

Unstable Households in a Stable Kalahari Community in Botswana

THE TRANSITION TO SEDENTISM, a significant event today as well as in prehistory, is credited as having had a major impact on the organization of human society. Sedentism allowed the growth of communities composed of members who shared a common identity above the household. Since 1987 I have been observing Kutse, a Kalahari community composed primarily of Basarwa (Bushmen or San) who speak G/wi, G//ana, and Kūa, but also including some Bakgalagadi (Bantu-speakers). The community is located near the Khutse¹ and Central Kalahari Game Reserves. Kutse was initially established in the early 1970s when several families were told to leave the Khutse Game Reserve. With only one or two exceptions, these same families had previously left their territories in the Central Kalahari Game Reserve area to occupy what is today the Khutse Game Reserve. Their move to the area that became the game reserve was precipitated by drought and the need to find water-bearing melons outside their traditional ranges. These families were allowed to move to wherever they wanted, including the Central Kalahari Game Reserve, as long as they did not choose an established game reserve set up for tourists.² However, most of the other Kutse residents originated in the Central Kalahari Game Reserve and never inhabited the Khutse Game Reserve area.

Rainfall patterns in the general central Kalahari area are highly variable from year to year, influencing the prevalence of melons, which were the only source of moisture during much of the dry season. Camps tended to be more aggregated, but also more mobile, during the rainy season when they were occupied for four to six weeks at a time. People stayed together as long as possible after the rainy season when pans began to dry up. During the early dry season, camps were inhabited roughly the same amount of time as before but tended to be located

at melon patches away from the now dry pans. The aggregated camps slowly dispersed during the cold dry season, although the length of camp occupation remained roughly the same. During the hot dry season, people dispersed into nuclear- or extended-family camps located near melon patches. According to older Kutse residents, length of camp occupation varied from a few days during the worse drought years to three or more months during the best wet years. Most commonly, length of camp habitation during the hot dry season ranged from eight to ten or twelve weeks in duration. Very occasionally, and often not more than once in an individual's lifetime, melons were unusually plentiful, which allowed people to stay in aggregated camps for eight to twelve months. Most camps in the contemporary Kutse community are occupied for one to two years (the range is six months to six years with neither extreme common today). Thus, the Kutse pattern of camp mobility and aggregation can be viewed as a continuation of what originally was a very infrequent occurrence that never lasted more than one year at a time.

Why Kutse?

Sedentary life is not necessarily easier or better than nomadism. Hematological studies show that living at Kutse is not particularly healthy (Kent and Dunn 1993, n.d.). Medical research among the Ju/hoansi (!Kung) at Dobe reveals that the same is true for other recently sedentary aggregations (Kent and Lee 1992). Inhabitants suffer from an array of illnesses that were not as prevalent when they were nomadic. The frequency of fighting and discord at Kutse is much higher than when people were nomadic, a situation residents find disconcerting (Kent 1989). While the nearby borehole, or well, allows Kutse residents to be sedentary, other Kalahari communities within a one- or two-hour drive also have boreholes. The government distributes food relief and a clinic dispenses medicine one morning a month at Kutse, but both services are available at other communities throughout the Kalahari. So why choose Kutse? Obviously the land must

support the people or they would not and could not stay. Food and water are preliminary conditions that allow Kutse to exist, but they do not explain its existence.

The Kutse location just outside the game reserve provided access to a borehole, or well, which was a permanent source of drinking water. This access permitted year-round occupation of one location, a previously rare occurrence. Other households from the Central Kalahari Game Reserve who learned of the newly established community decided to visit. These visitors eventually decided voluntarily to relocate to Kutse. Often they stated that they had moved to Kutse in order to be near a friend or relative and to have access to water and food (government-distributed cultigens in the form of flour or beans and wild plants and animals).

If we accept that most individuals were attracted to Kutse for social interaction with relatives and friends, not for the water and food resources, which were similarly available at other Kalahari communities, we can agree that people were able to stay at Kutse because of the availability of necessary resources. We are still left, however, with the question of how a newly sedentary community is integrated and how households are linked together. Through the study of recently sedentary communities, such as Kutse and others, we can begin to understand the dynamics behind community organization in small-scale societies undergoing the transition to sedentism. We can also develop models of non-Western community organizations and structures that can be tested with archaeological data to see how well they fit or do not fit the prehistory of a region (Kent 1994). Lastly, the study of contemporary aggregated communities undergoing sedentarization allows understanding of a significant transition that occurred in many regions at different times in the past. This understanding permits the elucidation of underlying factors important in community organization and its evolution.

Unstable Households: Four Lessons from the Kalahari

While Kutse is a stable community, the households within it are not. Camps are inhabited from only four or six months to two or three years. There is an inverse relation between the amount of time people have been sedentary and the length of time they occupy camps. More recently nomadic residents tend to move their camps more frequently than others. Unstable households are a result of the former nomadic mobility pattern in which camp membership is fluid and waxes and wanes through and between years (Lee 1979; Silberbauer 1981). Camp composition varies from a husband and wife by themselves to several families linked through kinship and/or friendship. Couples residing by themselves are usually

either just starting out or are older with their adult children living in other camps nearby.

New huts and windbreaks are constructed every six to twelve months, at the same camp. The most common explanations for rebuilding are that insects become too annoying or that structures fall into disrepair. Actually, these shelters are not very durable without much maintenance because they are adaptations of more ephemeral grass huts and windbreaks. Since the wind is often very gusty, it is difficult to know exactly which direction a windbreak should face to provide maximum shelter on any given day. Sometimes a new windbreak is hastily constructed to block the prevailing winds at the time.

At Kutse, every multifamily camp has a core membership around which others oscillate. Some multifamily camps form when visitors gradually stay longer and return more often as friendship intensifies. Core occupants have no additional status or decision-making authority. Instead, individuals form their own opinions and either go along with or move away from the core group.

Disintegration of the Community Core

The community nucleus is not stable. When Kutse was about three to four years old, most camps clustered along the sandy tract that ran through the village to the game reserve (see Figure 1; note the small number of abandoned camps in 1987). Six years later the majority of camps are located away from the original village nucleus (see Figure 2). Even so, residents still consider themselves part of a community.

The disintegration of the community core leads to the first of four lessons concerning community organization among recently sedentary peoples; namely, that the community grows from the inside out. Kutse began as a core that split up, partly due to resource availability but primarily due to social interactions. In 1987, Kutse was approximately 1 x 1.5 km in size while today it is well over 3 x 3 km in size. This larger area is occupied by a relatively small group of people (population ranges by year and season from 90 to 140 persons). In 1987, when the community was only a few years old, 68 percent of all camps were occupied. In 1992, only 29 percent of all camps were occupied. These figures reflect the common relocation of camps over the life of the community. The most densely packed area of the Kutse community in 1987 is the least densely populated in 1992 and later; thus, camps are much more dispersed than they were six years ago.

