II

Unpacking the Numic Spread

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The Numic spread is a particularist and bounded taxonomic convention that conflates many issues and limits understanding to historical description. An “unpacking” of this convention into behavioral issues broadens the scope of inquiry conceptually, geographically, and temporally. An appeal to historically known migration and biological aspects of migration, in addition to archaeological and linguistic measures, sheds some light on the processes and mechanisms applicable to the Basin/Plateau. Findings include: the importance of demographic fluidity and individual or small group movement; directionality in migrations varies over time; distinctions between indigenous and migrant people are blurred among foragers; a larger spatio-temporal context than the Late Prehistoric Great Basin is helpful to understanding the Numic issue; migration in the eastern Basin/Plateau occurred in an existing forager-farmer system; population growth and the failure of farming influenced these interactions; and languages ancestral to Numic were already present.

The “Numic spread” serves as a convenience to describe the recent history of Great Basin Native American languages. All sciences must balance the utility of taxonomic categories with the danger that those categories may eventually obscure an understanding of the processes by which events in the world proceed. Anthropology is historically saddled with preconceptions about societies categorized as bounded entities springing from various geographic fonts (e.g., “Numic homeland”), never wavering from an identity intrinsic to their origins and subsequently moving around the landscape and through time like pieces on a gaming board (Wolf 1982:3–19). This metaphor and its local convention, the Numic spread, needs to be conceptually “unpacked.”

The Numic spread is typically conceptualized as a historical event. As such it is a very trivial issue, probably unworthy of the amount of ink spilled. Beyond the well-rehearsed and pedestrian description of the Numic spread as history, the behaviors that led to such patterns and how they evolve over time remain elusive.

Here I discuss some ways to conceptually unpack the Numic spread. I think the notion that Numic language distribution must be studied as a one-dimensional spread from a particular homeland is unrealistic in light of both human behavior and contemporary knowledge of evolution and adaptation. The backdrop to understanding Numic language distributions is the differentiation of Uto-Aztecan languages over the past 4,000 years, and the geographic scale must encompass not only the Great Basin but also the Colorado Plateau and southwestern United States as well. Considering this scale, it may be useful to ponder the notion of Numic spreadings, and explore the possible behaviors among prehistoric Basin/Plateau foragers that would translate into the historically known language distributions. The subject of this perspective is not the language distributions themselves, but the evolution of cultural systems of which the languages are a part.

In the first section of the paper, I challenge a common conceptualization of the Numic spread and add some points to others made in this volume. In the second, I develop some behavioral scenarios for the kinds of spreadings that might have occurred, appealing to information about social organization and biological aspects of migration among foraging societies and Basin/Plateau foragers in particular. In the third section, I employ an analogy to promote thinking about Numic spreading as real behavior. Lastly I offer a scenario of Numic spreadings, looking to conceptualize process rather than a monolithic spread. I hope to broaden the context in which we consider the riddles of Numic spreading—conceptually, geographically, and temporally.
PREHISTORY AS PEOPLES AND PEOPLES AS POTS

The Numic spread issue has been fertile ground for the tendency of archaeologists and, to an even greater extent, linguists to describe prehistory as collections of "peoples," even though we know the symmetry between ethnic identity, archaeological culture, population genetics, and language are relationships for study rather than routine assumption (see Madsen, Hughes, and Jones, this volume).

Bettinger (1993:53–54) argues that this practice is not popular in recent times among Great Basin archaeologists, who are known for evolutionary studies of behavioral variability. Nevertheless, he acknowledges it is done in two cases that "periodically are deemed compelling enough to hazard speculation"—the Fremont and the Numic. Thus, the profession is cognizant of the people-equals-pots fallacy, but in these two cases some conclude it is appropriate to see artifact types as the embodiment of linguistic/ethnic entities.

