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Unsettled Communities: Changing Perspectives on South American Indigenous Settlements

Debra Picchi, Editor

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TABLE OF CONTENTS

Unsettled Communities: Changing Perspectives on South American Indigenous Settlements Debra Picchi	1
Settlement Patterns Over the Long Term in the Santiago-Cayapas Basin, Ecuador Warren R. DeBoer	8
Archaeological Implications of Changes in Wachipaeri Settlements Patricia J. Lyon	14
Settlement Pattern as Economic and Political Strategy: The Xavánte of Central Brazil Nancy M. Flowers, Silvia A. Gugelmin and Ricardo V. Santos	18
Changing Perspectives on Cashinahua Residential Practices: 1955–1995 Kenneth M. Kensinger	29
Dispersed, Nucleated, Dispersed: Changing Matses Settlement Patterns, 1969–1995 James G. Matlock	33
Northern Arawakan Peoples and Extralocal Factors in the Venezuelan Amazon Jonathan D. Hill	46
The Teleology of Kinship and Village Formation: Community, Ideal and Practice Among the Northern Gê of Central Brazil William H. Fisher	52

UNSETTLED COMMUNITIES: CHANGING PERSPECTIVES ON SOUTH AMERICAN INDIGENOUS SETTLEMENTS

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The essays in this volume were originally presented during a session I organized for the 1995 American Anthropological Association meetings held in Washington D.C. In these more recent versions, the authors consider the indigenous community as a product of history and ecology in connection with wider social and political developments. Both archaeology and cultural anthropology are represented, and I have encouraged the participants to frame their discussions with a variety of theoretical constructs in order to provide a rich mix of ideas that will generate new questions. Authors phrase their arguments in terms of historical, political ecological, ecological materialist, and/or symbolic analytic frameworks.

The case studies illustrate the processes whereby indigenous people cvaluate situations, derive meaning from them, and make decisions which concern their communities. DeBoer's paper examines the findings from archaeological surveys of the Santiago-Cayapas Basin on the coast of Ecuador, near the border of Colombia. Lyon's essay discusses changes in settlement patterns among the Wachipaeri who live east of Cuzco in Peru, while Kensinger's and Matlock's studies concern groups located in eastern Peru, close to the border of Brazil. The Cashinahua inhabit an area on the Purus and Curanja Rivers near Esperanza; the Matses live on the upper Yavari River. Several cases studies are about Brazilian Indians. The Kayapo (Fisher) are located in southern Para and eastern Mato Grosso, and the Xavante (Flowers, Gugelmin, and Santos) are settled in eastern Mato Grosso near the Rio das Mortes. In setting the scene in this introduction, 1 draw on my own field experiences with the Bakairi who also live in Mato Grosso on the headwaters of the Teles Pires River. Finally, "a vast regional diaspora" of Arawak-speaking people in southern Venezuela on the borders of Colombia and Brazil provides information for Hill's essays. (See Figure 1.)

In this brief introduction I review two significant themes which weave the articles together. The first concerns how indigenous peoples respond to interactions with other societies by altering the shape, in the most general sense, of their settlements. The second illustrates how Indians are social actors who respond in a variety of ways to both the opportunities and stresses inherent in contact situations. I conclude the essay by pointing out that the study of a topic such as community encourages researchers to return to the four-field model because the approaches inherent in this

model are not only complementary but necessary if we are to investigate fully such issues.

Theme One: Inhabiting The "Local" And The "Global" Simultaneously

A key idea running through these essays is the way in which lowland South American Indian communities occupy places within a global order while simultaneously inhabiting both an ecosystem and a social space at the local level. This approach involves broadening the scope of the study of settlement patterns from the perspective of how a people exploit resources within a given ecosystem (Brush 1993, Alvard 1993, Begossi 1992, Clay 1988) to one that examines how human agents, bent on maneuvering successfully across, what DeBoer calls in his paper, "mercurial landscapes," alter their settlement traditions.

Although some recent research on South American Indians examines how indigenous peoples adapt their traditions to manipulate political and media-related events to their advantage, the analytic thrust of these works concerns the way in which particular symbolic and ideological constructions link indigenous peoples with, for example, environmental organizations (Conklin and Graham 1995, and Arnt and Schwartzman 1992). Their work probes the metaphor of "The Indian" as a special representative of "The Environment," illustrating how the two images evolved, and ultimately fused.

The articles in this collection deal less with articulating the process whereby indigenous peoples participate in the social construction of ideologies that allow for achieving certain political objectives, and more with showing how Indians consciously alter specific features of their orientation to the social and natural world in response to changing conditions. Although socio-political factors are clearly relevant in both instances, these case studies focus on settlement patterning as a key analytic concept for understanding indigenous responses to larger politico-economic systems that historically penetrated their worlds and impinged on their societies.

