

From Sibling to Suki: Social Relations and Spatial Proximity in Kalinga Pottery Exchange

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This study illustrates how social relations—rather than simple proximity— influence spatial patterning in the distribution of contemporary Dalupa ceramics. The Kalinga pottery exchange network participates in a multi-centric economy, characterized by slightly overlapping exchange networks marked by different exchange mechanisms and goods. The *suki* relationship, a trade partnership that bridges social and ethnic boundaries, provides one vantage point for examining differences between two economic networks that operate within a single system of ceramic distribution. © 1992 Academic Press, Inc.

Archaeological attempts to grapple with patterning in artifact distributions have produced a steady stream of spatial models in recent decades. Despite the increasing sophistication of these models, approaches to spatial analysis continue to be “crippled by the naivete of their assumptions” (Kintigh and Ammerman 1982:33). Spatial patterning in the archaeological record reflects a complex interaction of cultural and natural factors (Voorrips and O’Shea 1987:500), and ethnoarchaeological research provides one means for identifying links between human behavior and material patterning. This ethnoarchaeological analysis of a northern Philippine ceramic exchange network examines a system in which a range of social relations influences spatial behavior.

Research reported here was conducted under the auspices of the Kalinga Ethnoarchaeological Project, initiated by William Longacre in 1973 in the Pasil Municipality of Kalinga-Apayao, Philippines (Longacre 1981). The Pasil is a deeply dissected river valley with 13 nucleated settlements. By the late 1980s, only the communities of Dalupa and Dangtalan regularly produced pottery. Research described here focuses on Dalupa and utilizes data collected during 1987–1988.*¹

* See Notes section at end of paper for all footnotes.

CONTEXTUALIZING THE DALUPA CASE STUDY

The study area is located in the highlands of northern Luzon (Fig. 1). Rugged topography, 300 years of indigenous resistance to colonizing forces, and a lowland bias against the Cordillera populations have insulated the Kalingas from many modern amenities. Mining and logging companies operating sporadically since the 1930s have been responsible for an influx of non-Kalinga goods into the area, but the penetration of lowland Filipino culture has remained minimal, and the Kalinga economy still revolves around a barter system and intensive rice cultivation (Lawless 1978; Takaki 1977; von Fürer-Haimendorf 1970). A two-crop annual regime of intensive rice agriculture is the mainstay of Kalinga subsistence. Swidden subsistence farming and limited coffee cash-crop production supplement the rice cultivation regime. Community-based specialization has a long tradition in the Kalinga economy, at least from the Spanish contact period (Scott 1974) to the present (Lawless 1977; Stark 1991b). Ceramic production takes place within communities of individuals who share a multitude of intimate social ties.