My argument is not that artifacts never covary with language and ethnicity. Rather, they vary within the normative types we construct, and they vary in terms of the behavioral sphere in which the artifacts occur, the latter notion exhibiting a lengthy anthropological pedigree (Linton 1936; Taylor 1948; Binford 1965). This point is illustrated in a recent study by Carla Sinopoli (1991) of 172 southeastern Great Basin arrows from known Numic-speaking bands and collected during the J. W. Powell expedition in the nineteenth century. On the one hand, she found that the stone points affixed to arrows contain virtually no stylistic relevance; they mark no cultural boundaries. On the other hand, arrow shaft decorations (of course, generally unavailable to archaeologists), are relevant for marking distinctions among groups, but in an interesting way. Shaft decoration varies the most among closely interacting groups, counter to the tendency of archaeologists to interpret stylistic boundaries as marking substantially different groups (hence the use of style to demarcate archaeological cultures, language, and ethnicity). Sinopoli found that the more distant or different the group, the less distinction in arrow shaft decoration. This makes sense given that the need to mark boundaries is likely to be greatest among people who have some association. It is, however, opposite to prevailing archaeological convention regarding style and cultural taxonomy.

Thus, artifacts do have meaning and, yes, they can mark social and/or linguistic boundaries. They do not, however, do so regularly, nor in covariant bundles, nor with any necessary relationship to the traits archaeologists like to use or are forced to use, such as ceramic temper, stone arrow points, pithouses, or wickiups. Artifacts reflect the context of their behavioral spheres. This seems germane to the Numic spread if our task is seen as understanding and accounting for it rather than just labeling it as a categorical phenomenon.

Beyond the conceptual and methodological problems of much anthropological discourse regarding the Numic spread, there is a contemporary cultural issue as well. Numic spread convention tends to segregate historically known Numic languages from what happened earlier and on a broader geographic scale than the Great Basin. This generates the anthropological Other and severs the historic residents from prehistory, fostering the problem that Wolf (1982) identifies as "the people without history." When the Numic spread scenario held by many anthropologists is described to Native Americans, some react with disbelief and note "but we have always been here." They are suspicious of the neatly bounded categories familiar to anthropologists where "peoples" bang about landscapes as bundles of traits, with new Indians replacing old ones and some becoming extinct. It is instructive that the view of some Native Americans is closer to that of physical anthropology than to archaeological and linguistic convention—the biologists seeing clinical variation in traits and persistence of genes and individuals even as cultures change or appear to die out.

WHAT KIND OF SPREAD WAS IT?

Discourse on the Numic spread mirrors the history of migration studies in anthropology where the realization that race, language, and culture vary independently has led the subdisciplines of anthropology toward differential treatment of migration:

The doctrine undoubtedly retains its greatest respectability in linguistics, for many language distributions still defy explanation in any other terms. It has suffered most in physical anthropology, many of whose practitioners have abjured typological studies altogether. For archaeologists migration has been and remains largely a convenience for the explanation of anomalous trait distributions ... (Adams et al. 1978:526)

In light, then, of extant knowledge of migration, what kind of spread or spreadings might the Numic be?

Migration vs. Demographic Fluidity

The Numic spread could mean migration or diffusion, but linguistic and archaeological data support the movement of people, not just language. A distinction can be drawn between the movement of people and the movement of a people, the latter implying a higher level of cohesiveness and organization. Archaeological documentation of migration has historically focused on the movement of entire peoples (Adams et al. 1978:489), probably a result of equating "a people" with a type of artifact. This practice runs counter to the
fact that among historically recorded migrations, the movement of whole peoples is relatively rare when compared to the far more common movement of individuals or functionally linked, small groups of individuals (Adams et al. 1978:488). Thus, it may be more accurate to think of migration in the Numic case as demographic fluidity, which draws attention away from describing Numic language distribution as a mass phenomenon with a point origin and conceived only as a single historical event.