Flowers, Gugelmin, and Santos firmly ground their discussion of the Xavante in historical and ecological contexts before going on to establish how the indigenous communities react to regional political pressures. They note that in the period preceding the establishment of the Pimentel Barbosa Reservation, the Xavante responded to resource availability by adjusting

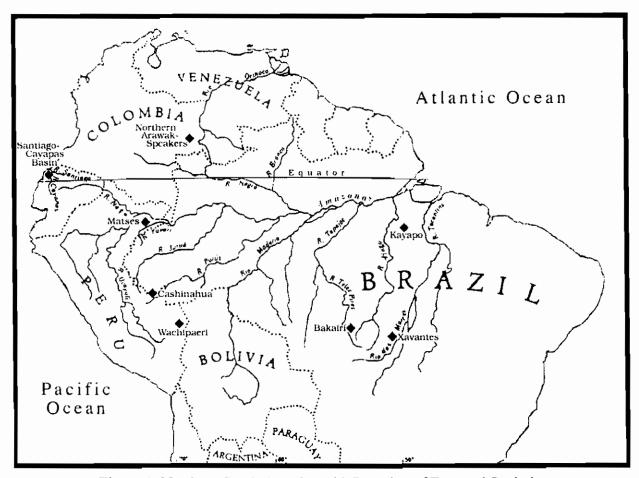


Figure 1: Northern South America with Location of Featured Societies.

the size and location of their villages. They formed relatively large villages and placed them near suitable agricultural land during appropriate seasons. Then they dispersed into trekking parties and hunted-and-gathered at other times.

Following the Xavante's permanent contact in the 1940s, the political context becomes essential for understanding the formation of their communities. The Indians constructed and dispersed settlements less in response to availability of resources in local ecosystems and more in response to accessibility of Indian posts and missions which protected the Xavante from attacks by settlers and provided them with trade goods. Flowers, Gugelmin, and Santos demonstrate how a people reconceptualize "resources" as it becomes clear that food can be found at a mission or town as well as in the natural environment.

Lyon's article shows how depopulation triggered indirectly by contact with Europeans ultimately led to changes in house type and settlement location among the Wachipaeri. Like the Xavante, they located their villages closer to churches, soccer fields, and other aspects of European communities.

Hill also provides an ecological context for his study of Arawakan-speaking people, but he clearly situates the reader in a rapidly evolving global system where he rejects what he calls "the tired old dichotomy of core and periphery." His research emphasizes the significance of settlement organizational features, showing how indigenous "modes of ecological orientation" used to adapt to a nutrient-poor, blackwater ecosystem are eurrently employed to adjust to new social, economic, and demographic conditions. In the past, during times of scarcity, the people depended upon sacred hierarchies within local patrilineal groups to control the distribution of resources, while during more plentiful times, they utilized widespread affinal alliances to allocate resources in a more egalitarian manner. Recent data collected from three groups of Arawak-speakers living under very different conditions indicate that these modes continue to be employed, but as a means for adapting to Venezuelan society. Hill explains how indigenous peoples redefine and redeploy adaptive strategies, rather than simply "choosing between indigenous or nonindigenous cultures."

Fisher's study also demonstrates the subtlety with which indigenous people intrepret and respond to social relationships in contact situations. comparison of Kayapo community and the Kayapo version of Brazilian comunidade shows that the former is made up of people "in relationships who can collectively experience shared social states." emphasis here is upon the joint experiencing of emotions such as joy or sadness that leads to a feeling of oneness among them. Comunidade, on the other hand, is defined in terms of situations where the differences between Kayapo chiefs and commoners are manifest. Because the Kayapo deal with the larger world primarily through the conduit of the chief, inequality results. Fisher is quick to note that the use of the term comunidade is not an example of acculturation. Rather it is an implicit comparison by the Kayapo of their community ideal and what they perceive as the kinds of social relationships forced upon them in contact situations. .

One of the strengths of the articles in this issue is their propensity to people DeBoer's "mercurial landscape" with a rich and varied selection of players. Clearly "the landscape" is not monolithic. provides historical documentation of coca-producing Incas and their impact on the Wachipaeri, while Kensinger and Matlock emphasize the impact of missionary settlements and local economies. Cashinahua, studied by Kensinger, not only depend on purchasing goods in the nearby Peruvian town of Esperanza, but their schools are directly linked to this regional center, and many Cashinahua vote in local Matlock corroborates these findings, showing how Matses settlement size and permanence increased in the vicinity of missionary settlements over the last twenty-five years.

Another important contribution of these works is their reliance on more than one subdiscipline. In examining cases from both archaeology and cultural anthropology, fascinating commonalities emerge. For example, observations about how urban centers affect nearby settlements are found in both DeBoer's study, which discusses La Tolita, an Ecuadorian regional center which collapsed in about AD 350, and Hill's article, which addresses the importance of contemporary Puerto Ayacucho, the capital of the Federal Amazon Territory.

Some Remarks About The Bakairi Indians

The approach outlined above can help us understand the situation of the Bakairi with whom I am particularly familiar. At a local level, the Bakairi depend upon traditional subsistence practices to produce most of their food. They cultivate gardens in the gallery forests along the sides of the rivers, and they also fish, and to a lesser extent hunt.

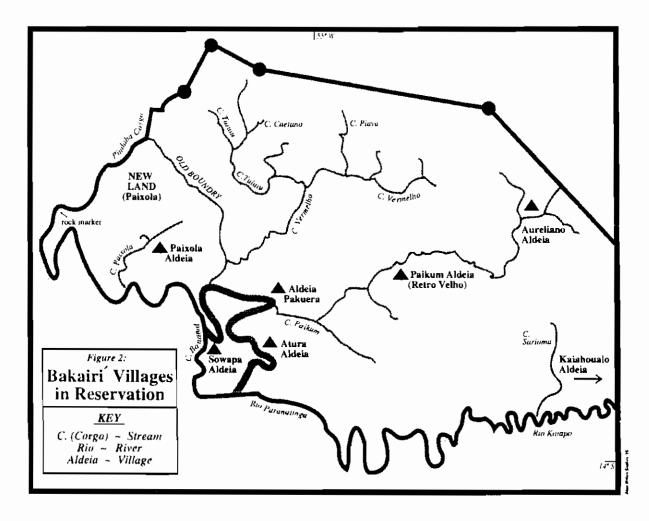
An ecological analysis of resources provides an important context for understanding how the Bakairi distribute themselves in villages across the region. Yet, the Bakairi also occupy a political world. Impinging government agencies, missions, and nearby businesses have affected them in the past, and continue to influence their daily lives today.

