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The Primary Sampling Unit A Nongeographical Based Rural-Urban Example

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Imagine yourself suddenly set down surrounded by all your gear, alone on a tropical beach close to a native village, while the launch or dinghy which has brought you sails away out of sight. . . . you have nothing to do but to start at once on your ethnographic work.

Malinowski (1961:4)

Current anthropological studies of human behavior incorporate many more kinds of ethnic units and field work samples than were used in those marvelous days when every isle, ridge, or plain provided new ethnographic data. Studies of relatively homogeneous groups designed to elicit cultural patterns in those times usually could rely on the physical propinquity of the members of the local community for the definition of group boundaries and membership.

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The anthropologist who pitches his tent in splendid rural isolation today, however, is likely to find that his ostensible "local community" is far from localized—members are periodically coming and going from other rural areas, and to and from cities as well. Inter-community, intertribal, and even international contact and mobility is rapidly becoming the norm rather than the exception. Malinowski's *kula* ring was but a portent of things to come.

This paper reports on a study of rural-urban migration in Kenya, and particularly on the problem of dealing with high mobility into and out of both rural and urban communities. Systems of rural-urban migration such as are found in Africa and elsewhere are only quantitatively more extreme in their population dispersion than situations prevailing in many peasant and tribal communities. This mobility of community members means that socially relevant community or study units are often not coterminous with physically or geographically localized settings. The field worker interested in the social effects of migration or mobility must construct samples and define communities utilizing criteria in addition to co-residence. The next section of this paper briefly discusses this general problem of defining the local community for purposes of intensive anthropological study. The following section describes the particular case of rural-urban migration in Eastern Africa, and the final section deals with evidence for the social relevance of a non-co-resident community.

THE PRIMARY SAMPLING UNIT

The tribe, nation, or language group continues to be a standard unit of cross-cultural comparison in anthropology, and the intensive interviewing of selected informants within such a unit continues as a standard method of inquiry. These units and procedures are supplemented by random and purposive sampling, and by a wide variety of formalized data collection procedures (Pelto 1970, Naroll and Cohen 1971). This increasing diversity and flexibility in field work strategies parallels increased sophistication in cross-cultural and controlled comparison in anthropology. What units are to be compared becomes as problematical as the question of how to collect and report field ethnographic data.

Two issues arise: (1) whether cultural-behavioral variables can be compared cross-culturally at all—the problem of context; and

(2) whether a single, multipurpose unit of analysis should be maintained as the best strategy for cross-cultural comparison—the problem of appropriateness. This paper is concerned with the second issue, except to note that the two are not independent: appropriate units can be compared cross-culturally more readily than less appropriate ones.

Naroll (1964) proposed a standard unit for comparative analysis, the cultunit; Whiting commented on the usefulness of the cultunit by asking about the widely differing purposes to which it would be put:

if the problem is cultural, I do not feel that a single definition such as that offered for the cultunit is appropriate for all problems. . . . nations or states might be more appropriate for the study of problems involving political variables, whereas local communities may be the more appropriate unit for the study of kinship or child-rearing (1964:305).

Functional utility is one important consideration in defining any field work unit for study. A second consideration revolves around the level of generality and abstraction desirable in field work and in reporting findings:

the unit most intensively studied by standard ethnographic techniques is, in fact, a community rather than a larger unit. . . . the detailed workings of the social life is documented from the observations of the community in which [the anthropologist] lives (*ibid.*).

Although anthropologists often report their findings to be representative of a larger society than the village, band, or barrio they have intensively studied, it is our opinion that their reports should more properly be referred to the smaller group (Whiting and Whiting 1960:932).

The intensive, face-to-face field work that remains the most valuable and most characteristic method for most anthropologists, takes place not within societies or cultunits, however valuable these abstractions may be for analytical purposes, but rather within the local community. Some combination of functional usefulness and definable, interacting community boundaries, then, probably provides the best guidelines for selecting a field work study community.