Bilateral descent structures Kalinga social organization, and an indi-

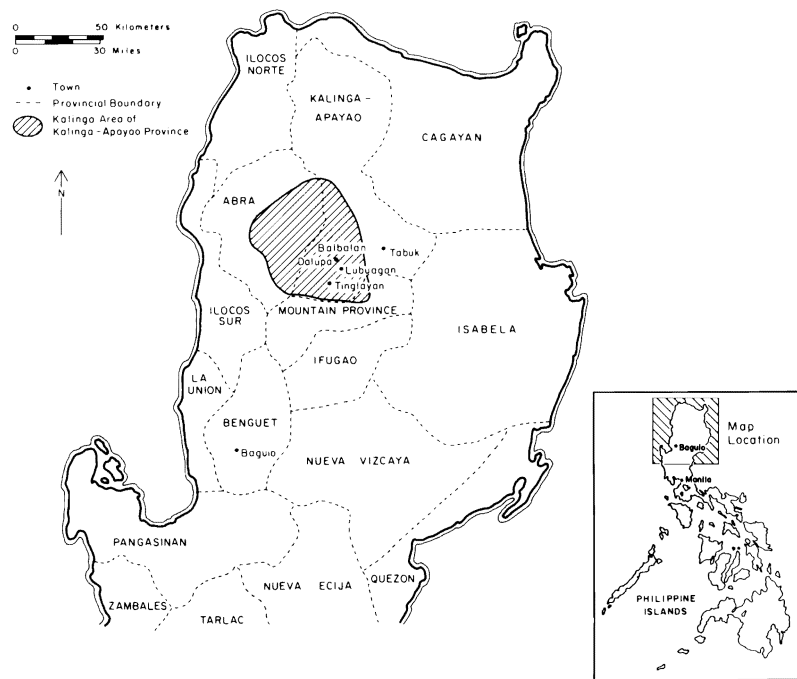


FIG. 1. Northern Luzon, Philippines, and the study area.

vidual's kinship group includes all relatives to the third cousins of both the individual and spouse (Barton 1949; Dozier 1966). Each Pasil settlement consists of multiple bilateral kin groups, with tendencies toward matrilineal residence and regional endogamy.² The politically significant unit in Kalinga society is the region or *ili*, which consists of multiple communities that participate as a single political entity in peace pacts with other "regions" (Dozier 1966; Takaki 1977). Today, densely nucleated villages of 300 to 1000 residents dot the landscape. The traditional settlement system likely included small, dispersed hamlets (Dozier 1966:60) that were clustered into larger communities by American administrators during the early 1900s to facilitate colonial rule (Wilson 1956). Through political organization and historical circumstance, the Kalinga area is bound by a network of ties of kinship and, where direct ties cannot be found, by a reckoning of affinity.

SOCIAL AND SPATIAL RELATIONS: THE PASIL AND EXTRA-PASIL NETWORKS

Changes in the organization of Kalinga ceramic production and distribution have occurred since the inception of the Kalinga Ethnoarchaeological Project. Production has intensified in Dalupá and diminished in Dangtalan, the latter being the site of the project's original research. Changes are evident in Dalupá potters' introduction of a repertoire of nontraditional forms (*ay-ayam*) and in the growing importance of cash-based transactions that augment a barter-driven system (Stark 1991a). With intensified ceramic production also has come an expansion in the Dalupá pottery exchange system's geographic range. Potters now ply their wares in communities beyond the boundaries of the Pasil River Valley (Stark 1991b). In doing so, potters transcend social and, in some localities, ethnic boundaries to enter communities in which producer-consumer kinship ties are absent. Despite these changes, Dalupá pottery exchange transactions continue to operate outside of market systems located immediately beyond the Pasil River Valley.

Distinctions in pottery exchange transactions between two economic spheres (i.e., the Pasil and the extra-Pasil exchange systems) provide a vantage point for viewing the articulation of social relations and spatial proximity. Where exchange transactions within Pasil are characterized by balanced exchange (Takaki 1977), the economy of the extra-Pasil system is increasingly influenced by the lowland Philippine economy. I describe my data sources and discuss the intersection of social relations and spatial proximity within the intra-Pasil pottery exchange system, and next examine these issues as they operate in the Dalupá network in its extension beyond the Pasil Valley's boundaries.

consumer. Where the first factor can inflate a vessel's worth (especially in transactions outside the Pasil network), the latter three factors can depress the vessel's exchange value.

Social relations are closely linked to spatial proximity in the Pasil pottery production and exchange systems. Nearly two-thirds of the Dalupa potters come from five large matrilineal descent groups, and these groups form the Dalupa community's social core. Households within these descent groups tend to cluster spatially in recognized divisions within the community (also see Dozier 1966:61). Dalupa potters often choose as travel companions members of their work cohort or potters from other work groups within the same division. Pottery-making is one of several economic activities in which members of extended households participate, and potter work groups are commonly organized along kinship lines.

