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## Abandonment Conceptualization, Representation, and Social Change

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Abandonments offer a context for examining social changes at varied scales. Within intermediate societies the movements entailed by abandonment are especially interesting because they may be as much a strategy for using landscapes as the failure of a particular structure or adaptation. I discuss the unique aspects of abandonment research that deepen our understanding of social processes in middle-range societies. I examine the place of abandonment research in the study of these societies, changes in the way abandonment research has been conceptualized and the impact of this conceptualization on research, and the future directions of research that will contribute to clarifying the variability in human social behavior within intermediate societies and the continuity between past and present. My perspective is strongly influenced by a focus on the archaeology of the North American Southwest.

Throughout this essay I emphasize two changes crucial to all archaeological research and that can be addressed easily in abandonment studies. They have an impact on the quality of our social theories, the contribution of anthropology within contemporary societies, and the future of archaeological research. First, we must take a less normative approach to understanding behavior. Archaeologists for many decades have called for attention to variability in human behavior, yet the majority of our statements about the past and about human behavior rest on the

unstated assumption that people move in lock-step within households, villages, larger communities, and regional groups. Change is conceptualized as uniform within households, communities, and sometimes within regions. Second, we must become much more aware of the impact of our statements on nonarchaeologists. We have communicated to the public and to professional nonarchaeologists contrasting images of the "science of archaeology" finding "the answers" or of the "relativist archaeologist" embracing all views, suggesting that any perspective is as reasonable as any other. In addition, we have presented the archaeologist as a detective in a mystery novel. The past is a mystery rather than a history. These images are detrimental to our contributions in contemporary society and social research. I discuss abandonment research as a way of looking at these conditions and moving toward a stronger basis for social theories and a clearer presentation to nonarchaeologists of the sense of archaeology and the past.

### THE CONCEPT OF ABANDONMENT IN THE STUDY OF MIDDLE-RANGE SOCIETIES

Within foraging societies when groups move away from a locale, we say they are employing a mobility strategy. When centers in state-level societies are depopulated, we study collapse (although Sinopoli [1994] explores the mobility of capitals within the his-

tory of the Mughal empire). Mobility is a primary focus of research on small-scale social groups (e.g., Binford 1980; Kelly 1983). Collapse is equally pervasive as a topic of study by those interested in cities and states (Yoffee and Cowgill 1988). But among people who live in social groups more complex than the former and less than the latter, we have varied ways for labeling and therefore understanding movements. We use the label *abandonment* if we are interested in "the leaving," such as the depopulation of a site or structure, and apply the label *migration* research if our focus is on "the resettlement." Why we conceptualize the processes of movement differently in societies of different scales is an interesting question that would provide a more self-conscious understanding of our explanatory stances in archaeology, but it is not the focus of this paper. Rather, I take for granted the use of the term *abandonment* and its complement, *migration*, in the study of movement in middle-range societies and examine them as processes, strategies, outcomes, and causes of social change. Understanding the processes of change contributes to better understandings of social life, perhaps applicable to various scales of organization.

The category "middle-range" or "intermediate-level" society is difficult to delimit but not for lack of trying (Feinman and Neitzel 1984; Fried 1967; Service 1962). The problem resides not only in the observation that the category is extremely variable, as documented by Feinman and Neitzel (1984), but in the usual problem of creating nominal categories in a continuously varying universe. The term *intermediate* implies a scale more complex than small, highly mobile groups that were once referred to as bands (Service 1962) or egalitarian societies (Fried 1967). Delimiting this end of the scale is problematic because we know that small-scale societies have relations that involve different forms of leadership, the longevity and strength of which varies, creating complicated though not complex social forms (Bender 1990). Further, we cannot equate subsistence focus with organizational scale, ruling out the equation