At the same time that the community nucleus dispersed, camps moved farther away from the only source of water. Although some families have access to donkeys to help haul water, not all do and many carry water in plastic jugs which they tie to a carrying stick or on a tumpline or in a hide kaross. In 1987, most people had an hour to hour-and-a-half round-trip walk to get water. By

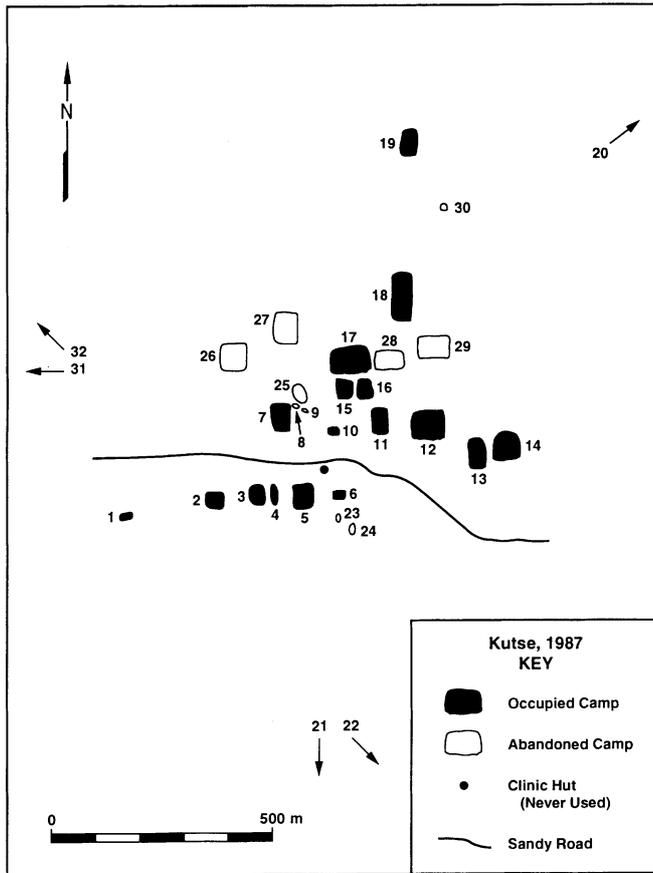


Figure 1

Distribution of occupied and abandoned camps at the Kutse community during the dry season of 1987 (31 and 32 are abandoned camps).

1992, many had a two-hour or more walk. When questioned about their moving, residents consistently referred to one issue or a combination of issues they considered more important than distance from water (residents tend to use relatively small amounts of water, so water need be collected only every couple of days). First, many people cited proximity to wood as a concern because they collect firewood every day during the dry season and almost as much during the hot rainy season when wood is used to cook and keep wild animals away at night. Second, most people wanted to escape noise from the shouting and fighting that regularly occur in the most aggregated part of the community. Third, individuals moved their camp in order to follow a sharing partner who had moved earlier. One sharing partner usually establishes a new camp and within six months the others in the sharing network follow. This gives the movement and placement of camps a social dimension that is not often included in models of community organization and spatial patterning in highly egalitarian societies (see Figure 3).

Of the core 20 households present at Kutse in 1987, all those still inhabited were present in 1992 (although a number of members had died during the intervening

years). With the exception of one very old man, all 20 households had moved their camps to different locations over the past seven years. Four new households came to Kutse in 1988 and all were still present in 1992. These households are now well incorporated within the community. Also during this period, six visiting households from the Central Kalahari Game Reserve established independent camps. Two families stayed two years and then returned to the Central Kalahari Game Reserve. These inhabitants were always referred to as visitors rather than as community members, even though they had relatives at Kutse and even though in some cases they stayed several years. Four other visiting households lived at Kutse for more than four months but less than two years.

Camps are periodically abandoned for a few days to a few months at a time while residents visit other camps. Usually, but not always, these camps are located in different communities. Some individuals maintain a pattern of visiting similar to that practiced when they were nomadic. It is not uncommon for a person to move with his or her possessions to a Kutse camp for weeks or even months at a time, despite the fact that his or her own camp is only a fifteen-minute or less walk away. When questioned, residents did not consider it unusual to move into someone else's camp when their own is located so nearby. Kutse residents visiting other Kutse camps, combined with the common practice of extending visits to other communities for two or three months or more at a time, makes specific community population estimates extremely difficult to calculate.

The Role of Sharing Networks in Structuring Community Organization

George Silberbauer (1981) describes sharing networks as "cliques." They are a Central Kalahari Basarwa characteristic used to establish social relationships that does not occur among the Ngamiland Ju/'hoansi. When one belongs to a sharing network, everything—edible or not—is shared when requested and sometimes even when not.³

Kutse Basarwa organize with whom they interact in these very fluid, impermanent cliques or sharing networks, which usually consist of two to five households and last from several months to several years. Camp interaction is organized around the sharing networks. One socializes most with fellow sharing partners. They hunt or collect wild plants together whenever they want company while foraging. Sharing partners often visit different camps together, as well as spending much time at each other's camp. Residents who are not part of someone's sharing network are not ignored, they are just visited less frequently and they do not regularly share possessions or food. Silberbauer comments that the formation of sharing networks has little to do with any empirical reasons he