Social relations also play an important role in potters' selection of consumer villages. Within the Pasil Municipality, producers and their customers often have a direct relationship that is reckoned by kin ties, no matter how distant. Where possible, a potter relies on established social relations who, by Kalinga custom, are obligated to provide food and lodging during her barter visits (Lawless 1978:145–146). These hosts often receive gifts of pots in return for their hospitality. Relationships between potters and hosts can endure through generations of producers and consumers. Customers in a given village often live or work in proximity to the hostess, which promotes limited spatial clustering of particular potters' products in areas of "consuming" villages.

The presence of established hosts therefore influences the potter's selection of barter localities. Other considerations include a potter household's need for particular barter equivalents that are productive specialties of different villages (e.g., white beans, coffee, and watercress) and her household's immediate cash needs, since cash is available in extra-Pasil locales during exchanges. The availability of traveling companions, the level of tribal warfare or military activity, and general distance from the potter's own village (also see Graves 1991:131) also factor into the selection of barter locations.

The centrality of social relations in pottery distribution can also be viewed at a broader level, in the spatial patterning or "catchment" areas of entire potter communities (Fig. 2). Dangtalan and Dalupa are only 2 km apart; however, they straddle a locally recognized, kin-based boundary between "Upper" and "Lower" Pasil that forms the basis of long-term alliances between particular communities. Pasil oral tradition maintains that residents in Upper Pasil communities are more closely related to one another than they are to residents in Lower Pasil communities (Lawless 1977). This geographical and social boundary is reinforced by peace pacts between communities located within each area (Dozier 1966).

By 1987, the village of Dalupa had assumed dominance over Dangtalan in pottery production and distribution for the entire Pasil River Valley. For this reason Dalupa was selected as the study village, and field research took place between October 1987 and late June 1988. Nearly three-fourths of Dalupa's 76 households (containing 400 residents) contained at least one resident potter, for a total of 60 potters (all potters are female). In all, 41 Dalupa potters (or two-thirds of all potters identified) were active during 1988, when all Dalupa pottery transactions were recorded.³ They produced over 3100 ceramic goods for exchange, 2779 of which are included in the following analysis.⁴ The frequency distribution of ceramic goods exchanged during 1988 is presented in Table 1.⁵

Within the Pasil River Valley, kinship and affinity provide a web of social relations that affects decision-making. Social relations also channel the distribution of material goods within and among communities. Gift-giving and barter, at the household and community levels, continuously reinforce this social network (Takaki 1977:59f). The Pasil economy circulates goods within a large social community according to a flexible set of market principles. These market principles, seen elsewhere (e.g., Bohannan 1967; Malinowski 1922; Miller 1986; Sahlins 1972:231–246), structure the Kalinga economy through a system of "balanced exchange" (Takaki 1977).

"Balanced exchange" transactions employ a system of cross-media equivalences that are somewhat standardized. One of the artifact classes involved in balanced exchange transactions is earthenware pots. Pounded rice is the exchange medium in traditional Kalinga pottery transactions. In theory, each vessel's worth is determined by its volume capacity of uncooked rice. Other goods have barter equivalents with rice (e.g., beans, sugar, salt, tobacco, garlic, and rattan), and pots may be exchanged for these goods using their value in rice. Although the rice-based exchange value of the pot is theoretically stable, its value may vary with the venue of a transaction, the point in the seasonal farming cycle, the neediness of the potter's household, or unequal status relations between producer and

TABLE 1
FREQUENCY DISTRIBUTION OF CERAMIC GOODS EXCHANGED DURING THE 1988 YEAR BY
DALUPA POTTERS

	Percentage of total
Rice cooking	9.7
Meat/vegetable cooking	67.7
Water storage	11.9
Nontraditional	9.8

Note. *N* = 2779.