The Bakairi possess a longer contact history than the Xavante, Cashinahua, or, Matses, having migrated from the Xingu River culture area at the beginning of the century and settling in the headwaters of the Teles Pires River by 1927 (Schmidt 1947). By the 1930s the Indian Protection Service (SPI) agents succeeded in convincing them to dress in European-style clothing, abandon their traditional form of housing and settlement organization, and concentrate their villages into one settlement near the SPI post. Until the early 1980s they continued to occupy this village, known as Pakuera, and even now, a number of them live there.

Pakuera and the SPI post, later replaced by the National Indian Foundation (FUNAI) post, peaked in size with a population of about 350 people in the 1980s. Over the decades, FUNAI personnel provided the Bakairi with many important services including a school, a clinic, a grassy airstrip that FUNAI medics and administrators used, and a two-way radio. In 1980 FUNAI agents initiated an agricultural project, similar to the one described by Flowers, Gugelmin, and Santos for the Xavante. They stored all of the equipment in Pakuera and located the rice fields close to the village. Although the project was somewhat more successful than that described for the Xavante, it did not meet the objectives of FUNAI in terms of making the reservation self-sufficient and integrating the Indians further into the regional economy (Picchi 1991). By 1989 rice production was down considerably.

Like the Xavante, Cashinahua and Matses, the Bakairi found themselves half attracted to the services and goods available at the post and half compelled by FUNAI agents to remain in Pakuera for longer periods of time than they would have during pre-reservation times when more frequent village movement was common. And decisions about what services FUNAI provided, as well as what projects it initiated, were not made at the local level. Rather they were part of national policy forged in Brasilia and Cuiaba, FUNAI's regional headquarters. The political dimensions of decision-making about community permanence, size, and location are quite clear in this instance.

Another obvious example of how the Bakairi inhabit both a local social space and ecosystem, as well as a global place, concerns the presence of Summer Institute of Linguistics (S.I.L.) missionaries in their reservation between 1962 and 1970. As documented in *Thy Will Be Done: The Conquest of the Amazon* (1995), a convergence existed for many years between the S.I.L. and US economic and political interests as defined by Nelson Rockefeller. Unaware of the reality



as they might have been, such missionaries as James Wheatley, who lived and studied with the Bakairi in the 1960s, found their decisions and actions in the field affected by policy and practice set in the context of such global relationships.

It indeed becomes increasingly more difficult to disentangle "the local" from "the global." The web of interrelationships affecting Indian groups such as the Bakairi, Xavante, Cashinahua, and others is a dense one. However, as we will see in the next section, indigenous peoples are not helpless.

Theme Two: Vulnerable But Resisting Actors

A second important theme in these articles concerns resistance. Each of the authors shows a keen awareness of the historical context in which indigenous cultures operate. They are cognizant of the asymmetrical nature of the relationships between indigenous societies and the Western world that has characterized interactions between these peoples in the past (Wolf 1982, Ferguson and Whitehead 1992) or more recently (Urban and Sherzer 1991). There is also agreement that their limited exercise of social, economic, and political power continues to leave these

indigenous peoples exposed (Price 1989, Hemming 1987, 1978, and Davis 1977).

The authors in this volume show that, while vulnerable to the effects of the regional and national forces that surround them, indigenous peoples are not passive victims, but active resisters to the complex processes they confront. Viewing settlement as a social construct, the expression of which is contingent upon historical, regional, and cultural factors, the participants show that indigenous societies possess a repertoire of responses, which, together, constitute an effective strategy for maneuvering around obstacles. This repertoire includes definition, location, organization, form, relative permanence, and size.

Flowers, Gugelmin, and Santos's article on the Xavante deals explicitly with the issue of resistance. They define settlement relocation, or "strategies of movement," both as a primary defense used in coping with the colonization frontier and as an integral element of a broader political strategy. DeBoer's work also touches on the theme of resistance in that he tries to account for the variability he finds in the archaeological record by speculating about why people located their communities along navigable

rivers and tributaries during some periods, while in interfluvial hinterlands that were far less accessible during other times. One way to account for this variation is to hypothesize that people retreated into interfluvial areas when they assumed a defensive posture against intruding groups or when they withdrew from the influence or control of large regional centers.

A sub-theme of pulsation or oscillation emerges here. Although the papers cover different spans of time, both in this century and in the past, there is consistent evidence that indigenous peoples flexibly alter the placement, size, and organization of their communities in response to outside pressures. I already mentioned DeBoer's observations about riverine versus interfluvial positioning. Additionally, Lyon's work with the Wachipaeri indicates that these Indians dispersed and coalesced repeatedly since the Incas conquered their lands, while Kensinger's and Matock's research, focusing upon contemporary case studies, show how people, in microcosms, operate in response to external threats and opportunities. Their work documents significant changes in settlement location, size, and form since the 1950s (Cashmahua) and 1960s Matlock notes that when the Matses "accepted contact," they no longer found it necessary to retreat into the hinterlands. And Kensinger establishes that the Cashinahua remained in villages that swelled to much larger sizes than had been viable in the past as the people enjoyed the services and trading opportunities available in a village with a resident missionary and in a nearby Peruvian town.