of hunter-gatherer with this end of the scale and subsistence farming with the middle range. But communities within middle-range societies generally move less frequently, disperse less easily, and aggregate for longer than those considered "egalitarian." On the other end of the size and complexity scale, middle-range societies are less complex than states and nations, although they may participate in the actions of or form structures and take actions to resist states and nations (Bender 1990). States and nations have a kind of institutionalized power that is broad, deep, and long-lived. Power relations in middle-range societies may be more often negotiated and more easily undermined than in more complex societies (e.g., Bender 1990; Earle 1977; Potter 1997b; Whiteley 1988). Dissolving social relations and moving among social categories is difficult in state-level societies. Between states and bands, middle-range societies may be characterized as having relatively firm residential focus on places and as subsisting on concentrated resources. They comprise primarily farmers who hunt and gather and live predominantly in aggregated settlements with limited institutionalized leadership (short-term and/or of limited authority). All of these conditions are highly variable, however, and I list them not as a way to classify communities in the past but as a way to delimit the context I am addressing. My working definition subsumes the categories that in the past have been referred to as tribal and chiefdom organizations. Feinman and Neitzel (1984) use the phrase "pre-state sedentary societies."

I take time to describe my understanding of the category "intermediate societies" because several aspects of this category are particularly important to abandonment research, differentiating it from similar research on a smaller scale and on more complex social contexts. These aspects are *mobility*, *aggregation*, *place-focused residence*, and the nature of *leadership*. As Rocek (1996) has pointed out, mobility and sedentism are not opposite ends of a continuum; they can be incorporated within the land-use strategies of any group. Most of our ideas about mobility,

however, derive from studies of small-scale societies in which population densities are quite low and strategies for resource use are extensive rather than intensive (Cashdan 1983, 1984, 1990; Halstead and O'Shea 1989; Kelly 1983). In the context of some population packing and where resource use is targeted to specific places (as with cultivation or salmon fishing), mobility is organized differently. Thus, to move may involve considerations of ownership, investment (time, energy, resources), and access, all of which are socially negotiated in ways that differ from those in foraging societies. Farming promotes a degree of land ownership (Bender 1990; Kohler 1992; Preucel 1988) resulting from the limited distribution of arable land and investments in preparing land for cultivation. *Aggregation*, well documented among foragers (e.g., Steward 1933; Thomas 1973), is short-lived in comparison to aggregation patterns among many who depend on tended or concentrated resources (like cultigens or salmon). This is not to suggest that aggregation is a permanent or universal condition of life outside of foraging but that it is more common. Thus, to move away from an aggregated settlement is a complex social process. It involves considerations of access and support, whether the move is to another aggregated settlement or to a more dispersed pattern of regional settlement. I have noted, in my discussion of mobility, the influence of *place-focused* land use on movement. The kinds of investments and access questions that arise may be complicated to resolve in the context of limited institutionalized leadership. Finally, the nature of *leadership* influences movement. Many argue that social arrangements are relatively flexible (Adler 1990; Horne 1993; Johnson 1989; O'Shea 1989; Upham 1984) or that people in middle-range societies are relatively autonomous; they vote with their feet (Netting 1993:276), so movement is a strategy for addressing social issues (e.g., Dean et al. 1994; Halstead and O'Shea 1989). But movement is also limited by commitments to the ideas that successfully hold groups together in middle-range societies. Movement may involve sev-

ation to movements that result in the absence of active residence. It is not mysterious that people change by moving residence; in fact, perceiving abandonment as part of an ongoing process of transformation allows us to link the past to the present. People are constantly transforming themselves, their land, and their communities.

The study of abandonment behavior contributes to the development of social theory from the perspective of both action and change. Moving and transforming the use of land at any scale is probably a conscious, socially negotiated decision and is certainly more often than not a conscious and variable set of actions (Adler 1993). What conditions a move? How is it accomplished? Who decides? What is the nature of the negotiation? How does the move impact those who stay and those who leave and those with whom the departing later join? The action of moving is a social one. Abandonment is an aspect of ongoing social change; in the context of change, we gain insights about the social dynamics of groups. In middle-range societies decisions to move occur more often at the scale of individuals and small groups (households?). Within the Southwest there are few examples of movements en masse by large community groups (Haury 1958; Herr et al. 1996; Schlegel 1992; Upham 1984). Also, movement of individuals and households may have been rather frequent, at least in marginal environments, because as Johnson (1989) argues, mobility is an important survival strategy (for the Southwest see Cordell and Plog 1979; Hard and Merrill 1992; Reid et al. 1996; Schlanger 1988; Varien 1999; Zedeño 1994). Thus, the social dynamics of negotiating movements occurs constantly in face-to-face relations among people with different kinds and amounts of information. The dynamics of gender relations within and outside households, of age relations, of wealth and knowledge differences all impact and are impacted by this constant change. For example, the decision by one household to leave a village and settle in another is not the same as that for another household. Opinions depend on the history of relationships

established by each household and the nature of each household economy (Wilk 1991). Also, movement by any household impacts the abandoned community in relation to the ritual, social, and subsistence obligations carried by that household. It impacts the recipient community similarly in relation to the demands created by its presence.