Processes of Demographic Fluidity

Great Basin foragers lived in relatively small groups, in a fluid social structure, were necessarily exogamous, and occupied large seasonal ranges that varied in size and configuration over spans of years and among generations (sensu Binford 1983:109-43). Demographic fluidity was fostered among Great Basin foragers by the ecologically driven adaptive diversity demonstrated for over 10,000 years of prehistory. Fluidity is evident in the tendency of Great Basin group associations to be based on functional decisions in an ecologically variable setting (variable across space and through time on all scales), as implied by concepts such as “camp group” (C. Fowler 1982a, 1982b). Exogamy ensures that affinal links connect widely different kin lineages, and may traverse linguistic diversity.

This situation implies people migrating as a function of life histories of individuals and of generational histories, rather than a people moving on some frontal scale. It implies that people from many different places could have contact. Crapo and Spykerman (1979) describe the effects of fluid social arrangements in the Great Basin on the evolution of dialects and present a means of explaining linguistic homogeneity in the region via socioecological factors rather than only in terms of a singularly conceived recent and rapid spread. Dumond (1969) offered a similar argument decades ago with reference to Na-Déné language distribution.

Migration is typically kin-based (Roberts 1988:59-60). Kin-based migration refers to the tendency of small groups of related people to fission along the basis of lineage and their lateral, affinal connections. Kin-based migration will produce different genetic effects than the even more fragmentary form of movement, individual migration (Roberts 1988:59-60), Weiss (1988:342-44) points out, “In many areas of the world, especially among hunter-gatherers, there is a much more fluid demic structure, where individuals come and go frequently... In such groups there is very little genetic differentiation within regional areas.” Thus, the differences between kin-based and individual migration can be blurred among foragers. Collectively, they are the mechanisms for demographic fluidity resulting in what we perceive retrospectively as migrations. The well-known observation of Steward (1938) as to the increased frequency of marriage among bands and increased bilingualism near spatially vague tribal/linguistic boundaries are expected corollaries of these mechanisms (also see Knack, this volume).

A Wave of Advance or a Migration Stream?

The recognition of demographic fluidity and the mechanisms of movement do not explain the linguistic evidence for the directionality implied by historical distributions of Numic languages. This directionality is referred to as a “migration stream” (Anthony 1990:903), and implies a direction of migration and a region of “origin.”

A wave of advance migration goes further than the concept of a migration stream by implying a unified front in a context of population pressure (Ammerman and Cavalli-Sforza 1973). Much Numic spread discourse is implicitly based on a wave of advance model by assuming a strong contrast between “indigenous” people and “migrants,” even though archaeological evidence can be used to argue for continuity or discontinuity. Furthermore, in a context of demographically fluid foragers, gradations rather than sharp contrasts among languages (pre- or post-Numic) would be expected.

Population pressure models such as the wave of advance are more applicable to geographically small, often community-level migration forming a local wave. As found in the case of Indo-European language spread (Renfrew 1987), waves of advance can occur at local levels within a larger migration process, but it is difficult for wave of advance models to explain a geographically large migration that crosses several adaptive systems—such as the Numic case.

The Numic case appears to be a migration stream rather than a wave of advance. This calls into question accounts of the Numic spread that require monolithic contrasts in some sort of adaptive confrontation (Bettinger and Baumhoff 1982) or groups involved in warfare (Sutton 1986) to account for the entire phenomenon. Both of these explanatory options founded upon the regional scale of the Basin/Plateau, the ecological diversity, and the likelihood that the social context on the scale of analysis relevant to the problem was one of fluidity and association rather than strong demarcation among bounded peoples.

The Temporal Depth of the Numic Migration Stream

Having taken pains to separate the concept of migration stream from the wave of advance typically assumed in Numic-spread discourse, it is critical to note that migrations can exhibit multiple directionnalities over the course of their evolution via return migration and other mechanisms (Adams et al. 1978; Anthony
Directionality in a migration stream is, however, difficult to perceive archaeologically and it must be remembered that the observation about directionality in the Numic spread is based on linguistic data from the historical period. As conventional Numic spread discourse holds, this directionality is likely recent and the Numic spread observed in this sense strikes me as a closed issue. However, severing the ethnographic data from processes operating over time seems like an abbreviated approach to the problem.