Prior to their settlement on reservations, the Xavante used what Flowers, Gugelmin, and Santos call a "fluid settlement pattern that involved opportunistic fission and fusion" to resist pressures from the national society. Because they were less dependent on growing crops, they were able to elude intruders by breaking up their villages and dispersing into the forest. Concomitantly, they could reform these settlements, concentrating their people in isolated areas, or where there was a mission or an opportunity to earn cash.

We also find the concept of oscillation discussed in Hill's essay on the Arawakan peoples of Venezuela, who temporarily dissolve social relationships with people, and later re-establish them. These people interact with the natural and social environments in expansive and constrictive ways, in terms of relating to people and distributing food. Hill underscores the defensive value of these modes when he provides us with the example of how phratries respond to other invading phratries.

Finally, Fisher puts a slightly different spin on the question by establishing that Kayapo villages are never static. Rather, he claims, they are "outward manifestations of striving to create community." Kayapo communities, in contrast with settlements, are essentially defined by powerful sentiments that are

collectively experienced and expressed. Settlements, then, are always works in progress reflecting attempts to create desired social states through public endeavors that will ultimately result in the essential emotions that define a community. Fisher adds that attempts to create communities sometimes fail, the outcome of which can be migration out of the settlement by large numbers of people. His work suggests the image of a pulsating mass of people, aggregating and dispersing across the landscape as they seek to create community indexed through shared emotional experience.

More Remarks About The Bakairi

The discussion about the resistance theme, oscillation sub-theme, resonates with my understanding of why the Bakairi divided Pakuera, a large village they occupied for many decades, into several smaller settlements during the 1980s. Although I provide a more complete discussion of this process elsewhere (Picchi 1995), a summary of some of my findings may be helpful at this point. In the 1970s a drought in the northeastern part of Brazil triggered a series of destabilizing migrations which were, in part, facilitated by funds supporting small farmer colonization of the Amazon region. Mato Grosso was not designated a colonization area; however, the number of landless farmers, or posseiros, increased as the result of the process of local economic development which was related to events in the Amazon (Lisansky 1990).

At the local level, we can see what form this process took as bands of *posseiros* began to enter the Bakairi reservation. The Bakairi became alarmed, and part of their decision to divide Pakuera and to settle themselves at strategic points throughout the reservation was the result of their determination to defend and to protect their land against these intruders. It was not coincidental that the distance between the two villages located farthest from each other, Kaiaualo and Paixola, was nearly the width of the entire reservation (35 km). These "outposts" were responsible for monitoring the reservation borders that were distant from the heart of the reservation where the Bakairi located most of their villages. (See Figure 2.)

The theme of resistance can also be seen in what I call "the Paixola" incident (1995). The Bakairi claimed that their original reservation was about 58,000 hectares in size, but that American missionaries and Brazilian farmers siphoned off and sold nearly 9,000 hectares in a region the Indians named Paixola after a stream that flows through the area. In 1984 Bakairi leaders, some of them educated outside the reservation and proficient in Portuguese, spent a considerable amount of time and energy convincing FUNAI that the Bakairi were the rightful owners of Paixola. Today, the reservation has returned to its original size, and a group of Bakairi occupy the area. (I feel compelled to note that my succinct summary does

not do justice to the reporting and analysis that this extremely volatile chapter in Bakairi history deserves.)

A final postscript - the oscillation sub-theme also applies to Bakairi recent history. When the Bakairi migrated into the Teles Pires region, they initially inhabited one settlement. But they dispersed into six communities sometime before 1920, only to be concentrated back into one large village a few years later when the SPI established the indigenous post named P.I. Simoes Lopes (Picchi 1982). This settlement, Pakuera, has already been mentioned. It broke into several settlements during the 1980s.

Conclusion

ln 1974 Lyon published her anthology on American Indian research, subtitling it South Ethnology of the Least Known Continent. (1985) referred to this volume, and to the subtitle, when he reviewed the rapidity with which our knowledge of lowland South America was growing. As the number of individuals doing research in the culture area increased, what Gross called "a new generation" of South American anthropology began to emerge (Gross 1985: 203). These studies were frequently based on doctoral research in which original data were gathered during long, intense periods of field work. They grappled with major theoretical questions posed by ecological materialism, French structuralism, and structural functionalism.

In 1995 Lyon revisited her original idea about the relative obscurity of South American Indian research during the Robert F. Murphy Lecture at the South American Indian Conference at Bennington College. Her lecture was entitled "A Better Known Continent?"; it both reviewed the progress made by researchers over the last twenty years as well as defined new directions for future studies.

Lyon's "least known continent" allusion is referred to once more by Pollock (1996). He notes that although South American Indian studies remained undeveloped in the first part of the century, probably because "South American countries had not been colonized by those societies that led in the production of anthropology" (p. 157), one would be hard pressed today to find an anthropological debate to which researchers of this culture area have not made important contributions.