Four perspectives on abandonment behavior direct current research. First, abandonment is a process, not an event. It begins well before any actual move and continues to impact people and modify landscape use well after a move. Because the archaeological record is the product of cessation of residential use of places, it has been easy to think of this cessation as an event rather than a process, but the former limits our understanding. Second, abandonment is studied at different scales. I refer to scale in two senses: the size of the area that becomes unoccupied and the analytic scale at which we examine the nature of movement (segments of settlements, whole settlements, local areas, and broad regions). Third, residential abandonments occur in several different ways, including temporary, partial, anticipated, among many other aspects. These vary within and among settlements and regions. Fourth, abandonment transforms the use of places. It is not to be confused with discard or relinquishment of ownership. The latter is a modern, Western view of abandonment that is unfortunately applied to interpreting the past. I examine these aspects of abandonment research as they influence our understanding of middle-range societies.

*Abandonment is a process* (Cameron 1993); Fish et al. [1994]; Lightfoot [1992: 67]; Schiffer [1972b, 1985]; see Anthony [1990] and Herr et al. [1996] for a similar view on migration). Thus, it should not be studied in the absence of attention to how places were settled and the dynamics of changing settlement organization. Abandonment research simply emphasizes the process of moving away. For example, Reid argues that migrations into the Cibecue Valley in eastern Arizona in the A.D. 1200s decreased mobility, created uncertainty and competi-

Abandonment captures the interest of archaeologists and the public because it is the obvious process influencing the remains we see—archaeological sites are not currently resided in by living people. Why did people leave? How did they leave? When did they leave? In this sense abandonment research is the arena of investigation that focuses on why, how, and when people left places. It is easily transformed for the nonarchaeologist into the pursuit of a mystery. But this perspective is restrictive and detrimental to archaeology. Abandonment is a process of transformation from one way of using the landscape to another, within sites, locales, and regions. In this essay I limit my consider-

tion over access to resources, and led to the abandonment of some sites and areas and the occupation of others (Fish et al. 1994: 157-161; Reid et al. 1996). The social history of mobilizing human resources is as much an influence on movement strategies as are the conditions of the natural environment (Stone 1993).

*Abandonment processes vary according to scale* (Cameron 1991a, 1993; Cameron and Tomka 1993; Cordell 1984). The social processes of regions, sites, and areas within sites differ markedly and contribute to understanding varied social dynamics of change (Fish et al. 1994:136). The causes for depopulation of regions or reorganization of regional settlement involve social relationships not only within villages but within regional networks and are tied to the conditions of the regional landscape. These can more easily be related to broad scale climatic changes than to local degradation effects. The causes of intransigent abandonments may be much more idiosyncratic. Cameron has noted that "abandonment of structures or activity areas is a constant process in many settlements" (1993:5). Two examples illustrate the effects of scale of movement. Adler (1993) examines the differential treatment of ritual structures depending on whether abandonment involves shifting occupation within a site or migration from a region. He argues that regional abandonments require ritual closure (through burning) of ceremonial structures because these could no longer be guarded against intruders. In contrast, local movements may not be associated with ritual closure at abandoned sites because the ceremonial structures continue to be watched and visited. It is also possible that ritual closure of ceremonial structures is an act of rejection or "ideological closure" of the ideas and practices that defined and integrated a community. Regional moves may be so disruptive that they entail such action (this is my idea, not Adler's). Cameron (1991b, 1992) documents the historic reorganization of groups within the Hopi village of Oraibi with departure of some and shifting of others within the

settlement. She describes a shift in residential focus at Oraibi toward the oldest ceremonial structures and communal areas at the village. Those who moved from Oraibi to establish a new settlement did not continue to construct the same ceremonial structure (Whiteley 1988). The shifts within the village involved quite different social processes than did the resettlement.