Some Implications and Predictions

The arguments in this section about the nature of Numic spreading hold a variety of implications and enable some predictions about language, culture, archaeological data, and patterns in prehistory:

1. Indigenous languages in the Great Basin encountered by Numic speakers may have been less, rather than more different from each other, given the demographic fluidity characteristic of Basin/Plateau foragers.

2. Kin-based or individual migration is consistent with linguistic evidence for fluid dialect variation across space in the Basin/Plateau region. Within particular Numic languages variation is better characterized as “intergraded isoglosses,” rather than dialect boundaries or even bundles of isoglosses (W. Miller 1986:99). In some cases, the boundary among different Numic languages might be sharp (e.g., Mono and Northern Paiute) and in others not so sharp (Northern Paiute and Shoshoni) (Wick Miller, personal communication 1993).

3. Kin-based or individual migration is consistent with a Basin-Plateau archaeological record that shows some discontinuity consistent with conventional timing of the Numic spread, but that can just as easily show continuity at that time or discontinuity at other times in prehistory, depending on which traits are selected (see papers by Elston, Fowler, and Raven, this volume). In light of the inconclusiveness about the timing, what if Numic spreadings have been going on over the past several thousand years and continued up to the last few centuries? In one sense, that would equate with a recent and rapid spread. In another, it would depart from conventional Numic spread discourse by requiring us to examine factors in addition to recency and rapidity of the spread to explain the process.

4. A migration of individuals or small, kin-based groups would foster acculturation, rather than depopulation or the development of a sharp boundary between indigenous and emigrant people. This shows that the mechanisms of movement will affect the nature of the encounter and the character of boundaries. This point also de-emphasizes the importance placed on a perceived conversion from indigenous to emigrant languages by seeing this shift as an acculturative process among related speakers. Of course, this point follows number three in arguing for Numic spreadings occurring over some time in the context of demographically fluid societies.

5. The process was not uniform across the Basin/Plateau region. In the eastern Great Basin and on the Colorado Plateaus, demographic fluidity during the period of Fremont farmers would bring foragers into contact with an existing system of coresident, interacting farmers and foragers. The increasing literature on forager/farmer interactions is consistent with archaeological evidence for such a system in the Fremont region (e.g., Moore 1985; Spielman et al. 1991; Rushforth and Upham 1992:52–57; Upham 1984) and this will be considered later.

6. Demographic fluidity and migration in a processual sense needs to be conceptually separated from directionality observed at any particular point in the evolution of a migration. Linguists are only able to document the most recent directionality, but migrations are dynamic processes more often than they are particular events. Return migration is common and this, along with demographic fluidity and varying trajectories of selection operant on adaptive diversity, make it possible for Numic languages to have been in the region for some time, with variations in directionality within the stream over time. Thus, directionality and the processes of migration should be treated as separate, but related issues. Subsumed within this picture is the potential for wave of advance migrations to occur, but these tend to be subregional and unlikely to account for the process as a whole.

7. The population genetics implied in this scenario would be intertwined and at best clinal. To the extent attempts to extract and amplify ancient DNA are successful in examining the Numic problem, I predict we will see large-scale homogeneity with perhaps pockets of heterogeneity. There will be a general lack of symmetry between genetic variation and archaeological categories and perhaps a slightly stronger relationship with large-scale linguistic categories.