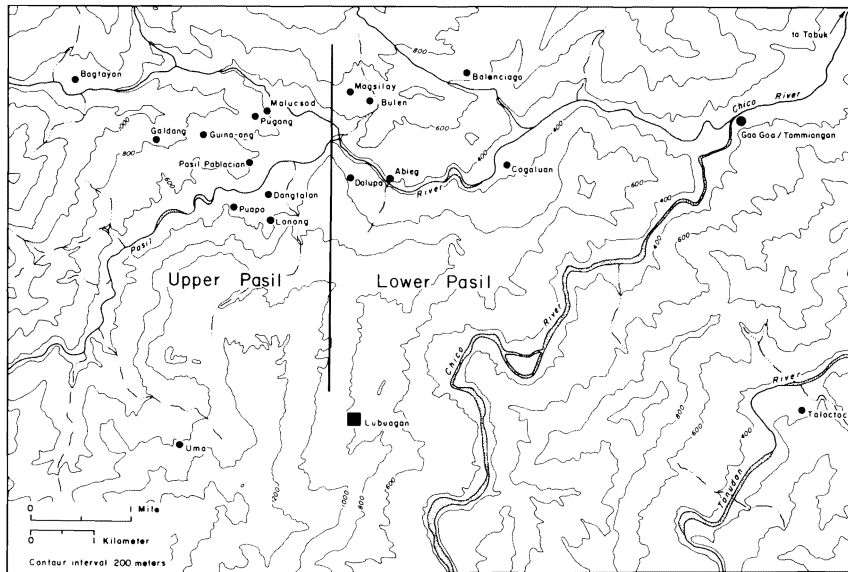


FIG. 2. Upper vs Lower Pasil in the Pasil Municipality, Kalinga-Apayao, Philippines.

Pottery exchange patterns during 1987–1988 paralleled the cultural and geographic division between Upper Pasil and Lower Pasil. The few active Dangtalan potters observed in 1988 tended to peddle their wares in Upper Pasil villages, a pattern also observed in limited exchange records from 1975 to 1980 (Graves 1991). Household pottery inventories and exchange records indicate that Dalupa potters peddle some wares in Upper Pasil villages, especially as a dwindling number of active Dangtalan potters fails to meet communities' ceramic needs in that area. Dalupa potters have now virtually monopolized the Lower Pasil villages, despite the presence of some kin connections between Lower Pasil communities and Dangtalan.

Numerous factors involved in changes in the Dalupa ceramic traditions have been described elsewhere (Stark 1991a). Here I only note that one strategy enabling Dalupa potters to successfully market their increased volume of products lies in expanding their distributional sphere beyond the Pasil Municipality's boundaries. Figure 3 illustrates the geographic extent of the intra-Pasil exchange system as it operated in the late 1970s (identified through interviews with 56 active and retired Dalupa potters) as well as the scale of expansion observed in 1988.

Pottery exchange transactions that occur outside of the Pasil River Valley are guided by social relations that are qualitatively different from those within Pasil. The dual networks are distinguished by mechanisms of

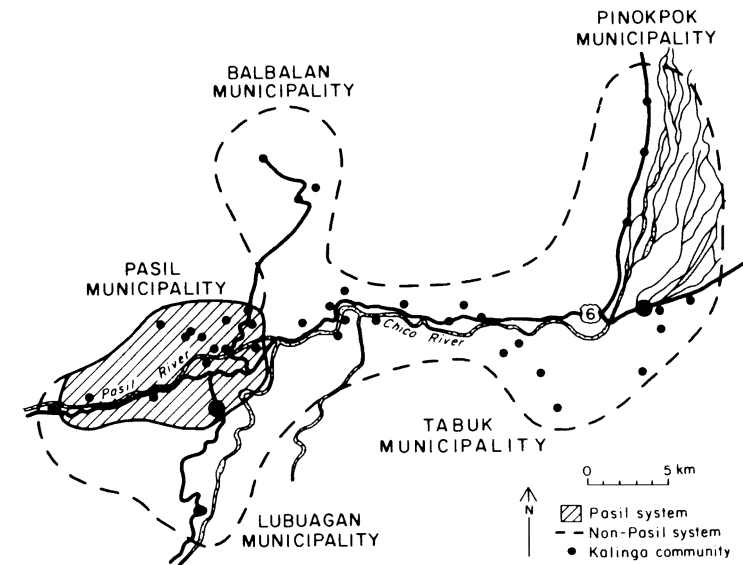


FIG. 3. The Dalupa exchange network: 1975 and 1988.

exchange, geographic extent involved, and types of products moved. Where Pasil exchange transactions are characterized by balanced exchange, the extra-Pasil system is increasingly characterized by a capitalist economy. In the extra-Pasil sphere, trade partnerships forge alliances across social boundaries to ensure successful economic transactions (Barton 1949; Lawless 1978).