After reviewing several works on Amazonian ethnoecology (Balee 1994, Descola 1994), Pollock goes on to critique Roosevelt's anthology (1994). His major criticism of the work is not of the quality of the papers in the volume, but of their failure to achieve a true synthesis of theoretical perspectives. Although he warns that attempts to reconcile in some way a symbolic-interpretive approach with an ecological-materialist perspective will be "daunting" (p. 160), he believes a synthesis is ultimately a worthy objective.

I suspect that the epistemological differences between the two groups, as well as where they assign causal priority, will continue to divide them. However, we can hope that calls for rapprochement from increasingly large numbers of anthropologists will lead to greater cooperation between professionals and further cross-fertilization of ideas. In this issue, we have evidence of how the use of a single analytic concept, such as settlement patterns, can unite researchers positioned in radically different theoretical camps and allow for insightful and stimulating discussions. If we contrast Fisher and Hill's essays with those presented by Flowers, Gugelmin, and Santos and by DeBoer, their arguments are clearly framed by distinct questions. However, the rieh layering of history, ecology, social and political organization, and symbolism achieved in their works challenges us to continue to seek a conceptual framework that will accomodate various theoretical approaches.

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SETTLEMENT PATTERNS OVER THE LONG TERM IN THE SANTIAGO-CAYAPAS BASIN, ECUADOR

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Over the last half century, the elucidation of prehistoric settlement patterns has come to be one of the standard tasks of archaeological research (see Willey 1953 for a formative statement). By settlement pattern is meant the ways in which human populations are distributed - or, if a more active voice is preferred, distribute themselves - over a natural environment as well as a culturally constructed landscape. In the present paper, I wish to summarize what has been learned about changing settlement patterns in the Santiago-Cayapas Basin of coastal Ecuador on the basis of an ongoing program of archaeological research (Tolstoy and DeBoer 1989, DeBoer 1996).

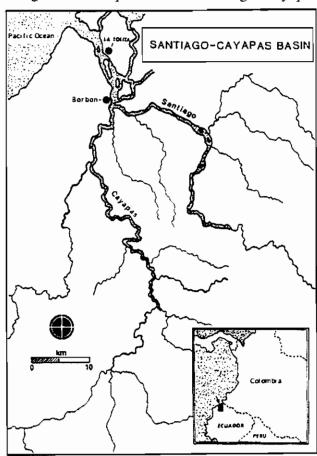
As mapped in figure 1, the Santiago-Cayapas Basin covers some 4000 km² of coastal tropical forest in Esmeraldas province, northwestern Ecuador. Two major rivers, the Santiago and Cayapas, have their headwaters in the western Andean slope, flow across a coastal plain, and then join shortly before entering the Pacific Ocean. Both rivers have numerous tributaries, many of which are navigable by dugout canoe, the major mode of transportation in the basin. Interfluvial areas have a rugged topography dominated by steeply sided ridges that rise a hundred meters or more above surrounding terrain. The contemporary inhabitants of the Santiago-Cayapas include an Afro-Ecuadorian majority, living largely in towns along the Santiago and lower Cayapas, and native American Chachi concentrated on the upper Cayapas. Although there is an increasing trend toward moving to aggregated settlements where schools or medical services are available, many Chachi eontinue to live in single house settlements dispersed along the Cayapas or its major affluents. Both Afro-Ecuadorians and Chachi appear to be relative newcomers to the Santiago-Cayapas, the former largely descended from nimeteenth century in-migrants from Colombia, while ancestors of the latter reached their current homeland on the Cayapas perhaps no earlier than the late eighteenth century (DeBoer 1995).

Two features in figure I deserve mention. One is the present-day town of Borbón situated at the confluence of the Cayapas and Santiago. Numbering over two thousand individuals, primarily Afro-Ecuadorians, Borbón is the economic hub for the basin. A second feature of note is the prehistoric site of La Tolita, located a short distance downstream from Borbón. Covering an estimated square kilometer and containing over forty earthen mounds, La Tolita is the most impressive archaeological monument of the

region. Although famous for its looted antiquities, only in recent years has the site received systematic archaeological attention. It is now known that La Tolita served as the region's paramount center during the period ca 200 BC to AD 350 (Valdez 1987).

Our archaeological survey has concentrated on the area flanking the Santiago and Cayapas rivers and their tributaries as well as the interfluves separating them. About 20% of the basin has now been surveyed and over three hundred archaeological sites spanning three millennia have been recorded. The archaeological sequence has been documented in detail elsewhere (DeBoer 1996) and can be sketched, with the help of

Figure 1: Map of the Santiago-Cayapas



Basin, northwestern Ecuador.

semicolons, in one lengthy sentence. A poorly represented and defined Mafa phase is followed by a

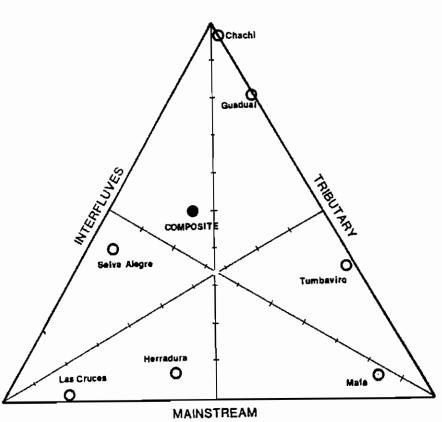
better understood Selva Alegre phase dated to between 400 BC and AD 200, a period concurrent with the rise of La Tolita as a major site; the subsequent Guadual phase dates to ca AD 200 to AD 450, a time overlapping the apogee of La Tolita but extending beyond that center's seemingly abrupt abandonment at about AD 350; in order, post-Guadual phases are Herradura-Las Cruces, Tumbaviro, and finally the historic Cantarana and Chachi phases, the latter two identified with Afro-Ecuadorian and Chachi occupations respectively.