*Abandonment occurs in various ways.* Temporary and permanent movements, residential and nonresidential moves, rapid and gradual abandonments, and short- and long-distance movement represent some ways that abandonment takes place. A range of considerations is involved in any decision to move residence, including the time frame of the move, how the move will be made from the place being left to the new home, what can be transported, and the condition in which the abandoned place should be left (Adler 1993; Schiffer 1985). The extent to which these can be planned depends on the causes of the move and the nature of the pull from other places (Anthony 1990; Cameron 1995; Lipe 1995). Many archaeologists have contributed to an in-depth understanding of the material implications of different degrees of planning, distances of moves, and permanence of move (e.g., Baker 1975; Binford 1978; Brooks 1993; Cameron 1991a; Joyce and Johannesen 1993; Kent 1992, 1993; Lightfoot 1993; Schiffer 1985; Stevenson 1982; Wilshusen 1986 [these are selected sources from different regions; a full set of references would be lengthy]).

This methodological focus on recognizing the behaviors encompassed by different abandonment strategies has contributed to recognition of the variability in behavior and archaeological record. As many have noted (Cameron 1991b; Joyce and Johannesen 1993), occupants of a single site behave differently and by implication employ different strategies in the process of moving. This realization has produced a more complicated past to explain and one in which models of abandonment and migration can no longer generalize about the residents of a site or re-

gion. Contextualizing the process of movement to the level of household and individual is difficult but an appropriate level of analysis, when combined with broader scale analysis, for understanding the social processes involved in moving. I am not suggesting that we know what people think about their options but that we consider the place of households and individuals in the structure of communities and how that place influences their options, their strategies, and ultimately their behavior.

*Abandonment transforms the use of places.* Schiffer has stated that abandonment is "the process whereby a place—an activity area, structure, or entire settlement—is transformed to the archaeological context (1987: 89). Schiffer's model of formation processes also recognizes that discontinuation of one kind of use need not imply discontinued use (Schiffer 1972b, 1985, 1987; see also Cameron 1991a). There are many examples in which residential use ceases but other uses of a site or parts of a site or a larger locality do not. Within the Southwest, modern Hopi and Zuni continue to visit places where they once resided in large villages and use them for collecting resources and performing rituals (Ferguson 1995). Adams and Adams (1993) and Reid (Fish et al. 1994:162) argue that residents of previously densely occupied regions in the North American Southwest continued to collect resources after they had abandoned them as loci of residence. The regional networks of those who continued to occupy these depopulated regions shifted toward other centers of growth. Among the Late Woodland residents of Western New York, locales abandoned as residences and primary field areas continued to be used as hunting and collecting areas. In fact, by the historic period, at least, people were extremely protective of these hunting areas.

From a strictly functional and ecological perspective, "continued utilization of land would have extended the duration of claims on the best lands" (Adler 1996b:355). Adler argues that continuity of access and claim is related to previous investments. From the

perspective of identity and community integrity, people maintain contact with their homeland because it is part of their essence and their history. E. Charles Adams (1997) documented the continued use of an abandoned farming village in the Homolovi area in northeastern Arizona for the ritual burial of birds. Many native people state that prehistoric sites are not abandoned; their buried ancestors still occupy those places. Returning to those "living" places to communicate with ancestors and bury relatives may be more common than we currently perceive (see, e.g., Blake 1998). Continued use for different purposes is more pervasive and extensive when moves are not across great distances (Adler 1993). But even at the level of regional abandonment people return to use their former homeland and retain rights to the land (Fish et al. 1994:145; Schwartz 1970).

#### CHANGING THE FACE OF ABANDONMENT STUDIES: CONCEPTUALIZATION AND RESEARCH QUESTIONS

Explaining abandonment is an obvious focus for archaeological research and is of particular interest to that segment of the public for whom the abundance of once-occupied places provides an intriguing mystery. Indeed, it has always been popular to study abandonment. But the way in which abandonment has been conceptualized has influenced the design of research and the kinds of inferences made about social change.

The earliest studies of abandonment addressed the causes (warfare, raiding, environmental degradation, insect infestation, climatic change), with abandonment as the effect (Cordell 1984:304-312). Although the causes of social changes are important, many of these studies interpret abandonment as a passive effect rather than as an active process. As a result, consideration of the outcome of an abandonment was not a central issue (but see Schiffer 1972b, 1985). In addition, abandonment was seen as the failure of people to thrive. To some archaeologists and many interested nonarchaeologists abandonment is

equivalent to quitting. General disinterest in the study of migration beginning in the 1960s has, until recently, limited our understanding of the role of movement in continuity (but see Schiffer 1972b and Schwartz 1970).