Each of the above points brings knowledge about migration processes in general to bear on the Numic case and implies a direction of inquiry that is varying new to Numic spread discourse. The first three imply an unpacking of the spread into behavioral possibilities rather than the practice of constructing monolithic categories. They also argue for greater consideration of socioecological factors on Numic language distribu-
tions, given what we know about foraging societies. This makes us less dependent on a twentieth-century ethnographic record to know what “true” Great Basin foragers were like in prehistory. It may also make us less dependent on linguistic analogy from Europe or from farming societies to model language evolution among foragers in the Basin/Plateau (e.g., Shaul 1986). The fourth point is a significant departure from conventional thinking about the Numic spread because our tendency has been to see migration only as a phenomenon of replacement. The fifth point suggests the futility of explaining the Numic spread as if it were a uniform event across an enormous region of natural and cultural diversity. The sixth point credits prevailing wisdom about the Numic spread (directionality) while attempting to contribute knowledge from historical migrations in general. Of course, assessment of the seventh point awaits the results of experimental and potentially inconclusive molecular analysis on human physical remains.

ENCOUNTERS AMONG PEOPLE:
AN ANALOGY AS A HEURISTIC FOR THE NUMIC SITUATION

Consider an interesting analogy to help think about the aforementioned points and set the stage for a Great Basin scenario. I refer to the case of Apache migration into the lower Rio Grande, Trans-Pecos region of southeastern New Mexico and northwest Texas and the acculturation between indigenous foragers and Apache migrants between A.D. 1400 and 1600 or later (Kelley 1952). Prior to A.D. 1400 Puebloan agriculturalists lived in the area (perhaps languages of the Aztec/Tanoan group). Foragers lived in the region along with the agriculturalists until the latter abandoned their agricultural sites shortly after A.D. 1400 (note this makes no statement on whether the Puebloans left the region, only that their agricultural sites were left). By the time of Spanish records in the late sixteenth century, Uto-Aztecan, Jumano speakers were residents of the area, and these Southern Plains foragers had regular, amicable trading relationships with Puebloans practicing agriculture at that time (a return of people or a return of agriculture?). The Athabaskan-speaking Apache also moved into the area and participated in the same forager-farmer interaction, with the migrant Apache acculturating the indigenous Jumano and eventually assimilating many.

Examining this case and others in light of archaeological and ethnographic evidence, Rushforth and Upham (1992:47-67) point out that among foragers the potential for flux and acculturation is great, despite cultural and linguistic differences. This is consistent with the kin-based demographic fluidity identified previously as likely for the Numic case.

Various authors (Rushforth and Upham 1992; Spielman et al. 1991; Upham 1982) provide archaeological and ethnohistoric evidence from the Spanish period in the Southwest that foragers and farmers lived side by side. The existence of a forager-farmer relationship blurs the differences in material culture among them causing Southwestern archaeologists to erroneously see limited activity sites as mere extensions of Anasazi farmer activity, rather than as foragers who were separate from, but interactive with the farmers. There are even hints at linguistic diversity in such systems (e.g., Rushforth and Upham 1992:63-66). The existence of farmers and foragers in the eastern Great Basin has long been implied or discussed (Marwitt 1970; M. Berry 1974; D. Madsen 1979a, 1982) and more recently offered as an explicit model for detection (Simms 1984b:16-25; Dean and Simms 1984:317-20; Simms 1986, Simms and Stuart 1993:16-25), albeit without the ability to appeal to ethnohistoric records.

The epistemological upshot of recognizing the forager-farmer system is that the monolithic nature of the archaeological and linguistic categorization employed to simplify description tends to discount the adaptive diversity that characterized such systems. As Rushforth and Upham (1992:47-67) point out, this shortcoming overemphasizes historical particularism at the expense of comprehending the important role of adaptive diversity in understanding behavior and artifact distributions in the prehistoric Southwest and, I suspect, the Great Basin.

A SCENARIO FOR NUMIC SPREADINGS

The above analogy and previous discussion holds various implications for the Numic issue. They highlight the contrast between accounts of a Numic spread envisioned as a bump and grind among culture-historical categories versus Numic spreadings emphasizing demographic fluidity and adaptive diversity, all in an admittedly complex socio-ethno-linguistic milieu (that may never be known for prehistory). They also draw us away from categorical arguments about the Numic spread and toward an investigation of process and greater attention to the characteristics of the temporal dimension.