There are, of course, many advantages to the direct and intensive study of local communities, four of which are especially relevant to

questions of comparative usefulness and multimethod approaches: (1) the fieldworker is able to observe behavior directly, rather than rely only on words—informants' or other authors'—however valuable these might be; (2) the extent of cultural uniformity or variation within the local community can be directly measured, rather than either assumed or indirectly estimated; (3) multiple methods can be used and validation of these methods is possible; and (4) the relative contributions of different kinds of variables—cultural beliefs and values, setting and environment, and individual differences—can be separated out from one another and compared. This field strategy sees the local community as an experimental setting for studying cross-cultural and intracultural variations in behavior. Whiting *et al.* (1966) have called this kind of unit the primary sampling unit, or primary social unit, or PSU.

There are four criteria central to the definition of a PSU: (1) sufficiently frequent face-to-face contact among the members to consider the group an interacting unit; (2) a common dialect or language within the community; (3) some degree of sovereignty within the group; and (4) a common name for the group, or some other indicator of a group identity and consciousness of membership.¹ PSU's typically number some 40 households; they might include a single localized kin group, those sharing a well, residents of a small village, hamlet, street or ridge, and so on. Note that the PSU depends on local criteria for its particular form: it is the participants' own name, feeling of group membership, and interaction that define it—not primarily externally imposed criteria.

The primary sampling or social unit is typically geographically localized, as the examples illustrate. Perhaps the principal reason for this is that the members of the local community usually share a common attachment to some kind of basic physical resource—land, livestock, hunting territory, and so on. Management and inheritance of these resources within the community's families insures some continuity of residence intergenerationally. The next section turns to a social unit very much like the PSU, which is not co-resident: rural-urban migrants in East Africa.

1. Sovereignty implies some ability to make independent decisions in matters important to the members of the PSU; virtually no community has full autonomy. Endogamy was later suggested for inclusion as a criterion for the PSU to handle special cases, such as caste societies (Whiting 1968:699) but is not relevant to the African case presented here.

THE GEOGRAPHICALLY DISPERSED PSU: MIGRATION AND RURAL-URBAN TIES

One of the fundamental effects of social change and population increase is to create additional potential resources (additional technology, businesses, wage employment) and to put increasing pressures on the previously existing resources in the community (in East Africa, on land and livestock). Rural-urban migration in many parts of sub-Saharan Africa consists of attempts by men and women to expand their resource bases by obtaining urban jobs while at the same time retaining ties to their rural farms and families. Of course ties are not always retained between rural and urban areas; there are factors other than resource ownership which influence the form and intensity of rural-urban ties—distances, cultural homogeneity, inheritance rules, and others (Weisner 1973*b*:70–75). Common economic interests within large family units, however, appear to be of central importance in a wide variety of settings and cultures.²

McElrath (1968:6–7) has coined two terms that aptly describe the kinds of social roles created by these rural-urban interrelationships among migrants: the perpetual newcomer and the peasant returnee. The perpetual newcomer to the city retains city and country ties, and travels back and forth between a rural home base and an urban wage economy sector. The peasant returnee is a rural, farming resident of his home community who has urban experience and who in fact may be preparing for another urban visit. Newcomers and returnees have similar life cycles, share a common rural, local community, and retain close contact with each other regardless of which locale—city or country—they may reside in at any particular time. It is precisely this collection of men and their families, scattered between town and farm, which forms a PSU vital to the understanding of migration.

I searched out and sampled one such rural-urban community of newcomers and returnees in Kenya. Interaction among its members is high, and all the participants come from the same ethnic group and speak a common dialect. There is considerable sharing of eco-

nomic resources and information among this rural-urban community, or network. The network is not a formally named group. It does, however, have a recognizable identity and importance to the members themselves: when the structure of rural-urban ties and the nature of these newcomer-returnee networks is discussed, its members readily recognize and understand it as a social unit. It is this sense of formal identification and sociocultural significance which the naming criterion is meant to imply. Thus, as I show in more detail below, the rural-urban network of migrants (newcomers and returnees) did indeed form a primary social unit of crucial importance to the study of the effects of migration in the Kenya setting.