Studies of cause have become more complex, considering not only the conditions that contribute to leaving but those that draw people out of one site, locale, or region to another. Fish et al. (1994:143) state that "abandonments during late prehistory (in the Southwest) can be viewed as the outcome of interplay between conditions in previous homelands and the *availability and perception of alternatives*" (additions and emphases are mine). For example, they discuss demographic and climatic changes associated with abandonment of some sites and areas in the mountain Mogollon area of eastern Arizona during the early 1300s but emphasize the growing perception of threat and uncertainty that led to abandonment of smaller sites and aggregation into large, defensively located villages (Fish et al. 1994:157-161). I will return to the "perception" of options later. Fish et al. (1994) and Lipe (1995) discuss pull factors of extremely large, aggregated communities that drew people from one region to the next during the very late prehistoric periods throughout the Southwest.

More recently, the role of movement in occupational continuity and reorganization of the use of regional landscapes is recognized by archaeologists and ethnographers (Fish et al. 1994; Johnson 1989; Nelson 1999; Varien 1999; Zedeño 1994). Abandonment of the residential use of places is seen as a strategy (Cameron 1993, 1995; Horne 1993). Native people in the Southwest believe that movement has always been part of their way of life (Naranjo 1995), resulting in the residential abandonment of many places. Ferguson (1995) reminds us, however, that residential movement away from a place does not represent discontinuity in the use of the place. People remain attached to places through repeated visitation (Cameron 1991a) and burial of their kin, who continue to reside there after physical death. Abandonment is now examined as a strategy for demographic shift-

ing within a region that allows for long-term continuity of land use. Schlanger and Wilshusen (1993) examine the local shifts in residential locations within the Four Corners area of the Southwest that occur within the framework of long-term occupational continuity at a broader regional scale. Within a similar region Varien (1999) documents the local shifting of small groups within a broad regional community that maintains use of the most productive places over many centuries. Reid and others (Fish et al. 1994:157-161; Graves et al. 1982; Reid et al. 1996; Zedeño 1994) analyze regional population shifts within the mountainous region around the Mogollon rim in Arizona during the 1300s from small to large settlements as a reorganization responsive to changing demographic, social, and environmental conditions. Their work assesses the social dynamics of incorporating ethnically diverse groups in the large reorganized villages. My own research with Michelle Hegmon in southwestern New Mexico documents the shifting of population from aggregated to dispersed settlement within a region as a strategy that allows for continuity in regional occupation (Nelson [1993, 1999]; Nelson and Hegmon [1996]; see also Nelson and Anyon [1996] for a similar study). Outside the Southwest Marian White (1963) documented shifting village location on a decadal cycle that suited the cultivation strategies of Late Woodland occupants of the western New York region. Horne (1993) has coined the terms *locational stability* and *occupational instability* to contrast continued commitment to the use of places with the actual continuity of occupation.

Regional reorganization carries with it various social implications, brought into the spotlight in recent abandonment research. Adams (1991), Reid and his students (Reid et al. 1996), Mills and her students (Herr et al. 1996), and Zedeño (1994) have focused on the problems of integrating groups that have different social and possibly ideological practices. The context of Reid's work is one in which small sites are abandoned as people shift to large village communities. Mills is examining the reorganization of local settle-

ment with increased immigration, positing the view that new structures for community integration bring diverse groups together (Herr et al. 1996). The appearance of two new forms of community architecture, large enclosed plazas and large subterranean communal structures, suggests a change in ideology and the contexts of community social relations. Fish and Fish (1993) find the same developments in communal architecture with reorganization within the Hohokam region in southern and central Arizona during the Classic period. In essence these researchers are concerned with the problem of resolving diverse perspectives that result from the coming together of varied social groups who have abandoned their previous residences. The appearance of large community structures and perhaps a new ideology of community may be examined from the functional perspective of the mechanisms of adaptation, as well as from the perspective of practice. Communal structures may "serve to integrate" diverse groups, but how do individuals come to participate?