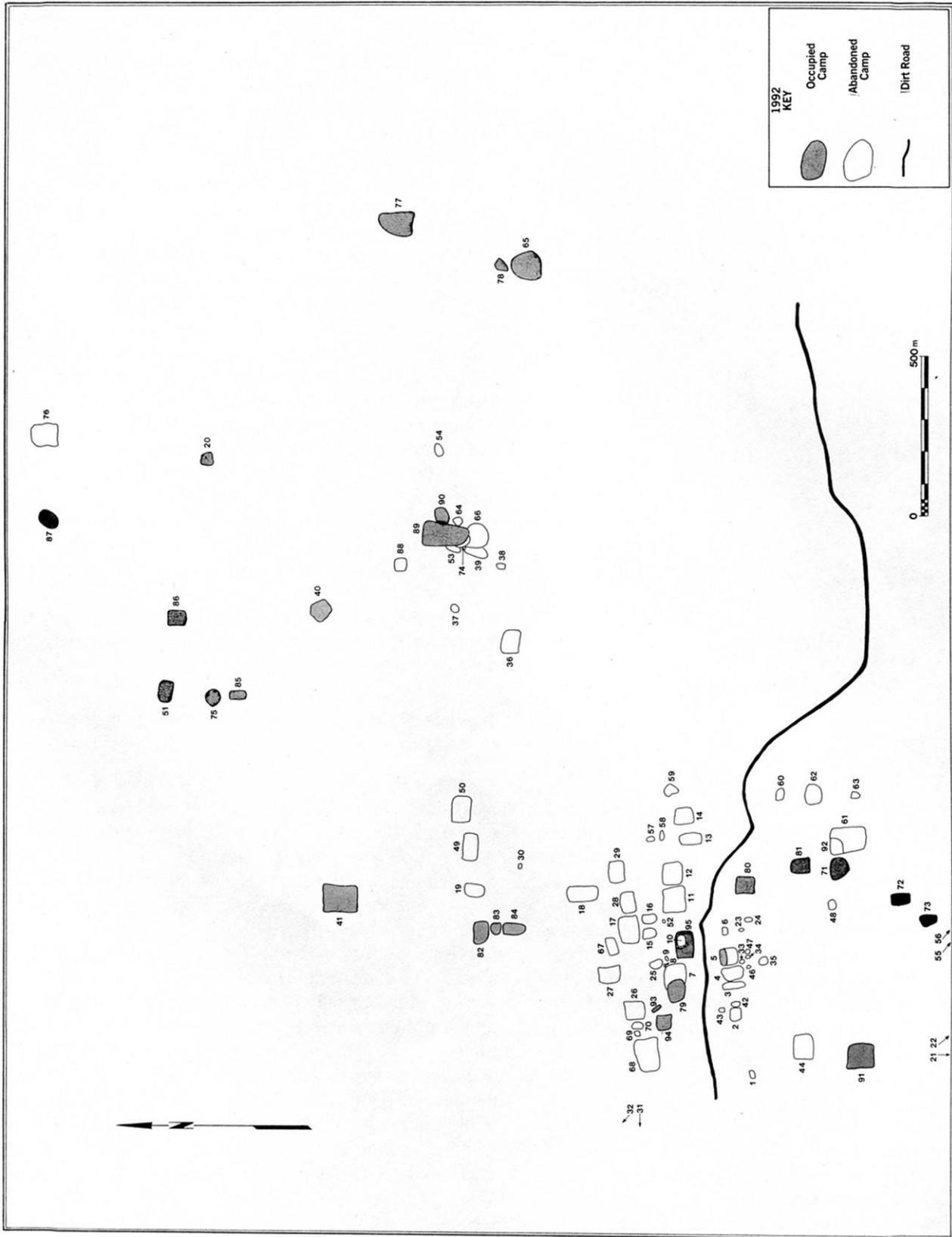


Figure 2
Distribution of occupied and abandoned camps at the Kutse community during the dry season of 1992.



Figure 3

Camps in which occupants are in the same sharing network usually locate their camps near one another. Kutse, 1987.

can discern, except for who is friendly with whom at any one particular time. In every case where there is a cluster of camps at Kutse there is a sharing network (see Figure 4).

The presence or absence of sharing partnerships influences community conflict as well. One example of expressing violence with property is an incident in which a man began to quarrel with his wife. He was angry at her because she asked for and received some salt from a person with whom he had an adversary relationship and who also was outside their sharing network. This person reconsidered his gift and demanded the salt back. The woman returned the salt in an enamel mug, which the original owner of the salt smashed with an ax to show how furious he was with the woman for taking his salt (even though he gave it to her). Enamel mugs are difficult to obtain, and the woman's now enraged husband took his possessions out of their grass hut and torched the roof, burning the contents inside (see Figure 5).

While mobile, the same groups residing today at Kutse were noted for their pacifism. Now, due to the long-term proximity of non-sharing partners' camps, violence has become prevalent. Antagonisms build when people observe other camps not sharing with them, even

if under ordinary circumstances they would not have shared because they were not part of the same sharing network, and they would not have resided near one another for more than four to six weeks at a time. The result is that many fights at Kutse erupt over perceived injustices about sharing. There is no community leader, chief, or headman to mediate such disputes. Hostilities escalate to the point of violence, fueled by home-brewed beer. Elsewhere in the Kalahari, Basarwa who have been sedentary for many decades if not centuries have formal leadership positions emerging within their communities (Guenther 1975; Hitchcock and Holm 1985). This has not occurred at Kutse yet because people have not been sedentary long enough.

How do we model early pre-Neolithic and Neolithic sedentary communities and their organization and site structure while at the same time avoiding a Western-centric perspective of the past? I suggest that early Neolithic villages or pre-Neolithic sedentary aggregations were plagued by violence similar to that occurring at Kutse. Anthropologists have emphasized the importance of kinship in structuring community household locations and hearth-to-hearth distances at hunter-gatherer camps ranging from Australian Aborigines to Basarwa (Gargett and