SOCIOMETRIC CHOICE AND SELF-SELECTION OF A NONGEOGRAPHICALLY BASED PSU

The rural-urban sample of newcomers and returnees (the “network” sample hereafter) was based in two clearly defined geographic poles. The urban study community was in Nairobi, Kenya, in a housing estate called Kariobangi. The rural pole centered around three patrilineal, patrilocal, exogamous subclans of the Abaluyia peoples of Western Kenya, Kakamega District, Kisa location, some 230 miles from Nairobi. Kariobangi is a multitribal, African residential area, with a population largely made up of migrants at or slightly below the Nairobi median levels for income, occupational, and educational status. Kisa is a densely settled region north of Lake Victoria with a subsistence economy based on maize, millet, other hoe agricultural crops, and some cattle. Approximately 50% of the adult, working-age men are away working or seeking work for wages at any time, and periodic migration of this kind is a nearly universal part of most men’s lives throughout this region.

Men from the Kisa area chose many urban target areas for migration, and one of these areas was Kariobangi. Thus there was a colony or enclave of men from the three patrilineal subclans in Kisa scattered throughout Kariobangi Estate. There were 24 such men all told, who were identified through a chain or snowball procedure. These 24 urban “newcomers” usually knew many but not all of their fellow Kisa clanmates in Kariobangi; they also had many contacts with similar men from Kisa in other parts of Nairobi; and they of course had extensive and permanent ties to their families and

2. For Africa, see for example Caldwell (1969), Parkin (1969), Watson (1958), Van Velsom (1960), and Mayer (1971). Elsewhere, examples of rural-urban family units include India (Owens 1971), Indonesia (Bruner 1970), the Balkans (Hammel 1969), Greece (Friedl 1959), and of course Oscar Lewis’ classic paper on Mexico City (1952).

friends in Kisa itself, including the many "returnees" living on rural homesteads there. The goal of the selection of the network PSU was to match up the urban group of migrants in Kariobangi to a similar group of rural residents in Kisa.

The urban and rural men had to know and be in some type of contact with each other. Thus the PSU needed to draw on the members' own perceptions of these contacts, as well as draw some limits around the multitudes of network ties, ramified through many urban and rural areas, which each individual had. To do this, each urban resident of Kariobangi from Kisa *selected his own* rural resident counterpart, subject to some constraints. Each urban PSU member was asked to choose a rural counterpart who was closely related to him patrilineally, and who was of similar age and educational level. The result of this choice procedure was *24 self-matched pairs of men, each pair including one man living in Kariobangi and the other living in Kisa*. This set of 48 men and their families constituted the rural-urban network PSU sample. The network sample was designed to capture a small portion, a microcosm, of the complex sets of rural-urban systems of interaction so characteristic of migration in this region.

One set of issues concerns questions of sampling "bias," the matching procedure itself, and the characteristics of the sample. These have been discussed elsewhere (Weisner 1973a). A second set of questions concerns the actual social and interactional importance of the collection of 48 men and their families which resulted from the matched self-selection. For example, each urban man knew only one rural man by the design of the sample itself—namely, his own matched counterpart. The degree to which the other 47 men in the PSU knew or visited or were in some other kind of contact with each other was not known; and unlike a similarly chosen co-resident PSU, such contacts could not be assumed to be present. The urban men, for instance, may not have known or visited other men in the PSU sample at all; or they may have only maintained contact with other urban PSU residents while reducing their rural contacts. This problem of the awareness by its members of the PSU as a unit, and the kinds of interaction within the group, was studied in a variety of ways in the field. Two of these are potentially useful in the study of any nonlocalized PSU sample: visiting and residence patterns, and sociometric preferences within the PSU.