Regional reorganization may involve a shift away from large sites toward small settlements. Within the Mimbres region of southwestern New Mexico, Hegmon and I have examined some of the social processes and changed contexts created by such a shift (Hegmon et al. 1998). Within large villages of the Classic Mimbres period, styles were relatively uniform across a number of media (ceramic and architectural). Once villages were abandoned and some segment of the population moved to farmsteads, styles became less uniform, and many new styles were integrated with existing forms and practices. Although this may be perceived as an adaptive shift that accommodates the formation of new groups or networks, it is also a dramatic change in the structure of the communities within which people interact on a daily basis. In this new context the nature of negotiation, the availability of options, and the limitations on actions would be different from the earlier village setting.

Residential abandonment does not always result in reorganization and regional occupa-

tional continuity. Recent research documents several major regional depopulations during the late prehistory of the Southwest (Cameron 1995; Fish et al. 1994). Long-distance movement by a large number of people involves considerable change. In the Southwest dramatic changes in the organization of communities around large enclosed plazas occurred with movement out of the Four Corners and into the northern Rio Grande and western Pueblo areas. Adams (1991) argues for the emergence of an ideology of ancestor worship as a means of integrating the disparate groups that formed the large communities in the late prehistoric Southwest; this ideological change correlates with an increase in the size and a decrease in the number of communal ritual structures.

Most recently, research on abandonment has brought to archaeology a clearer recognition of the variability within human societies. The abandonment of a village is an excellent context for examining social processes that are extremely variable. The options facing any individual or household in an intermediate society are based primarily in their kinship network and other relationships established over time. Thus, the options across all households are extraordinarily diverse. The village, which once appeared fairly integrated and homogeneous, becomes a diverse array of small groups or individuals acting according to their perceived options. This variation, of course, exists within the structures of communities, but such structures may be fairly flexible and fluid (Bender 1990).

Two examples illustrate this variability. In the Southwest many archaeologists have argued that agricultural land surrounding villages was and still is controlled by clan or kin-group leaders but that more distant fields, marked by field houses, indicate individual ownership or at least "practical control" (Kohler 1992). Kohler suggests, for the northern Southwest, that only a limited number of families may have had the right to claim land and establish field houses. This limited access is interesting in light of the abandonment and reorganization in the Mimbres region in the mid-1100s. In the east-

ern Mimbres area, during the twelfth century, villagers abandoned their large settlements, some moving to their field houses that were remodeled to accommodate more residentially permanent settlement by a few households (Hegmon et al. 1998; Nelson 1993, 1999; Nelson and Hegmon 1996). If Kohler's notion is applicable to this context, only some of the Mimbres villagers had this option. What did the others do? Who stayed and who left? This process could entail considerable conflict and negotiation. From another perspective, the Mimbres case poses interesting social issues. If people shifted from farming land held communally to cultivating privately held land, how did the relationships among individual households change? What constituted the communities and what held them together? These issues are ignored when large site abandonment is viewed as a uniform event with implied regional abandonment or simply as a structural failure.

A second example is from San Mateo Ixtatan in the Maya Highlands of northwestern Guatemala (Hayden and Cannon 1984), a similarly diverse settlement. Among the approximately 500 households of contemporary subsistence farmers, none depend entirely on cultivating their plots in the village. A few families hunt extensively, some have distant secondary fields, others produce items for local trade or transport them long distances to large cities, and some leave the village on occasion to do wage labor. This varied economic mix supported the continuity of this community, making possible the aggregation of so many people in the agriculturally marginal highlands. I see this case as similar to aggregated villages in the North American Southwest and perhaps many other areas of the world. The diversity of subsistence strategies also implies different practices and sets of daily interactions, as well as the formation of different networks. These form a large part of the options available to people for moving from one place to another. As Anthony (1990) and Cashdan (1983) have argued, people are most likely to be able to move to familiar places, where they have established relationships with others (also see Zedeño

[1994:17]). Wilk's (1991) ethnographic research among the Kekchi Maya in Belize has led him to argue that broad social and economic networks and the general ecological context set limits on the options available to households, but within those limits he documents considerable variation and change. In the context of such diversity the changes brought on by abandonment and movement may best be understood as variable within households and communities. Studies that focus at the household—or even within household (e.g., Wilk 1991)—and community scale simultaneously may be able to examine the processes of social change more clearly than have previous studies that rarely address diverse action.