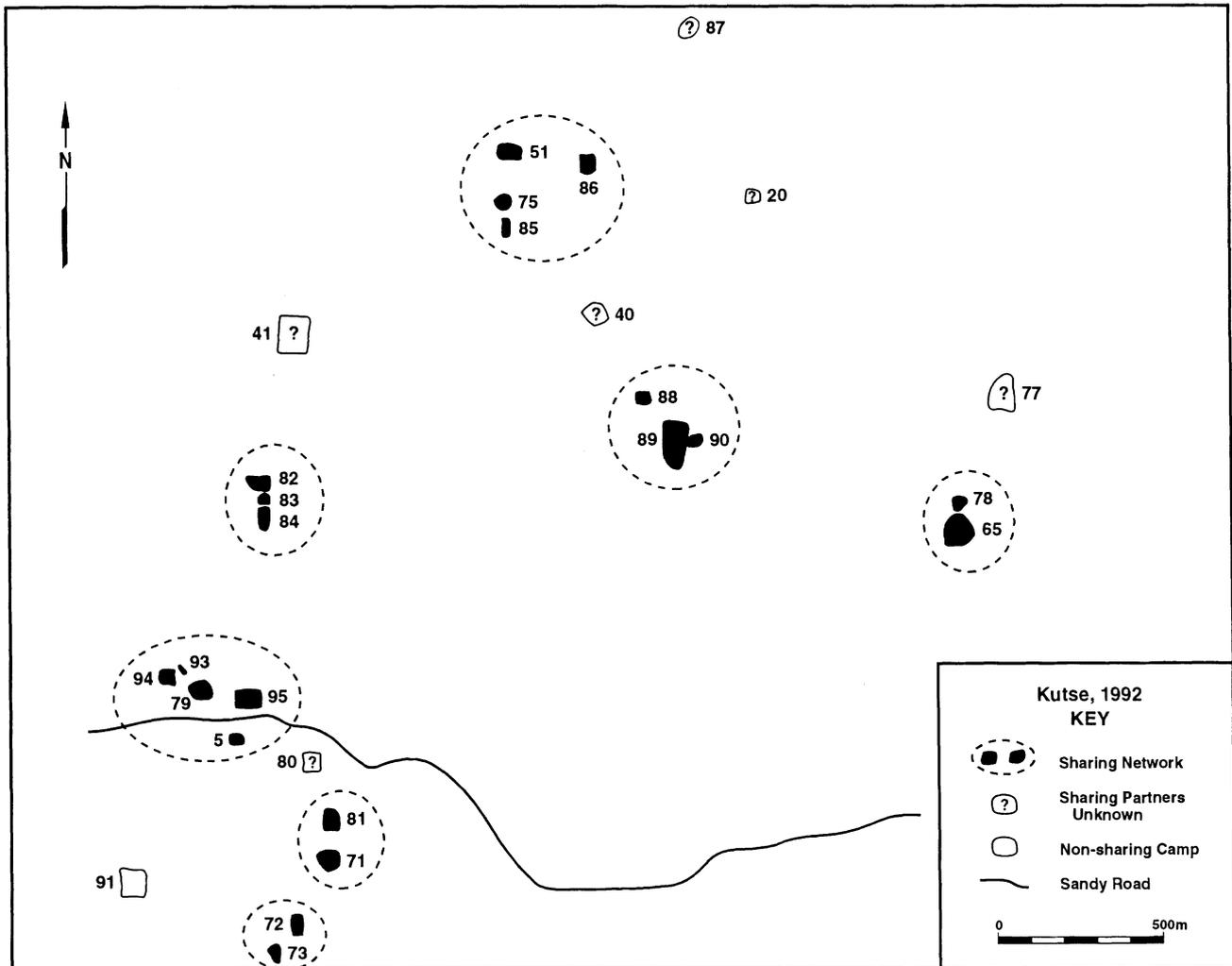


Figure 4

Sharing networks at Kutse in 1992. Those belonging to the same sharing network are enclosed by a dashed line. Camp 91 is the only known sharing isolate at Kutse (and it is described in more detail in Kent 1993a, 1993b).

Hayden 1991; Whitelaw 1983). Kutse provides an unusual opportunity to explore the importance of kinship in linking households because the community contains four linguistic groups—G//wi, G//ana, Kūa, and Bakgalagadi. Anthropologists have noted that many Kalahari groups have a universal kinship terminology, which means they incorporate everyone into their kin network, sometimes including the anthropologist (Barnard 1978). The result is that everyone claims to be distantly related even if from a different linguistic group. Because of the somewhat unique situation at Kutse, where linguistically distinct groups reside side by side, it is possible to determine whether or not individuals are related by consanguinity or affinity, or not at all.

One example of the extension of fictive kin is seen in three Kutse families, each of whom I have lived with for several months or more. Although they speak different dialects of Sesarwa (G//ana and Kūa), they have belonged

to the same sharing network during the past three years. The Kūa family first established a camp at Kutse in 1987, at which time it had only limited contact with the G//ana family with whom it later became friendly. The friendship developed through the years, and in 1990 the Kūa family moved its camp next to the camp occupied by its G//ana friends and began a sharing network. About the same time, the younger sister and family of the male head of the G//ana family moved their camp next to his and his Kūa friend's camps. Together, all three camps formed a sharing network. However, note that while one sister and her family were sharing partners with the above male G//ana, their youngest sister and family were not, and the latter situated their camp some distance from these sharing network camps. In 1993, the G//ana family moved to a new camp. The Kūa family and the younger sister of the male head of the G//ana family split up and built separate camps near one another but away from their original G//ana

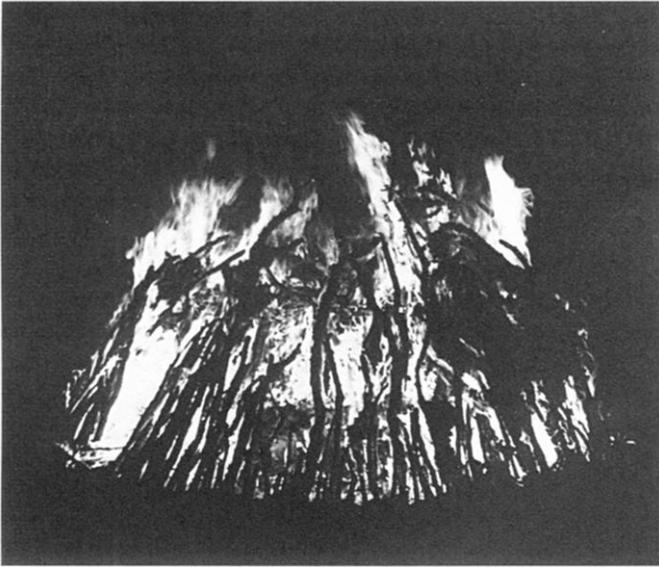


Figure 5

What started as a dispute over the sharing of salt between two non-sharing partners whose camps were located spatially near each other escalated into physical fighting between the two male heads of the camps and later turned into violence against one of the men's wives, who had requested the salt from the non-sharing partner. The conflict culminated in the burning of his hut, after he had removed his things from it. Kutse, 1989.

sharing partner. They each said that they had quarreled and consequently established their camps apart from one another.

Central Kalahari sharing partnerships transcend economics as well as kinship and ethnicity.⁴ For instance, the male head of the Kūa family is not and never has been a good hunter, while the male head of the G//ana family is quite good. The latter has little to gain economically from his relationship with the former, who has no goats, does not provide labor or services such as baby-sitting, and can in no way provision the latter (Kent 1993a, 1993b, in press b). Because of the linguistic diversity at Kutse, we can see that sharing partnerships are not based solely on kinship. Friendship, not kinship (or economics), structures sharing partnerships and links camps together.

Whereas some sharing partners are kin—brothers, sisters, uncles—not all are. However, all sharing partners are friends, whether kin or not. (See Figure 6.) While some kin belong to a sharing network, others, equally close biologically or closer, do not. In the same sharing network as the G//ana family and the Kūa family is one of the former's sisters, but not the other sister who also lives at Kutse. This is because the G//ana family is close friends with the older sister and husband, but not with the younger one.

Understanding the nature of sharing networks brings us to lesson two: Factors not often considered when

modeling prehistoric early sedentary communities appear to be as important or more important than kinship and economics. Specifically, sharing networks organize the spatial patterning and interaction of camps and households. Measuring the meters between camps in 1992 revealed that belonging to a sharing network was highly significant and accounted for much of the variability in the log number of meters between camps.

