rather than either defined "abstract theory" or trivialized "abstracted empiricism" (Mills 1961). We can do so by attending to biography as well as history, and the relations between the two, to individual experience as well as social organization, to process as well as structure, and by so doing may hope to learn "to understand the larger historical scene in terms of its meaning for the inner life and the external career of a variety of individuals in a variety of societies (Mills 1961:5)."

My paper, with its attention to processes of social interaction, is an effort in this direction. It is not definitive—a fact I intended to emphasize by heading its final section with the pun, "Inconclusion" (and would have done so had not wiser clearer, less ambiguous heading). I am glad to see, however, that the paper has proven to be provocative. I am grateful to all of the commentators, and I hope that the paper and comments will stimulate further thought and research on the consequences of size and complexity in human society and experience.

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