VISITING AND RESIDENCE

The PSU sample was followed for approximately 15 months in 1969 and 1970. Systematic reinterviewing and censusing of the entire sample, along with continual participant observation and intensive interviewing formed the primary methods of data collection, much as they would in any community study. Research was about equally divided between the rural and urban poles of the network sample. One fact about the network was immediately noticeable: its high mobility. Nineteen of 23, or 83% of urban families with complete data, had at least one member who moved his residence from city to country or vice versa during the study period. For example, wives of urban migrants might spend several months living with their husbands in Kariobangi, and then return, usually with some or all of the children, to live in Kisa. These changes in residence are related to crop planting and harvesting cycles, and school terms, as well as personal factors such as health or family needs. Twenty-two of the 24 urban network families had rural farms and houses available to them for residence—either their own homesteads or those of their parents or siblings. By comparison, only 40% of the rural PSU families had any residential changes. Overall, 60% of the families in the PSU (rural and urban poles combined) had members commuting between the city and the country, a full 12 hour bus ride apart.

Table 1³ summarizes the rural-urban mobility data for the PSU. It is interesting to note who makes these moves or visits within the family units. Within the urban pole of the network, a third of the

TABLE 1
NUMBER OF MOVES BETWEEN CITY AND COUNTRY

	Number of families with members making					
	0 moves		1 move		2 or more moves	
	N	%	N	%	N	%
Urban (N = 23)	4	17.3	9	39.1	10	43.4
Rural (N = 23)	14	60.9	9	39.1	0	0
Combined (N = 46)	18	39.1	18	39.1	10	21.8

3. The data in this table refer to moves between Kisa and Kariobangi by PSU members during a 15-month period. A move is a round trip with a minimum stay of 3 weeks made by one person or several simultaneously. Visits are round trips of shorter duration. One-way moves also occurred during the study period. Some men initially in the rural matched group moved to town, and some men or wives initially in the urban sample moved back to Kisa and remained there. These moves tended to balance out between the two residential groups.

men made more than two moves or visits, compared to only 10% of their wives; another 14% of the men made two visits compared to 47% of the women, while 38% of the men made one move or visit, compared to 26% of the wives. The mobility of children of these same families is closely tied to this pattern of rural-urban contact. Among preschool-age (0–6) children of the urban PSU families, 48.5% spent time residing in both the city and the country; for school-age children attending school, the percentage drops to 25, and for school-age children not attending school, 50% maintained this dual pattern of residence. The rural PSU members, wives, and children made far fewer and shorter moves and visits between city and country. The rural members relied primarily on the highly mobile urban migrants for news and visits.

These figures illustrate the rural-urban visiting patterns found within the urban pole of the PSU: men tended to visit only once a year during vacations, or to go several times a year for shorter periods. The wives of the urban PSU residents tended to travel once or twice a year and remain for longer periods of time than their husbands.

Once any PSU member made a move or visit between Kariobangi and Kisa, information, gossip, news, and material resources were rapidly exchanged between network members. This furthers the unifying effects of the high turnover of family personnel within the households of urban migrant PSU members. Physical separation of urban newcomers and rural returnees does not result in social separation. This is because of the maintenance by the urban residents of rural homes and resources (farms and livestock), and also of the pattern of “duolocal” household residence among families of urban PSU members.

THE STRUCTURE OF NETWORK SOCIAL CONTACTS

All the 48 PSU men, and the wives of all married men, were asked a series of sociometric questions about every other member. Each member of the network was asked which other men or women in the sample he or she knew, visited, or would select as a friend.⁴ Visiting questions included data on frequency, location, and other relationships or reasons for the visits. Friends were ranked within

4. Men were only asked about other PSU men, and women only about other women, owing to problems of cultural appropriateness in asking such questions.

the network. The PSU was also asked about closest friends regardless of whether they were in the PSU sample or not. About 25% of the friends named spontaneously by members were also in the network sample. From these sociometric interviews, large matrices were constructed comparing the respective social ties of each network member with all the other members. Scores were then derived for each pair of PSU members measuring their degree of social similarity or proximity within the context of the total network system of relations.⁵

Several interesting issues could be tested utilizing these social similarity matrices. Various attributes of the PSU members were compared for their relevance in structuring social contacts within the community. For instance, clan affiliation and rural geographical propinquity clearly played a role in the formation of social ties, as did rural or urban residence, age, educational levels, social status, and so on. What is the relative importance of each of these? If urban or rural residence is the primary factor involved in the formation of personal attachments, then the idea of a rural-urban PSU cutting across these residential divisions would be weakened. If some rural criterion such as kinship affiliations, or modernization characteristics like education were more important regardless of residence, the rural-urban PSU concept would be supported.