The Linguistic Setting

It is generally believed that the Numic languages result from a differentiation of related Uto-Aztecan languages after 4000 B.P., affecting a large portion of the Southwest and northern Mexico; Hopi, Tubatulabal and Numic differentiated from each other perhaps 3,000 years ago (Lamb 1958; W. Miller 1986). However, since the Uto-Aztecan language family is a large, differentiated taxonomic entity, one can read about a plethora of linguistic divergences and temporal estima-
tions for divergence between 4000 B.P. and the last few centuries, depending on how ideographic one wants to get (e.g., Goss 1968; Lamb 1958; W. Miller 1986; Miller et al. 1971).

My point, however, is not that the Numic spread was simply earlier. The processes of language evolution should not be expected to be consistent over the entire region. For instance, the tetherting of settlement found around some of the large Great Basin wetland ecosystems (e.g., Stillwater) would lead to different sociolinguistic milieus relative to the surrounding regions. The subscription to agriculture in the eastern Basin/Plateau region would do the same.

The context of linguistic evolution would also vary through time. In the Basin/Plateau and Southwest, it is clear that the move from the Archaic to variable forms of agricultural lifeways proceeded contemporaneously with Uto-Aztecan differentiation over the past several thousand years. Not do the languages and cultures themselves remain immutable in their adaptive strategies, material culture, or identities. Hopi diverged from Numic after 3000 B.P., and became caught up in the evolution of agriculture, at some point donning “Puebloan” clothes. Similarly we should expect Numic spreadings to have occurred under many adaptive guises.

Looking at the situation this way may have some advantages. It explains why there is Archaic continuity in some areas, while discontinuity develops where agriculture evolves. It is consistent with linguistic evidence, not just for a single slice of the spread, but for spreadings that were under way for a long time with numerous diversifications long recognized by linguists.

Some Archaeological Referents: The Regional Picture

The spread of Uto-Aztecan languages, the split of Hopi, and the Numic differentiation, all occurring less than 4,000 years ago temporally correlates with increasing moves toward agriculture in the southwestern United States. This was a time of intense change exemplified by the arrival of corn, the bow and arrow, and ceramics to the northern Plateaus over a span of several centuries from about 100 B.C. to A.D. 400. There must have been enormous impacts on demography and language.

Given the population growth in the Southwest with the spread of agriculture, the Great Basin may have been a receptacle for excess population from other regions regardless of population trends intrinsic to the Basin (see Bettinger 1993:48). Environmental evidence indicates a period of climatic amelioration in the Great Basin portion of the Basin/Plateau region during the Neoglacial after 4500 B.P. (Mehringer 1985; W. Spaulding 1991; Thompson and Kautz 1983; Enzel et al. 1992; Oviatt 1988). This evidence suggests that the beginnings of Numic spreading, writ temporally broad in the context of Uto-Aztecan differentiation, correspond to an increase in potential carrying capacity for the region.