In the Pasil network, exchange transactions are guided by fixed exchange rates, and utilitarian pottery moves from producer to customer primarily through barter. Kin ties, whether close or distant, structure social relations, and each transaction is laden with social as well as economic meaning. In contrast in the extra-Pasil network, cash transactions with negotiable prices channel the distribution of both utilitarian pottery and nontraditional forms (Malinowski 1922:507 describes a similar example). Where barter involves utilitarian pottery, equivalents vary and potters can receive inordinately high values for their vessels. Social relations lack the web of well-defined kin ties, and interactions are more economic than social.

Relationships and behaviors observed during 1987 and 1988 have material correlates. Figure 4 presents summary data from the 1988 log of pottery exchanges.⁶ Observed exchanges were first divided into Pasil and extra-Pasil networks, and then into traditional vessels (i.e., cooking pots and water jars) and nontraditional forms (*ay-ayam*). All transactions within each of the two systems were then categorized as bartered, bought,

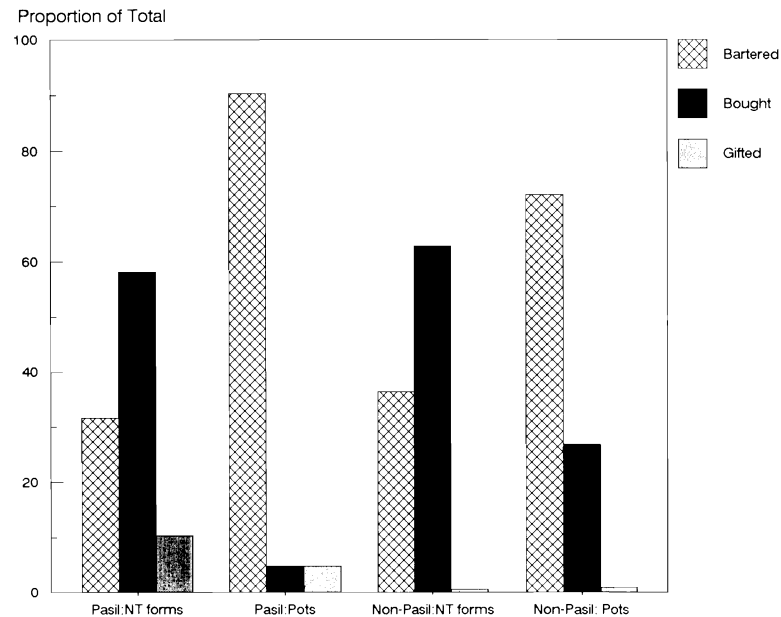


FIG. 4. Summary data from the 1988 Dalupa pottery exchange log: types of exchange transactions within the Pasil and the extra-Pasil exchange systems.

or gifted. Barter transactions in this analysis conform to Takaki's (1977) "balanced exchange" transactions. "Bought" transactions refer to episodes in which cash, rather than barter equivalents, were exchanged for ceramic goods. "Gifted" transactions include instances of gift-giving from the potter to another individual. Gift-giving events are probably under-represented in the data base since gift-giving is pervasive in Kalinga life and often occurs outside of economic (i.e., barter) contexts. Pots and nontraditional forms circulate within both the Pasil and the extra-Pasil networks in varying proportions, so that the networks overlap in the goods that move within them. Goods exchanged in the two systems differ in kind and frequency. Nontraditional forms come in a dazzling array of shapes and are increasingly important in the Dalupa ceramic economy; over 50 varieties of *ay-ayam* are now manufactured (Stark 1991a).