Whereas I agree with, and the Kutse data support, Todd Whitelaw's (1983:50) initial proposition covering all hunter-gatherers that "camps are collections of social units arranged in space, not amorphous aggregations of individuals," I do not agree with his cross-cultural interpretation that they are based on "ecologically dependent density relationships" (Whitelaw 1983:63). Instead, I suggest they are based on sharing networks that are based on friendships. Ecology has nothing to do with the fact that people choose who they interact with, and that choice is based on who belongs to their sharing network at the time. O'Connell (1987:86) additionally recognizes the importance of social relationships among Australian Aborigines, which explain the position of individual households within a settlement. He writes that people "usually camp nearest those individuals to whom they are most closely related" and that sharing of food and nonfood items occurs among these related households (O'Connell 1987:87; see Figures 7, 8, and 9). One reason for the dispersal of camps at Kutse is the fluidity of sharing networks, which commonly form and dissolve over a period of a few years. Following a sharing partner to a new location may be an original attraction to a spot while the schism of a sharing network may be the impetus to relocate. The spatial patterning of camps is significantly associated with sharing networks.

The Role of Friendship in Structuring Sharing Partnerships: A Quantitative Analysis

Lesson three from Kutse is that sharing networks are based on friendship, which may or may not also be based on kinship. As illustrated above with the case of the G//ana and Kūa families, friendship rather than kinship links camps together. In many cases friends are close kin, but not always. And there are close kin who are not friends and who, as a consequence, do not belong to the same sharing network at Kutse, even though they are related. They also do not locate their camps near one another. A logistical regression shows that there is no significant difference between relatives and nonrelated friends in the composition of sharing networks ($\chi^2 = 0.03$; $p = 0.8687$). This indicates that nonrelated friends at Kutse are as likely as kin to be part of a sharing network.

Equally close kin deliberately situate their camps either near to or away from each other, depending on friendships, which structure sharing networks. A regres-



Figure 6

Related children in the same sharing network play house at one of their parents' camps. Kutse, 1990.

sion of the log distance between camps reveals that sharing partnerships significantly influence how close to one another households locate their camps. In addition, whether camp occupants are relatives, nonrelated friends, or both nonrelated and nonfriends significantly influences the log mean distance between camps ($F = 14.956$; $p = 0.0001$; $R^2 = 0.4102$). However, since friendship, kinship, and the variable nonrelated, nonfriend share the same variation with membership in a sharing network, adding all variables in a saturated model increases R^2 by just 0.0132, which is not a significant amount (full model is $F = 36.635$; $p = 0.0001$; $R^2 = 0.7235$ versus the model with only belonging to a sharing network included, which is $F = 107.871$; $p = 0.0001$; $R^2 = 0.7103$).⁵ Whether or not one belongs to a sharing network becomes the only significant parameter estimate. The other variables lose their significance because they all explain the same variation as does membership in a sharing network. Being friends or being relatives does not significantly increase or decrease the number of meters apart camps are located, since sharing networks are composed of both. However, camps inhabited by nonrelated, nonfriend occupants are located significantly farther from camps linked by friendship or by

kinship. Tukey comparison of the means shows that camp-to-camp distance between unrelated friends in a sharing network and relatives within a sharing network does not vary significantly. However, Tukey comparisons also indicate that members who are *not* part of a sharing network—whether relatives, friends, or neither—locate their camps significantly further apart.⁶

Understanding Cross-Basarwa and Cross-Cultural Differences

Among the Ju/'hoansi, several different social mechanisms exist to link people together that do not occur among Central Kalahari Basarwa. The two best known ones are *hxaro* (Ju/'hoansi exchange partnerships which usually link individuals) and the use of namesakes.⁷ Both are quite different from the sharing networks found among Central Kalahari groups which bond families or camps together. For example, according to Polly Wiessner (1977), *hxaro* is not only social in nature but also economic, reducing risk by creating relationships with people who live in different areas with different resources. As a result, the majority of *hxaro* partners do not



Figure 7
Sharing partners eating wild plants together. Kutse, 1990.

live next to each other but are spread across the north-western Kalahari region, extending into Namibia. In contrast, Kutse individuals within the same sharing network situate their camps next to one another. However, both *hxaro* and sharing networks use friendship to include or exclude eligible relatives (for the former, see Wiessner 1982). In some respects, *hxaro* can be seen as specialized trade networks in which ritual or nonutilitarian objects are exchanged. While these mechanisms organize the Ju/'hoansi people and households economically, similar to the way sharing networks organize Central Kalahari people socially, they are more formal than Central Kalahari sharing networks and operate somewhat differently. *Hxaro* represents a Ju/'hoansi-specific trait that is not generalizable to other hunter-gatherers.

A number of anthropologists have tried to account for the difference in site sizes of Basarwa and Aborigine camps. Richard Gould and John Yellen (1987), for example, attribute the difference to the presence of predators in the Kalahari and their absence in Australia, although

they also mention sharing as a potentially influential variable. Not all anthropologists agreed with the predator hypothesis.⁸ My cross-Basarwa research indicates that Basarwa and Aborigine site size differences result from dissimilar mobility patterns and the length of time occupants plan to stay at a camp (Kent 1991, 1992; Kent and Vierich 1989). Rob Gargett and Brian Hayden (1991:27) provide an alternative explanation: "Households will want to be far enough away from their neighbors to enable each household to hoard small resources but not so far that they will not be able to observe large resources or be subject to unobserved thefts or intruders or to be accused of sorcery or other mischief." Kutse data, however, suggest that whether or not these comments are valid for the Aborigines, they are not valid for Kutse inhabitants. Kutse residents do not hoard small resources unless the above reference is to very small animals such as squirrels, which are not routinely shared.⁹ The same is the case for Ju/'hoansi; they also do not share very small animals but routinely share larger animals (see, for example, Lee 1979;



Figure 8

Related and nonrelated sharing partners processing a hartebeest hide. Kutse, 1991.

Marshall 1976). Highly egalitarian Batek, who occupy a very different environment, appear to have a pattern of sharing similar to that found among Central Kalahari and Ju/hoansi Basarwa (Karen Endicott 1979; Kirk Endicott 1988).

Because the hoarding interpretation is not cross-culturally valid, it is inappropriate to generalize to other modern foragers or ex-foragers, much less to prehistoric peoples. We first need to determine precisely why there is cross-cultural variability in sharing patterns and the factors that influence it. According to Richard Gould (personal communication, 1994), there are other reasons than hoarding for Aborigines' camp locations: "Sharing partnerships and close residential proximity based on friendship (as opposed to kinship) occurred among the Aborigines." Most important at Kutse is the need to be close enough to family and friends for a lively social life, but far enough to avoid social discord. Dissension between individuals or between camps was not a regular feature of nomadic life because when people quarreled, they just

moved apart.¹⁰ Now, however, people cannot as easily move away from the problem because of their sedentism. This may also be influencing the distance of camps in Aborigine settlements, but it has not been examined.