Finally, abandonment research is an excellent arena in which to examine the nature of negotiation and power in intermediate societies. Whiteley's (1988) study of the historic fissioning of the Hopi village of Oraibi made clear the role of individuals in positions of authority in orchestrating the abandonment of part of the village. Although we have argued loud and long about the nature of power and authority in intermediate societies (for the Southwest see Reid [1989] and Upham et al. [1989]), we have not addressed how relationships of power are related to movement. Power may derive from the control of resources (Brandt 1994; Hantman 1989), of people (Saitra 1994; Sebastian 1991; Vivian 1970), or of ritual knowledge (Brandt 1994; Potter 1997b; Spielmann 1998), each having different implications for the nature of negotiation and access (Bender 1990). In addition, in intermediate societies we see "considerable variability in the ways leadership positions are transferred from one generation to the next" (Feinman and Neitzel 1984:61), suggesting that negotiation is a constant and critical dimension in community-level social relations. Access to resources and negotiation of options are derived through social mediation (Adler 1996b:339; see also Haenn 1999 for an interesting contemporary study of rural farmers in Oaxaca). Similarly, within households access and power can change, impacting the options available to different in-

dividuals. For example, heads of households or kin groups, if they are perceived as the holders of land, may have authority to slough members—i.e., cause them to have to abandon their home—under certain conditions (Wilk 1991). The nature of gender and age relationships impact this process in the sense that they are integral to owning and controlling resources and knowledge.

Perceptions of abandonment as a process have expanded our ideas about the multiple causes, dimensions, and outcomes of movement. Among the many dimensions two are especially important for improving our approach to social change: variability in behavior and negotiation of options. The variable strategies and possibilities for individuals, households, and communities create a myriad of outcomes rather than the smoother trajectory so commonly presented to describe change. Recognition of the role of negotiation expands our approach to social dynamics to categories of inequality or difference to individual actions with respect to those categories. Our expanded view of outcomes leads to greater appreciation of the role of movement in strategies of land use and therefore attention to the aspects of social relations that promote or facilitate movement.

#### FUTURE DIRECTIONS

I have presented some information about the study of prehistoric abandonment in intermediate societies as a way to address efforts at building social theory. A range of approaches can be brought to bear on the new developments in abandonment research. Agency-based, behavioral, and processual approaches all have contributions to make in the future development of social theory addressing movement.

Agency-based research is concerned with negotiation and perception of options, among many other aspects of social life. The focus is on structure and practice—structure in the sense of defining the contexts that influence the actions of people, practice in the sense of the actions of people. Shennan (1993) has argued convincingly that archaeological deposits are evidence of practices

that are the outcome of selecting among options or priorities. Although we may not know fully what options were perceived, we may be able to understand those that were acted on, as well as a range of possible options. For example, I have discussed variation in subsistence strategies within communities that are related to access to land and resources and possibly to ownership and authority. Within a community these create different options and relationships of access. I have also noted that there are different kinds of power and that power may be fleeting. It may be worthwhile to consider what options are created for different individuals or groups and how a flexible structure impacts and is impacted by negotiations. Similarly, access to information is variable within communities, providing different structures of knowledge within which people operate. We may be able to delimit these structures and evaluate the social contexts of abandonment decisions and actions.

Behavioral approaches to archaeology have made the greatest contribution to understanding variability in abandonment behavior. As Schiffer states, "The ultimate goal of a behavioral archaeology is to furnish... explanations for variability and change in human behavior" (1995b:251). Although attention has been paid to the technical choices involved in forming and using artifacts (e.g., Schiffer and Skibo 1987) and depositing them (Schiffer 1972b, 1987), the social context of the choices could be more fully explored. Various kinds of abandonment (rapid, gradual, long-term, short-term, distant, near, etc.) may be perceived as processes resulting from social choices within a given set of conditions and as behaviors that create new conditions, in turn defining a new range of choices. Linking the behaviors that precede abandonment to those that follow and create new conditions would contribute substantially to our understanding of the variable nature of social change. For example, various households within a community may abandon their residences in different ways. Which segments were last to move? Which show evidence of anticipated return? What

conditions may have contributed to the existence of different options for these different households? How might the different abandonment strategies be linked to different patterns of movement (long-distance, permanent, incorporation into existing settlements, creation of new settlements)? The answers to these questions can help us better understand the transformation of human social relationships.