The nontraditional forms are important in identifying dual spheres of ceramic distribution because the expansion of the exchange network roughly coincided with the development of nontraditional forms. The importance of *ay-ayam* to the Dalupa pottery system is greater than their frequency alone indicates. Nontraditional forms comprise about 9.8% of all ceramics traded during 1988. More than half (53.1%, or 154) of all nontraditional forms were distributed in the extra-Pasil system in 1988.

Most (78%) of the nontraditional forms traded outside Pasil were traded northward into the Balbalan Municipality. The *ay-ayam* category is also important because most nontraditional forms, in both the Pasil and extra-Pasil systems, are bought with cash rather than bartered with goods.

The two systems also differ in their social relations of exchange. Social relations of exchange in the extra-Pasil system have been affected by the introduction of Dalupa-based intermediaries and by the formation of fictive kin relationships between producers and non-kin customers, the *suki* relationships described below. Intermediaries from Dalupa are emerging. Three to four women have begun this line of work, and the Balbalan municipality is the area of most intense activity (Fig. 3). Dalupa potters now consign—or barter—their pots to these pottery merchants, who then travel to distant settlements where the value of the pots is higher than in the Pasil Municipality. Kinship may figure into relationships between intermediaries and producers; future research will clarify this relationship.

A second but equally important shift has occurred in the social relations of Dalupa pottery distribution with the emergence of the *suki* between Dalupa potters and their non-Pasil customers. Translating roughly as "special customer," the *suki* relationship operates in the absence of kin ties, and is found in market contexts throughout the Philippines (e.g., Davis 1973:216f.). Similar relationships have been noted in Melanesia and Indonesia (e.g., Allen 1984; Spriggs and Miller 1979). *Suki* relationships link socially distinct groups of producers with customers or market vendors into potentially long-term relationships. Today in the Philippines, *suki* or *suki*-like relations structure economic transactions that involve commodities that range from electrical appliances (Dannhaeuser 1979) to fresh produce (Davis 1973). That trading relationships resembling the *suki* have a long tradition in the context of highland–lowland commerce in the area is clear from 16th century Spanish accounts (Dozier 1966; Scott 1974:41). In the past, these trade partnerships bridged ethnic and social boundaries and encouraged the flow of goods between mountain and lowland populations. They remain an enduring aspect of economic life within the ethnic sub-boundaries of the Kalinga area (i.e., from one river valley to the next). Peace pacts maintained between different Kalinga settlements required active alliance formation between pact-holders and quelled large-scale tribal warfare; these pacts also facilitated exchange between villages (Barton 1949; Lawless 1978:145–146). Economic motives may have been as important as political motives in the establishment of peace pacts by individuals in politically distinct Kalinga communities (Barton 1949:173).

Data on kinship-related pottery transactions provide a gross means of comparing social relationships within and beyond the Pasil system.

Within Pasil, 15.7% (278) of all transactions occurred between potters and their very close relatives. Beyond Pasil, only 1.8% of all transactions were kin-related, and all nontraditional forms were distributed to nonrelated customers. Dalupa potters' economic transactions in the extra-Pasil system contrast with the barter-based, gift-giving system that operates within the Pasil system. Within the Dalupa ceramic exchange network, the *suki* is becoming common in the extra-Pasil system and links potters (or intermediaries) with customers. Figure 5 illustrates that, in the Pasil system, regular cooking pots are more often bartered than sold. In both systems, *ay-ayam* are more often sold than bartered. Cash-based transactions are more common than barter-based transactions in the extra-Pasil system (and this pattern is more pronounced in the nontraditional forms). Where barter does occur in the extra-Pasil system, exchange values are negotiable and are often 30–50% higher than within the Pasil system. As extra-Pasil localities become established components of the exchange network, the exchange values tend to lower and to stabilize.