An option to resolve strife followed by Ju/hoansi (at least at Dobe) that is not available everywhere in the Kalahari is the use of outsiders (Bantu-speakers) as mediators of disputes. Within traditional Ju/hoansi culture, there is no established mechanism that allows for community-wide arbitration, which is necessary in large sedentary aggregations (Lee 1979). In fact, the large Dobe community of approximately one hundred people dispersed during the mid-1970s into three separate communities once the anthropologists, along with their arbitration, left (Alison Brooks, personal communication, 1994). Richard Lee (1979), John Marshall and Claire Ritchie (1984), and others have documented the high rate of violence in recently sedentary Ju/hoansi communities, such as Dobe, Chum!kwe and elsewhere. Although not expressly analyzed by researchers, conflict in Ju/hoansi sedentary



Figure 9
Sharing partners eating duiker meat. Kutse, 1990.

communities such as Dobe, and the extreme example of Chum!kwe, Namibia, may be caused by factors similar to those at Kutse, particularly the aggregation and sedentism of people who are, in the Ju/'hoansi case, not hxaro partners, and, therefore, under no cultural obligations to share or trade with jealous non-hxaro partners (Lee 1979; Marshall and Ritchie 1984). In fact, Wiessner (1982:68) states that during one month, conversations revolved around who had what and gave away to whom in their hxaro relationship. It is interesting that culturally different groups of Basarwa, such as the Nharo and Tuya, who have been sedentary for centuries, are beginning to develop local leaders (Hitchcock and Holm 1985). The nontraditional role of trance dancers as leaders can be seen as an extension of their traditional role as healers (Guenther 1975).

Another consideration listed by Gargett and Hayden for the larger distance between households at Aborigine camps is a "gradual breakdown of the traditional sharing ethic at settlements, coupled with a desire for greater privacy" (1991:27). Again, even if valid for sedentary Ab-

origine communities, this breakdown is not present at Kutse. Residents remain highly egalitarian, and sharing within networks is common and routine (Kent 1993a, 1993b, 1995). The difficulty that emerges at Kutse, and perhaps at other recently sedentary communities, does not result from a breach of sharing; it is the unprecedented number of people who are not within one's sharing network but who are now residing close enough to observe when resources are present at non-sharing partners' camps. The dispersed spacing of camps, resulting from the discord caused by proximitics, is not the breakdown of traditional sharing patterns as suggested for the Australian Aborigines. Instead, it is the result of a situation that rarely occurred at the same level or magnitude traditionally—the presence of large numbers of people at Kutse who do not belong to each other's sharing networks but who are accustomed to sharing with close neighbors. Now Kutse residents are permanently within observation distance, and fighting erupts over the lack of sharing among people who never would have traditionally shared in the first place. It would be physically impossible to regularly

share with everyone living at Kutse—there are just too many people. While the large, permanent aggregation represents a relatively new situation, sharing along traditional lines of temporary friendships still occurs and is the most common pattern present.

Egalitarianism and Community Differentiation

There is one other organizing principle that needs to be taken into consideration when trying to understand modern or prehistoric communities. This principle is based on the fact that Kutse residents have maintained their highly egalitarian sociopolitical organization, which includes political, social, gender, and economic equality. Egalitarianism is visible in the community layout and brings us to the fourth lesson we can learn from these data: highly egalitarian societies organize their communities very differently than do nonegalitarian, culturally complex societies.

Lesson four is ethnographically and archaeologically visible at Kutse in the lack of spatial, social, economic, political, and architectural differentiation or segmentation. More complex societies, such as state-level societies, stratify their communities by status, activity-function, gender, and sometimes age (Kent 1990, in press a). Anabel Ford (1994) mentions hierarchy and variability present in the architecture at ancient Maya communities. Such variability is conspicuously absent in the highly egalitarian Kutse community. John Clark and Rob Fergus (1994) refer to special nonhabitation buildings in Early Formative sites in Chiapas, Mexico, which likewise do not exist at Kutse or at other highly egalitarian communities. Differences in hut size are related to how long occupants plan to inhabit a structure (Kent 1991). Even so, the variability in size is relatively small compared to communities occupied by sociopolitically complex societies.

Discussion

Kutse is one example of sedentarization in action; it is not the only possible way sedentarization may occur, nor is it the only way early sedentary communities are or were organized. However, cross-culturally consistent patterns suggest that the Kutse mechanisms of organization and interaction tend to operate in other recently sedentary aggregations. These patterns can be tested using the ethnographic and archaeological record of various regions (although only groups with voluntary sedentism and settlements would be appropriate to include for study).¹¹

The knowledge that communities grow from the inside out is applicable to many regions and time periods. For instance, consider modern American cities: they too tend to grow from the inside out. The original inhabitants of the inner city, like those at Kutse, often move to escape violence and poor living conditions common to the com-

munity core. It would be interesting to learn if other established sedentary non-Western communities (that is, non-Westerners who have been sedentary and aggregated for centuries or more) have a similar pattern of community growth for the avoidance of social discord. If so, this knowledge could be useful to urban planners, among others.

O'Connell (1987:87–88) commented on a similar instability of household camps within the Alyawara Aborigine settlement he observed, although the movements were attributed to factors other than the two most common reasons at Kutse: social attraction or discord, and distance to firewood. In contrast, among the Alyawara, death is the most common reason to relocate; the next most frequent reason is change in settlement population, which causes adjustments in household location to accurately reflect the revised patterns of social interaction (O'Connell 1987:88). It may be possible to test the cross-cultural variability of O'Connell's observations ethnographically and archaeologically. The tests would note the presence or absence of burials in conjunction with abandonment or architectural remodeling, implying that the camp was or was not abandoned as part of funerary observations.¹²

As observed by Gargett and Hayden (1991), reliance on food sharing among Australian Aborigines is a major factor affecting camp spatial structure. They state, "Sharing between individuals and families is a common thread in relationships that display the most predictable spatial patterning. Sharing not only influences how far apart people choose to live, but it also determines whom they live near" (p. 30). What they do not explain is what determines who shares with whom. Although sharing takes place between kin, since most people are either fictively or biologically related, kinship has little meaning for most highly egalitarian small-scale societies because everyone in the community is considered to be related. What principle, other than kinship per se, links people in such a way that some related individuals are spatially closer than others? Impermanent household composition based on membership personality (including age or maturation of the constituents) has been observed among formerly nomadic Australian Aborigines (pp. 13–14).