Envisioning migration as a process which includes previous, linguistically untraceable spreads rather than an isolated event after A.D. 1000 explains why it is difficult to see change in the archaeological record in many areas of the central and northwestern Great Basin when using single artifact types (Elston and Raven, this volume). If the linguistic differentiations pertinent to Numic spreadings took place over a span beginning at least 3,000 years ago and continuing into history, then there must be more to recognizing Numic language distributions in prehistory than finding Desert Series projectile points. The ceramics don’t solve the problem either since they are no more likely to vary only with reference to linguistic or ethnic identity. Rather than representing the flow of a new people carrying pots, utilitarian ceramics in the Great Basin more likely reflect interaction by foragers with societies heavily dependent on ceramics as suggested some years ago by Lyneis (1982:180). Contact would have increased with population growth and eventually the failures of farming, thus increasing demographic fluidity and causing gradational variation in ceramics such as that noted by some researchers (e.g., Lockett and Pippin 1990:71). The foragers would incorporate a version of ceramics into their system when circumstances selected for this option. The ceramics would not necessarily mimic those of the agriculturalists, and would be used by foragers dependent on considerations of mobility, especially the frequency of moves, lengths of moves, and the expected redundancy of occupation. The degree of investment in ceramic quality by Great Basin foragers or farmers should increase with increasing residential stability and/or redundancy in residential moves, and a recent quantitative ceramic study of 5,600 Fremont and Late Prehistoric shards by Simms et al. (1993) supports this prediction. This model also predicts that ceramics will show a high degree of regional and subregional variability and gradational, rather than categorical, differences among “types” (Simms et al. 1993; see also Dean 1992; Griset 1986; Mack 1990). As for what projectile points and ceramics say about the Numic, they tell us about what kind of spreads there were. They probably will never enable us to trace “a people.”

The Eastern Basin/Plateau: Foragers, Farmers, and Demographic Fluidity

Migrations among foragers are difficult to document, hence the best place to see migrations in the Basin/Plateau region may be in the eastern portions where farming provides a contrast with foraging. Foragers migrating into regions characterized by farming would likely encounter a system already involving in-
teraction among foragers and farmers. This suggests a niche by which linguistic differentiation could have occurred in a context of interaction. We typically envision Numic migrants encountering Fremont or Anasazi farmers. Rather, the mechanism of kin-based and individual migration among foragers would bring them first into contact with the forager component of the existing forager/farmer system. Thus, there would have been no direct "face-off" of Numic foragers and Fremont or Anasazi farmers. Since most excavated Fremont and Anasazi sites are residential farming bases, we should not be surprised that there is little evidence of Numic contact at such sites nor that bias in our sample precludes understanding relationships between them.

As in the Southwestern cases described earlier, there was movement back and forth between the farming and foraging components of the system. There may have been linguistic differences among them, but the fluidity also ensured pressures for linguistic homogeneity or at least bilingualism. As for the Fremont, it was noted previously there has long been a recognition of adaptive diversity. There are three adaptive strategies all potentially involving farmers and foragers cohabiting the region: (1) full-time, relatively long-term sedentary Fremont farmers who supplemented their annual diet with some foraged foods and employed a logistic system; (2) Fremont farmers who may also rely heavily on farming, but who switched agricultural settlement often by employing group fission and fusion to adjust the relationship between foraging and farming, especially in locales and/or years marginal for farming; (3) foragers who practiced little or no farming, but who could have variable relationships with farmers during their life history (Simms 1986). These people may have been linked in varying degrees via trade in agricultural or foraged foodstuffs and in the population movement of small groups and individuals via kinship and alliance channels. It is also possible there was some linguistic diversity in such a system. This produces unity among Fremont wherever it is found, but also the recognition that "there is no one 'set' of material remains resulting from that behavior we can identify as Fremont." (D. Madsen 1989:24). Important to Numic spreadings and the fate of the Fremont is a recognition of this diversity in a system with some degree of interaction that provides the basis for assimilation of the people occupying the increasingly failing farming niche (i.e., some Fremont).

Similar to the perspective on adaptive diversity discussed previously with reference to the Southwest (e.g., Upham 1984), this perspective applied to the Fremont is germane to Numic spreadings because it shows how an encounter between demographically fluid foragers and agriculturalists proceeds in terms other than a mass dying out of the farmers, warfare between aggressive invaders and peaceful farmers, or other historical particularist "explanations."