An initial question is where were settlements located at various times in the past? Did most cling to the banks of the Santiago and Cayapas mainstreams, as is the case today? Or were navigable tributaries, or even interfluves, favored zones for settlement? In figure 2, total site area for each phase is partitioned according to the three zones of mainstream, tributary, and interfluves. The most impressive result of this tripolar graph is the extreme variability in preferred settlement location. Thus Guadual and Chachi site areas are overwhelmingly mainstream in distribution. contrast, Selva Alegre, Herradura, and especially Las Cruces site areas predominate along tributaries, while Tumbaviro and Mafa occupations concentrate in the Nor are these wildly fluctuating distributions time-transgressive; that is, we do not see a progressive shift from interfluves to mainstream, nor the reverse movement inland. These settlement

changes over time can be described better as pulsating. Thus from Mafa to Guadual, the change was from the interfluves to the mainstream. After Guadual, this trajectory was reversed, as if the mainstream were acting like a siphon, first sucking in settlements and then expelling them, and then again drawing them into the mainstream during the recent Chachi-Cantarana occupation.

Settlement form, as well as distribution, varied dramatically over time. These changes are diagrammed schematically in figure 3. During the Selva Alegre phase, a group of hamlets, or small villages, centered around a large settlement having one or more earthen mounds. The exact functions of these mounds are unknown, but a public or ceremonial significance is likely. These mound-bearing sites appeared during the growth of La Tolita as the largest regional settlement, and it may be that they represent secondary centers within an emergent La Tolita polity. In Guadual, the Selva Alegre pattern of hamlets swarming around a mound center continued but shifted to the mainstream. During Herradura-Las Cruces times, the center with public mounds dropped out as a settlement form, seemingly to be replaced by villages up to a hectare in extent. Smaller hamlets are found in the vicinity of these villages. In addition, as alluded to earlier, Herradura-Las Cruces evinced a turning away from the mainstream to navigable tributaries.

Tumbaviro



radical departure. was a Tumbaviro sites overwhelmingly small (modal size of 0.02 ha), each apparently representing single house. These sites are most commonly found interfluvial perched upon ridges, far from navigable streams.

Figure 2: Tripolar Graph showing the percentage of distribution of site area along mainstreams, on navigable tributaries. Open circles indicate archaeological phases. Solid circle is composite total for all phases

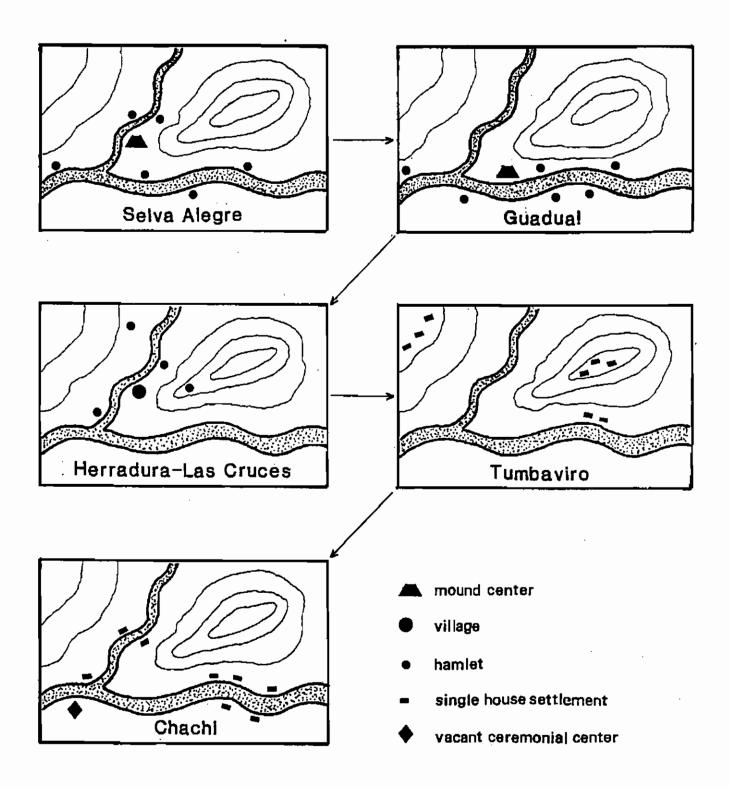


Figure 3: Schematic distribution of settlement types (as defined in legend) during five sequent phases. Wide strippled band indicates mainstreams; narrow strippled band indicates navigable tributary; thin lines show interfluvial topography.