The importance of these observations is that they indicate there is a cross-culturally consistent relationship between friendship and household spatial location and interaction. Friendship-based sharing networks are important in community interaction, not only among different Basarwa groups—the Ju/hoansi based on hxaro, a formal type of sharing network, and G/wi and G//ana on more informal transitory sharing networks—but also in completely different highly to moderately egalitarian societies such as Basarwa and Australian Aborigines. Household positioning is usually among close kin, but the Kutse case shows that it is not necessarily so. Ethnogra-



Figure 10

A sharing isolate is a family that is asocial (in contrast to antisocial), a trait that is tolerated by the rest of the community. Kutse, 1989.

phers can use the Kutse information to understand community organization and household interaction in highly egalitarian and highly nonegalitarian societies. Archaeologists can use the data to understand site organization and patterns of sharing. In the case of the latter, faunal remain inventories analyzed at Kutse suggest that sharing networks may be visible in bone and species frequencies, particularly when comparing faunal assemblages from camps participating in a sharing network with assemblages from camps occupied by a sharing isolate (Kent 1993b; see Figure 10).

Conclusions

The underlying principle that structures community organization is friendship, which may or may not be aligned along kin lines. Friendships activate some kinship relationships while leaving equally close kin relationships dormant. This was visible in the example of the man whose younger sister and family (a part of his sharing

network) located her camp near his, whereas their youngest sister (with whom they were not as friendly) was not part of his sharing network and consequently lived further away. Non-kin also reside at Kutse, and friendship extends beyond kinship. This allows us to see that in the more common situations where everyone is related in some way, it is friendship among kin that structures sharing partnerships and site organization. It allows us to understand why some people share with and live near some kin who are genealogically more distant than other kin who live farther away. Just like friendships, some sharing networks last briefly while others endure.

Culturally synchronic mechanisms that structure human interactions occur in some forager societies, such as the Ju/'hoansi of Ngamiland, where hxaro and namesake relationships underlie who shares with whom by activating some kin relations and ignoring others. I suggest this is probably based on friendships, although researchers have not labeled it as such (but see Wiessner 1977, 1982). G/wi and G//ana do not have hxaro or namesakes. They

are organized differently, based on sharing networks, which are based on friendship.

The Kutse data also show that sociopolitical organization fundamentally structures the spatial patterning and architectural segmentation in a community. Highly egalitarian and sociopolitically noncomplex societies organize their community space and architecture very differently from nonegalitarian complex chiefdom or state-level societies. This is particularly visible in terms of the amount of community differentiation present. The Kutse data make fascinating comparisons with the Maya and other complex societies, due to their lack of differentiation by status or gender in politics, social structure, or economics. Basarwa are at one end of a continuum, state-level complex societies at the other. The continuum of egalitarianism is visible in community organization, particularly in differentiation or segmentation of the built environment. I suggest it is both ethnographically and archaeologically visible, if we know to look for it. Thus, we can use the amount of differentiation or segmentation present in a prehistoric community to infer sociopolitical complexity.

Household camps are arranged according to sharing networks. While some researchers have said that camps are spatially patterned according to kinship, the somewhat unique situation at Kutse shows that it is friendship that structures household relationships and interaction among kin. Friendship structures who lives near whom and therefore who interacts with whom. Even when a community is composed of only kin, friendship dictates which kin live near one another. The reason camp positioning appeared to be invariably associated with close kin is that traditionally many hunter-gatherers camped near only kin, so that everyone in camp was related in one way or the other. In different situations fictive kin links serve to make biologically unrelated persons kin. In other words, one could not camp next to anyone who was *not* kin in some way or the other because, by definition, everyone in the close vicinity of one's camp was labeled kin.

The Kutse data agree with those collected among very different recently sedentary societies, such as Australian Aborigines and Ju/'hoansi Basarwa, which makes the data cross-culturally relevant. This is important to anthropologists because only cross-culturally consistent relationships can be profitably and reliably used to formulate predictive models of the consequences of mobility changes currently occurring in some developing nations. Cross-culturally consistent relationships are also important to study the past; culture-specific relationships cannot be easily generalizable to other groups, much less to other time periods.

The evolutionary significance of the Kutse and cross-cultural data includes the need to examine the presence and amount of differentiation or segmentation in the built

environment as one way in which to infer sociopolitical complexity. Site-structure and activity-area studies are critical for such a pursuit. Anthropological models of recently aggregated sedentary communities need to include social factors, such as sharing networks and friendship, that are community organizing principles among highly egalitarian societies. Through the study and understanding of contemporary communities undergoing the transition to sedentism from a cross-cultural perspective, we can begin to understand, and model, some of the most important factors operating in past, present, or future recently sedentary communities.

Notes

Acknowledgments. I am most grateful for the warmth and friendliness that the people of Kutse have extended to me since 1987. It is with profound sadness that I thank Willy, my field assistant and friend over the years, for all of his help and cheerfulness. His too brief life ended in 1993 when he was only in his mid-twenties; I will miss him very much. I would like to thank the Botswana government for granting me permission to work in their country. I am particularly grateful to the Office of the President, Ministry of Local Government and Lands, Remote Area Development Program officials, and the National Museum and Art Gallery. I sincerely appreciate the generosity from the granting agencies who have made my research in Botswana financially possible. These include Wenner Gren, the Swan Foundation, Fulbright Research Foundation, and Old Dominion University. The figures were originally drafted by Jim Railey and modified slightly by Old Dominion Graphics. I appreciate the constructive comments made by Barbara Tedlock, Dick Gould, and Lee Cronk. Denise Elliott and Marian Blue provided editorial comments. This manuscript was first given as a paper and I thank Peter Sigel for inviting me to participate in his and Michael Kolb's 1994 Society for American Archaeology symposium.

1. The alternative spelling, *Khutse*, is used to differentiate the game reserve from the community.

2. The Central Kalahari Game Reserve established by George Silberbauer was not designed for tourists, and currently visitors to the reserve must secure a special permit in order to enter.

3. Meat, which is often the only item anthropologists note when studying sharing, actually is only one component of these partnerships (Kent 1993a).

4. I have shown elsewhere that sharing networks are not based on economics (see Kent 1993a, 1993b).

5. This means 71.03 percent of the variation in the log number of meters between camps can be accounted for by belonging to a sharing network. Categorical data were made into dummy variables and the dependent variable was logged to equalize variances.