Processual archaeologists constitute the majority of those addressing questions about human movement in "intermediate societies." Recent research has moved the study of the processes of movement toward a more complex understanding of cause that includes push and pull (Anthony 1990; Cameron 1995; Lipe 1995). In addition, the complexity of processes is recognized in the variable nature of abandonment within sites, localities, and regions. The challenge for processualists is to look at the variable nature of human communities for conditions that contribute to that variability. Understanding those conditions may contribute to our ability to conceptualize the array of social processes involved in the formation, change, and continuity of communities.

Our attention in this conference was directed toward the building of social theory. We are also aware that our approaches to presenting our understanding of human behavior, of the past, and of the practice of archaeology to nonarchaeologists significantly influence the future of archaeology. I raise this issue here because I believe we can do a much better job of communicating the value

of archaeological research to nonarchaeologists. Abandonment studies, in particular, are an excellent arena for communicating our perspectives on human society. People are fascinated with abandonment. We can either play up the mystery, as we have so often, or we can use this fascination as a foothold for having a voice. To play up the mystery is to mislead. It is not a mystery that people left places; actually, it is a mystery that they managed to stay in some places in the Southwest. The topic of abandonment, which draws people's attention, is an invitation to communicate about the complexity of human societies. People have always had to negotiate, strategize, coax, and respond. Conditions have changed, but social life has always been complicated; "patterns of inequality, power differentials, and situations of domination and resistance arise in all societies" (Shennan 1993:53). It was not any simpler to be a gatherer than it is to be a suburbanite. The options and dangers are different; the networks and structures are different. But many of the basic concerns are the same. When we act, we influence our conditions in ways that are positive and negative. These positives and negatives develop as we continue to act and live with other actors. How people move through their lives, making choices and mistakes, is at least as interesting as the collapse of any structure if presented in an accessible way. Archaeologists have considerable knowledge about human society that often is not accessible to nonarchaeologists because we mask it in antiquarian images of the past.

## Elements of a Behavioral Ecological Paradigm for the Study of Prehistoric Hunter-Gatherers

ROBERT L. KELLY

Archaeologists have used various forms of evolutionary thinking in recent years to account for patterns in the archaeological remains of foraging societies. One of these forms is borrowed from the field of evolutionary or behavioral ecology. In this essay I will discuss several elements of this paradigm that need further thought before archaeology fully implements it, and I will consider the links between behavioral ecology and some of the other approaches discussed in this volume.

There are three assumptions to this chapter. First, I take the position that rather than being dogma, the source of off-the-rack answers, a researcher's paradigm ought to be a way to ensure continuous learning about the behavioral ecology, and its derived models serve "not as lawful statements about reality but as structured forms of inquiry, more interesting to stalk than to live by" (Winterhalder 1987:313).

Second, I take the position that our explanations of the past must revolve around what we can realistically know about the past. We cannot know everything about the past but can only hope to understand patterns in behavior that we are able to infer from archaeological data. This means that the models we use must be compatible with the data at our disposal. New perspectives and techniques will open our eyes to new sources of data, but

at any one time there will be limits. One of the major limitations for archaeologists, and especially archaeologists of hunter-gatherer societies, is that archaeology records patterns in behavior as they are manifested over long spans of time—decades at best and often in chunks of time measured in hundreds or thousands of years. Nonetheless, large-scale changes in human behavior are still the result of change in the way individuals made behavioral decisions in the past. The theories developed to explain the past must take into account the fact that we deal with behavioral decisions that were made by individuals but are tested against assemblages that are the conglomerate results of actions and decisions of many individuals.

Third, the approach I take is colored by the fact that I expect archaeology in the twenty-first century to be quite a different animal from its twentieth-century predecessor. In North America prehistoric archaeology will change as a function of NAGPRA and the ensuing dialogue that it has encouraged (or forced) between archaeologists and Native Americans. Although I think this dialogue is beneficial (Kelly 1998), others lament it because they see it as requiring the destruction of archaeology as a science. This is not a necessary result. Science is a strategy for maintaining honesty in the intellectual enterprise because it makes explicit the conditions under which the researcher will accept that an