The matrices of social proximity scores were analyzed using multidimensional scaling techniques. The MDSAL analysis gives the best-fitted relative position of each individual PSU member (man or woman) to all of the other members. The more socially proximate each pair is, the closer they appear in the scaling. The n points (42 individuals excluding missing data in this case) can be scaled using from 1 to $n-1$ dimensions.

Figure 1 illustrates the striking outcome of this procedure for the social similarity measures. These data are based on men's reports of their visiting patterns. Each individual is located in a two-dimensional grid, and is identified by his clan affiliation and urban or rural residence within the PSU sample. Each axis is a dimension, analogous to the factors generated in a factor analysis. The ordinate clearly shows the importance of patrilineal subclan affiliation in the pattern of social proximity: Members of the clan designated by

5. Details of this scoring procedure and analysis are in Weisner (1973b).

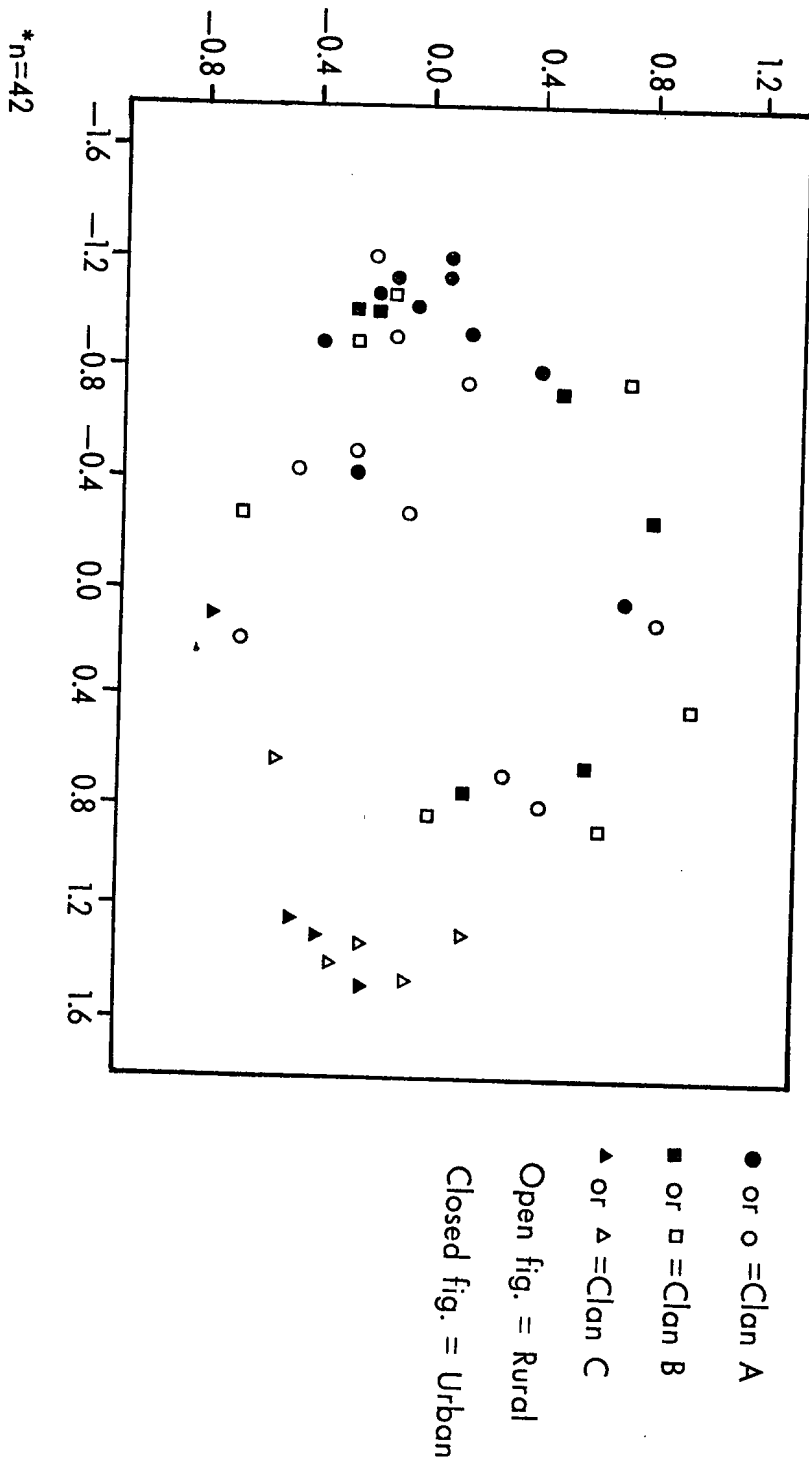


Figure 1. Multidimensional scaling in two dimensions for men's visiting relations (N = 42).

triangles in figure 1 cluster together on the right, while members of the clan shown by circles cluster toward the left. Clansmen shown by squares are scattered to the left of center. Urban or rural residence (indicated by solid or open shapes) does not appear to have a major influence on visits, although there is a slight tendency for urban clansmates to report visits to one another more often than rural clansmates, and vice versa.⁶ This horizontal dimension, dimension 1, is the single most powerful factor in structuring visiting and other kinds of social ties within the network sample.

Other characteristics of the PSU men were correlated with the dimension scores from the MDSCALE analysis. Dimension 2, the vertical axis, consists of an aggregate of factors that can be labeled social status. The educational levels of the men, their wage incomes or total farm incomes, and their total numbers of years living in cities are all correlated with the distribution of the men's scores along this second dimension. When a third dimension is added to the MDSCALE analysis, rural-urban residence does emerge as an independent factor, although it is not powerful enough to appear when only the first two dimensions are used.