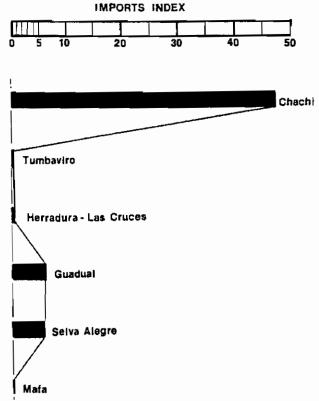
Often several such house sites occur at intervals of one hundred or so meters, well within shouting distance, and it is unlikely that the discrete single house site ever represented the actual Tumbaviro "eommunity." Finally, to complete this whirlwind tour, let's turn to the case of the historic Chachi whose archaeological remains are easy to recognize on the basis of a highly distinctive pottery that the ethnographer Barrett (1925) described early in this century. Like Tumbaviro, most Chachi sites are small and consist of a single house. In contrast to Tumbaviro, Chachi sites occupy the banks of mainstreams or their tributaries. As in Tumbaviro, these house sites often form loose but recognizable clusters, or vecindades (neighborhoods). Several such neighborhoods periodically convene at otherwise vacant ceremonial centers (DeBoer and Blitz 1991). During these ceremonial aggregations, a government of various officials, including police, is installed briefly to deal with the specter of a crowd, whose members are otherwise accustomed to dispersed and fiercely egalitarian living conditions.

In the preceding clipped and condensed stagesetting, "what" and "when" have been addressed, while "why" issues have remained silent. How do we explain, or, choosing a softer voice, how do we attempt to understand this wildly variable archaeological record in which people periodically hug the mainstream or retreat to precipitous, interfluvial redoubts? First of all, I am forced to discount major environmental changes as a determinative factor. This choice is not a theoretical predisposition so much as one based on available, albeit scant, evidence. Phytolith and pollen remains indicate that the Santiago-Cayapas environment has been a humid tropical forest studded with anthropogenic clearings over the past three millennia (Pearsall and DeBoer 1996). technological innovations relating to the subsistence sphere are not in evidence, although fishing gear such as stone net sinkers is unsurprisingly more common in riverside settlements. Maize and a suite of root crops are evident from the beginnings of the sequence, although the potentially revolutionary and presumably post-Columbian introduction of plantains, the current staple, is a probable exception to this picture of relative techno-environmental stability. Following the old adage that variability cannot be explained by a constant, we must look elsewhere in order to comprehend the fluctuating social landscapes of Santiago-Cayapas prehistory.

One problematic aspect of the oscillation between mainstream and interfluve is why the latter should ever be preferred for occupation. Most advantages would seemingly accrue to the mainstream: more arable (although flood prone) soils; rich quantities of riverine and riparian fauna; and greater canoe-based mobility. All of these advantages are cited by today's Chachi, although the interfluves are also used for fields and as a reserve for hunting much-esteemed terrestrial or arboreal game. Above all, the rivers are highways by which the Chachi visit neighbors, attend functions at the ceremonial centers, and transport small lots of chocolate, coffee, or other cash crops to Borbón. In short, a riverine residential pattern is outward looking and engages a regional arena of interaction. In contrast, the interfluvial pattern is inward turning, if not downright isolationist.

If this diagnosis is correct then it should be detectable in the archaeological record, that is, riverine orientations should correlate with greater quantities of non-local goods. As shown in figure 4, this is indeed the case. Imports are comparatively abundant in the Selva Alegre and Guadual phases, are exceedingly common in Chachi archaeological sites, and are virtually absent from inland Mafa and Tumbaviro settlements. These results make the insularity of

Figure 4: Imports index for sequent phases. The index is defined as number of imported objects (multiplied by 100) divided by phase duration in years (see DeBoer 1996).



phases such as Tumbaviro all the more quizzical. What aspects of the social landscape could prompt people to live on ridges perched high above a water supply and a long walk away from the nearest canoe port? In fact, there is a recent and nearby analogue for

this kind of settlement pattern. The case is that of the Awa-Kwaiker (Coaiquer), contemporary denizens of the forested piedmont of southwestern Colombia. The traditional Awa settlement pattern was one of dispersed houses located atop interfluvial elevations (Ehrenreich 1984, 1985). The rationale for this pattern was defensive. As Cerón (1986: 81) describes the situation: "As part of their defensive strategy, the Kwaiker attempted to avoid contact with outsiders. Houses were dispersed and situated on high ground such that they commanded a view of all approaches to the settlement [my translation]." During historic times, the feared outsiders have been European or African slavers and raiders, but there is no reason to believe that similar fears were unknown in prehistory. In the case of Tumbaviro, we have not yet been able to identify these sinister foreigners, but it should be noted that during late prehistoric times, several large and populous ports dotted the Esmeraldas coast (Guinea Bueno 1984, 1988; Nicholson 1953). The Tumbaviro folk in the Santiago-Cayapas interfluves appeared to be doing their best to stay clear of this coastal activity and, as a hypothesis, we can suggest that the Tumbaviro attitude was that coastal intentions were not entirely neutral.

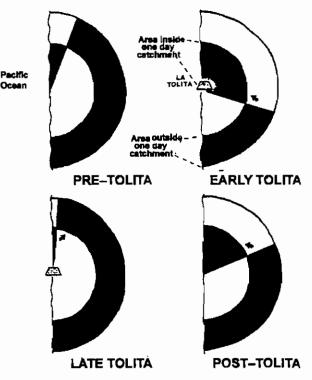
But there is a potential flaw in this reasoning. Riverine settlements and relatively high levels of imports correlate with the presence of large regional centers such as the prehistoric port of La Tolita or the modern road-terminus town of Borbón. Perhaps it is the magnetic effect of these centers of economic activity that shift settlement regimes to the mainstream. Again, the archaeological record is instructive in assessing this possibility.