For Dalupa potters, social relations and economic decisions are inseparable. Spatial patterning in their pottery exchange network is by no means random, and instead reflects a complicated web of spatial and social factors. The importance of social relationships in potters' selection of barter villages is especially clear in the extra-Pasil exchange network, where potters lack the web of social relations that covers Pasil commu-

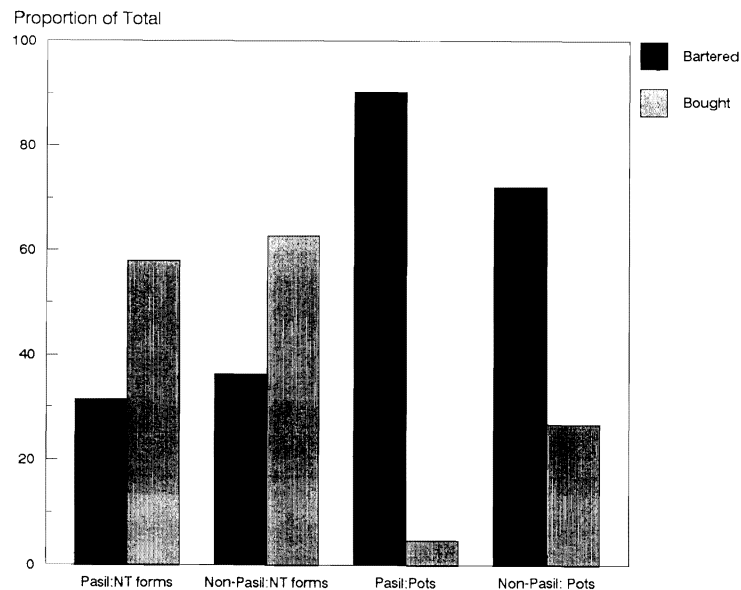


FIG. 5. Bartered vs bought ceramics in the Pasil and the extra-Pasil exchange systems.

nities. Social relationships, either kin- or *suki*-based, channel goods through the distributional network. Social tensions and low prices discourage Dalupa potters from visiting nearby villages (e.g., Ableg, ca 0.6 km distant from Dalupa) in favor of more distant locales with stronger social ties.

In the face of economic and technological changes, social relations continue to structure spatial patterns of ceramic distributions throughout the Dalupa exchange sphere. The range of relationships between potter and customer has expanded with respect to kin connections, as have the products traded, and the media of exchange. The *suki* relationship, evidently emerging in response to scalar changes in the exchange system, is a social relationship that has enabled the expansion of the Dalupa ceramic distribution system.

DALUPA CERAMIC NETWORKS AND ARCHAEOLOGICAL INFERENCE

Data on Kalinga pottery exchange contribute to regionally focused spatial analyses by providing longitudinal data on the Dalupa ceramic distribution system. Previous research has focused on ceramics vis-à-vis social boundaries (Hodder 1979; Miller 1986) or on the geographic extent of a particular ceramic distribution system (Allen 1984; Balfet 1981; Crossland and Posnansky 1978; Lauer 1971; Spriggs and Miller 1979). Where estimates of production scale are presented, they are anecdotal and often derived from historical sources rather than from extended periods of observation (e.g., Allen 1984; Crossland and Posnansky 1978; Hodder 1979). Spatial correlates, the scale of production, and the relationships that guide distributional networks are all described for Dalupa's distributional system.

The goal of spatial analyses in archaeology is to identify underlying structures of distributions, particularly those characterized by nonrandom patterning (Kintigh and Ammerman 1982:33). Social relations must be explored in more detail, since they often override factors of physical proximity (also see Hodder 1982; Spriggs and Miller 1979). The importance of social relations in spatial patterning has been recognized in analyses that deemphasize geographical distances in favor of context-dependent factors (e.g., Voorrips and O'Shea 1987). Social relations can enhance interaction through institutions such as trade partnerships, or the absence of ties can act as barriers to interaction, through situations such as inter-village enmities (Spriggs and Miller 1979:28).