The structure of social ties within the PSU sample, as indicated by sociometric interviews and participant observation, can be summarized as follows⁷ (in order of importance): (1) the subclan affiliation of each PSU member; (2) the composite social status of the men; and (3) whether the sample member lives in Kariobangi or in Kisa. These findings tend to support the model of rural-urban ties, of newcomer and returnee statuses being closely connected, which led to the planning of this sample initially. Residence at one point in time in town or country appears to be less important in determin-

6. Clan affiliation is significantly related ($p < .002$) to scores on dimension 1 (the horizontal axis), and unrelated to dimension 2 (the vertical), by chi-square. Urban or rural residence of the men is unrelated to the visiting pattern for both dimension one and two, by chi-square. Visiting for purposes of these interviews was defined as any visit in either man's home during the previous twelve months. Thus these data do not reflect the frequency of visits, only whether they occurred or did not occur. A separate analysis with scores weighted for visiting frequency did not substantially alter the cluster pattern in figure 1, although it did confound rural-urban residence with the clanship dimension, since men who in fact were socially close and who lived close also visited more frequently.

7. Figure 1 illustrates these general findings for visiting relationships only, but essentially the same results were found using data on knowing and on friendship ties. These data also refer only to the men in the sample; findings for the wives of these men were somewhat different.

ing social attachments than are ties of clan-ship and composite social status.

The rural-urban network, geographically dispersed but of considerable social importance, is only one among many possible adaptations of the concept of the intensive PSU sample. The use of self-selection and matching is certainly not the only way to obtain a sample of this kind. This particular example does, however, illustrate the sort of nonlocalized social unit that is becoming increasingly common during periods of rapid social change. It is just such small, intensive, interacting communities that anthropological research styles are best equipped to study.

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