Encounters among farmers and foragers may also have involved foragers from outside the eastern Basin/Plateau farmer forager system. The degree of this interaction and its acculturative effects would be expected to be less prior to A.D. 1000, when agriculture had yet to expand to its full intensity and range (see Talbot and Wilde 1989). In the last few centuries of Fremont farming, and certainly by the fourteenth or fifteenth centuries, the interaction process would have accelerated as the farming system increasingly failed and a foraging lifeway held sway. The greatest acculturation of Great Basin foragers seen in such things as ceramic use would have been during this time and on. It would have been the smaller and smaller pockets of farmers that would have been the greatest pressure to assimilate as their groups fissoned and went in all manner of geographic directions. Resident foragers might face the same pressures depending on the strength of their association with the farmers. Thus, demographic fluidity by people from the farmer/forager system would have increased as farming failed. The process involved no abandonment in the traditionally conceived sense, but left abandoned sites, just as in the case of Anasazi "abandonment." It resulted in no dying out of a "people" in a categorical sense, but involved acculturation (possibly bilateral) and, in the case of the farmers, assimilation. In this situation, we should expect both continuity and discontinuity in material culture traits, depending on the behavioral sphere the particular artifact class reflects, the sample size of the artifact class employed, and depending on the timing and nature of the adaptive change in each locale. In the case of ceramics, we should see ceramic use by Great Basin foragers increase first in response to population peaks among the farmers as population is exported and second with the demographic upheaval caused by the failure of farming.

CONCLUDING COMMENTS

Some may argue that I have moved closer to standard views of the Numic spread, an event happening in the eastern Basin and Plateau region after A.D. 1000–1200 and marking the arrival of "new groups of hunter-gatherers" (D. Madsen 1989:14). In fact the scenario offered here reconfigures the issue as an evolutionary process occurring over several thousand years with spatiotemporal changes in tempo and mode. The rapid subscription to farming in the Southwest 2000–3000 B.P. brought on a huge demographic change that temporally corresponds to a variety of Uto-Aztecan language differentiations. This should be seen as the larger context for cultural evolution in the Basin/Plateau region.
I have attempted to explore social and biological considerations to identify the kinds of spreadings the Numic might be. This leads me to suspect that linguistic differences between indigenous and migrant peoples were less rather than great. It seems reasonable that the pre-Numic languages in the region were Uto-Aztecan or ancestral in some way. In the western and central Great Basin, Uto-Aztecan languages would have already moved into the area and the historically perceived directionality of Numic languages was only one part of this evolution, rather than the entire picture. The nature of social interaction, and hence, migration and language evolution was related to variability in adaptive strategies. Thus, the adaptive context would be different in a case of settlement tethering at wetlands, such as Stillwater in western Nevada, and variable among regions. In the eastern Basin/Plateau, the spreadings began before the Fremont became Fremont (the split of Hopi is a good example) and continued after farming was abandoned. Farming brought both population growth and eventually the failure of the adaptive strategy. Demographic fluidity and acculturation intensified during these times and this affected other portions of the Great Basin. There is little evidence of ceramic use by foragers in the nonfarming portions of the Great Basin until the population peaked among farmers after A.D. 1000–1100. Ceramic use by Great Basin foragers expanded with the increased demographic fluidity stimulated by the failures of farming in the fourteenth century and thereafter (see Rhode, this volume).

Perhaps neither migration nor spread is the best term for what is conceptualized here, because for archaeologists and nonspecialists alike, migration seems to connote mass movement. This was a case involving mid-latitude, cold-desert foragers with low population density, large home ranges, and high adaptive diversity. Numic spreadings over the scale of time we are dealing with were likely the most common form of migration in history, the movement of individuals and small, functionally linked groups in a pluralistic context with fluid ethnic and linguistic affiliations.

An unpacking of the Numic spread leads me to glimpse behavioral process and does more justice to the fluid characteristics of time. A conceptual unpacking into behavioral issues also fosters a perspective that avoids the “Yes, it did” vs. “No, it did not” and the “It spread at this time” vs. “It spread at another time” tenor of discourse characteristic of the Numic spread debate.
Across the West

Human Population Movement
and the Expansion
of the Numa

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