Archaeological implications from this research concern assumptions that underlie spatial models and reconstructions of prehistoric economies in small-scale societies. Foremost is the problem of equifinality: different

economic systems produce similar distributional patterning, at least where ceramic distributions are involved (Allen 1984:410; Hodder 1982). One example of equifinality in the archaeological record comes from the American Southwest during the late prehistoric period. One reconstruction of status differentiation uses region-wide artifact clustering to argue for the presence of managerial elites who manipulated ceramic production and distribution systems to form alliances across regions on the Colorado Plateau (e.g., Upham 1982; Upham and Plog 1986). Using the same data with a comparative ethnographic perspective, one might suggest that these patterns reflect webs of social relations that bridge social and ethnic boundaries between producers and consumers within relatively unstratified societies. Situations of economic specialization, geographic expansion, and *suki*-like trade partnerships are not easily distinguishable from those of elite-administered specialization and elite-managed distribution systems. A second archaeological implication lies in my description of Dalupa's multi-centric economy as it operates outside of a market structure. Multi-centric economies that function in the absence (or periphery) of markets often have two or more economic networks, each of which is characterized by distinct relations of production and exchange (e.g., Bohannan 1967; Malinowski 1922; Miller 1981, 1986; Sahlins 1972:231–246). These systems contrast with one another in the exchange media used (e.g., cash vs barter), the types of goods exchanged, and the nature of social relations that govern economic transactions.

Little is known about the scale and mechanisms of ceramic distribution in ethnographic settings, especially in societies that operate outside of market contexts. Perhaps for this reason, archaeologists working with small-scale societies often equate multi-centric economies with evidence for hierarchical control. The Dalupa example indicates that nonhierarchical systems may also be characterized by multi-centric economies, and that we should develop analytical frameworks needed to address such situations.

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NOTES

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Investigator) and by grants to Miriam Stark from the Arizona–Nevada Academy of Science, the University of Arizona Graduate Development Fund, and the Department of Anthropology.

² Although most Kalinga marriages continue to be characterized by regional endogamy, various factors have encouraged alliances between individuals in different political regions. These include decreased tribal warfare, an increased emphasis on education that takes Kalinga youth out of their natal communities to attend schools in the provincial capital and elsewhere, and increased mobility caused by the introduction of motor transport into the area.

³ Unstable political conditions necessitated departure from the field site in June, 3 months earlier than expected. The pottery exchange log was continued in my absence by Josephine Bommogas, who interviewed Dalupa potters at least three times a week from July 1988 to January 1989.

⁴ Exchanged ceramics include pots and nontraditional forms (described below) that were bartered, sold, or given as gifts during the 1988 calendar year. Two caveats must be explained regarding the pottery exchange log: (1) a small proportion of gifted pots may have escaped daily recording during 1988; (2) the figure reported (2779) excludes 378 pots and nontraditional forms produced on consignment from the Kalinga Ethnoarchaeological Project for museum collections at the National Museum of the Philippines and the Arizona State Museum in Tucson, Arizona. To reduce the potential effect of researchers on Dalupa production patterns, vessel counts omit the project-related vessels from consideration (for a total of 2779 vessels).

⁵ Readers of a previous publication on the Dalupa system (Stark 1991b) may note discrepancies between the frequency distribution presented in that article (caused by typesetting error) and data presented in Table 1 of this article. Correct frequencies are presented here; 0.9% of the ceramics exchanged contained ambiguous information with respect to vessel function and were omitted from the frequency distribution.

⁶ Two problems plague the analysis of data available from the log of pottery exchanges: (1) a narrow definition of kin that underrepresents social relations between producer and consumer; and (2) a lack of full information on relationships between potters and their local “hostesses.” A local host is especially necessary as a conduit for the potter's barter transactions in distant villages where few direct kin ties exist. The relationship between potter and local host is thus essential and often involves fictive rather than blood kin; regrettably, no data were recorded on this type of relationship.

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