6. Tukey's comparison of the logged mean distance between camps at the .05 level.

7. On the establishment of a fictive kin relationship between two people, see Wiessner 1982.

8. See, for example, Binford 1991; Gargett and Hayden 1991:27; Kent 1991; and others.

9. Note that not sharing small animals cannot be considered hoarding, which can only occur when someone is supposed to share but does not.

10. Note that conflict resolution uses mobility as one solution among various groups including nonforagers, such as the sedentary Yanomamö farmers and hunters.

11. Forced settlement may result in less movement and dispersion of camps and smaller areas inhabited.

12. It is recognized that difficulties in preservation and visibility of burial practices may be problematic in certain areas.

References Cited

- Barnard, Alan
1978 Universal Kin Categorization in Four Bushman Societies. *African Studies* 87(1):69–81.
- Binford, Lewis
1991 Is Australian Site Structure Explained by the Absence of Predators? *Journal of Anthropological Archaeology* 10(3):255–282.
- Clark, John, and Rob Fergus
1994 Early Formative Communities at Paso de la Amada, Chiapas, Mexico. Paper presented at the 59th Annual Meeting of the Society for American Archaeology, Anaheim, California.
- Endicott, Karen
1979 Batek Negrito Sex Roles. Unpublished Master's thesis, Department of Anthropology, Australian National University.
- Endicott, Kirk
1988 Property, Power and Conflict among the Batek of Malaysia. In *Hunters and Gatherers: Property, Power and Ideology*. Tim Ingold, David Riches, and James Woodburn, eds. Pp. 110–127. Oxford: Berg Publishers.
- Ford, Anabel
1994 Integration among Communities, Centers, and Regions: Organization of the Maya of the Belize River Area. Paper presented at the 59th Annual Meeting of the Society for American Archaeology, Anaheim, California.
- Gargett, Rob, and Brian Hayden
1991 Site Structure, Kinship, and Sharing in Aboriginal Australia: Implications for Archaeology. In *The Interpretation of Archaeological Spatial Patterning*. Ellen Kroll and T. Douglas Price, eds. Pp. 11–32. New York: Plenum Publishing.
- Gould, Richard, and John Yellen
1987 Man the Hunted: Determinants of Household Spacing in Desert and Tropical Foraging Societies. *Journal of Anthropological Archaeology* 6(1):77–103.
- Guenther, Mathias
1975 The Trance Dancer as an Agent of Social Change among the Farm Bushmen of the Ghanzi District. *Botswana Notes and Records* 7:161–166.
- Hitchcock, Robert, and John Holm
1985 Political Development among the Basarwa of Botswana. *Cultural Survival Quarterly* 9(3):7–11.
- Kent, Susan
1989 And Justice for All: The Development of Political Centralization among Newly Sedentary Foragers. *American Anthropologist* 91(3):703–711.
1990 A Cross-Cultural Study of Segmentation, Architecture, and the Use of Space. In *Domestic Architecture and the Use of Space—An Interdisciplinary Cross-Cultural Study*. Susan Kent, ed. Pp. 127–152. Cambridge: Cambridge University Press.
1991 The Relationship between Mobility Strategies and Site Structure. In *The Interpretation of Archaeological Spatial Patterning*. Ellen Kroll and T. Douglas Price, eds. Pp. 33–59. New York: Plenum Publishing.
1992 Studying Variability in the Archaeological Record: An Ethnoarchaeological Model for Distinguishing Mobility Patterns. *American Antiquity* 57(4):635–660.
1993a Sharing in an Egalitarian Kalahari Community. *Man*, n.s., 28:479–519.
1993b Variability in Faunal Assemblages: Influence of Hunting Success and Skill, Sharing, Mode of Cooking, and Dogs on Faunal Remains at a Sedentary Kalahari Community. *Journal of Anthropological Archaeology* 12(4):323–385.
1994 Ethnoarchaeology: What Is it Good for? Paper presented at the World Archaeological Congress, 1994, New Delhi, India.
1995 Does Sedentarization Promote Gender Inequality? A Case Study from the Kalahari. *Journal of the Royal Anthropological Institute (Man)* (September).
In press a Cultural Diversity among African Foragers. In *Cultural Diversity among Twentieth Century Foragers: An African Perspective*. Susan Kent, ed. Cambridge: Cambridge University Press.
In press b Hunting Variation in a Recently Sedentary Kalahari Community. In *Cultural Diversity among Twentieth Century Foragers: An African Perspective*. Susan Kent, ed. Cambridge: Cambridge University Press.
- Kent, Susan, and David Dunn
1993 The Etiology of Hypoferremia in a Recently Sedentary Kalahari Village. *The American Journal of Tropical Medicine and Hygiene* 48(4):554–567.
n.d. Anemia and the Transition of Nomadic Hunter-Gatherers to a Sedentary Life-Style: Follow-Up Study of a Kalahari Community. Manuscript submitted for publication.
- Kent, Susan, and Richard Lee
1992 A Hematological Study of !Kung Kalahari Foragers: An Eighteen Year Comparison. In *Diet, Demography, and Disease: Changing Views of Anemia*. Patricia Stuart-Macadam and Susan Kent, eds. Pp. 173–199. New York: Aldine de Gruyter.
- Kent, Susan, and Helga Vierich
1989 The Myth of Ecological Determinism—Anticipated Mobility and Site Spatial Organization. In *Farmers as Hunters—The Implications of Sedentism*. Susan Kent, ed. Pp. 96–134. Cambridge: Cambridge University Press.
- Lee, Richard
1979 The !Kung San: Men, Women, and Work in a Foraging Society. Cambridge: Cambridge University Press.

Marshall, John, and Claire Ritchie

1984 Where Are the Ju/wasi of Nyae Nyae? Changes in a Bushman Society: 1958–1981. Cape Town: University of Cape Town Centre for African Studies.

Marshall, Lorna

1976 The !Kung of Nyae Nyae. Cambridge, MA: Harvard University Press.

O'Connell, James

1987 Alyawara Site Structure and Its Archaeological Implications. *American Antiquity* 52(1):74–108.

Silberbauer, George

1981 Hunter and Habitat in the Central Kalahari Desert. Cambridge: Cambridge University Press.

Whitelaw, Todd

1983 People and Space in Hunter-Gatherer Camps: A Generalising Approach in Ethnoarchaeology. *Archaeological Review from Cambridge* 2(2):48–65.

Wiessner, Polly

1977 Hxaro: A Regional System of Reciprocity for Reducing Risk among the !Kung San. Ph.D. diss., Department of Anthropology, University of Michigan. Ann Arbor: University Microfilms International.

1982 Risk, Reciprocity and Social Influences on !Kung San Economics. *In* Politics and History in Band Societies. Eleanor Leacock and Richard Lee, eds. Pp. 61–84. Cambridge: Cambridge University Press.