Figure 5 plots site area for the Santiago-Cayapas sequence in terms of accessibility to La Tolita. Accessibility is measured in terms of whether or not site area falls within a ten hour upstream canoe paddle from La Tolita. The basis for this cutoff is a comparative literature on chiefdoms and other "middlerange" polities which suggests that administrative control rarely extends beyond one day's travel from the paramount center (e.g., Spencer 1982: 6-7). Of greatest interest are the patterns evinced for the two phases contemporary with, or overlapping, La Tolita, called Early Tolita (Selva Alegre) and Late Tolita (Guadual) in the figure. During Early Tolita, La Tolita apparently acted as a magnet, drawing in its hinterland population. This centripetal effect was dramatically reversed during Late Tolita. Hinterland population resettled well upstream and outside the convenient "striking distance" of La Tolita. Interpretation of this reversal is difficult but, at face value, would seem to be a purposeful withdrawal from La Tolita. Furthermore, this withdrawal either portended or directly signaled the unraveling of La Tolita's regional hegemony. By AD 350, this center, which for a few centuries had been the salient fixture of the political landscape, was

abandoned. As seen in figure 5, after this collapse, La Tolita's former one day catchment was reoccupied.

I would like to conclude with three points that have already been intimated. First, as the lone archaeologist contributing to this volume, I hope that my colleagues in cultural anthropology sense that archaeological evidence has rich potential understanding settlement processes, particularly as they operate over the long spans of time uniquely monitored by the archaeological record. Secondly, the Santiago-Cayapas case elearly indicates that the humid tropical lowlands of South America had eventful and dynamic histories long before the coming of "people with history." Thirdly, these histories are unlikely to be understood as mere epiphenomena to environmental limitations or technodemographic innovations, a bias that continues to bedevil much anthropological inquiry in the Neotropics. Rather we have to imagine more realistic pasts and ecologies in which human actors feasted, starved, cooperated, competed, created, emulated, resisted, succeeded, failed, and otherwise maneuvered across complex and mercurial landscapes in which they were neither bobbing puppets tethered by the past nor sure prophets of any inexorable sequel.

Figure 5: Percentage of site area found within



and outside the one day's travel catchment of La Tolita. Arrows indicate direction of population movement.

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ARCHAEOLOGICAL IMPLICATIONS OF CHANGES IN WACHIPAERI SETTLEMENTS

Patricia J. Lyon

This contribution was originally written as a cautionary tale directed to archaeologists (see Acknowledgements). Its emphasis on settlement pattern within a broad historical and social context, however, suggested that it might well fit with the other studies in the present volume. When it was brought to her attention, the editor was kind enough to include it with only minor revisions.

Archaeologists often think of themselves as rigorous scientists, who carefully state their hypotheses and the methods they plan to use to test them. What they do not state, and indeed are seldom aware of, is the belief system underlying their hypotheses. While the precise content of this belief system may change depending on the current Theoretical Fad, it is always there, a bed of implicit assumptions upon which rest their interpretations. As with other belief systems, the content is almost never examined by the adherents, and anyone who presumes to question it is received with anger or disbelief, or is simply ignored.

In this paper I question two widely held

archaeological assumptions. The first is that abrupt changes in the archaeological record, especially those affecting such basic elements as settlement pattern and house type, are the result of, if not conquest, at least strong outside pressure. The second assumption is that the effects of conquest will be reflected in the archaeological record shortly after the event that caused them.

For the purpose of this discussion I shall present a case that I recorded a number of years ago among the Wachipaeri, a group of Harakmbut-speaking horticulturalists and hunters living in the Andean foothills around the headwaters of the Alto Madre de Dios River to the northeast of Cuzco (Fig. 1), I first visited the area in 1954-55, and again on various opportunities between 1960 and 1965 (See Lyon 1967). A smallpox epidemic in 1948 had almost destroyed the Wachipaeri, and there remained only three nuclei in 1954: one house to the west, on a left tributary of the Tono River; a small group mixed with Machiguenga (Arawak speakers) on a left tributary of

the Piñi-piñi; and the houses to which I shall refer located on the east side of the valleys.

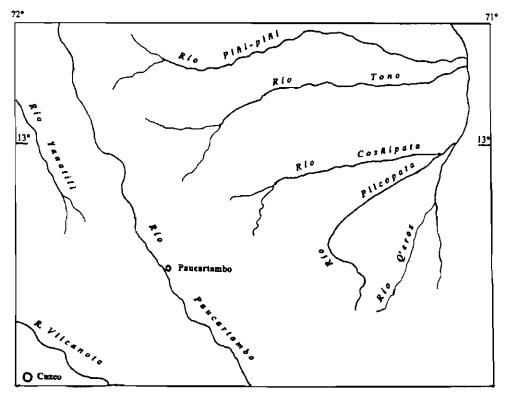


Figure 1: Map show ing area now called Cosñipata comprising the rivers to the east of the Paucartambo, which the headwater are tributaries of the Madre de Dios.

Historical Background

While the event that inspired this paper took place in 1960, a brief historical review is needed for background. Even before the arrival of the Europeans the area, now called Cosñipata, was invaded by the Incas, who took possession of part of it, removed its inhabitants (most likely the ancestors of the Wachipaeri), and established coca plantations along with imported colonists to plant and tend them. These fields belonged, not to the state, but to the individual rulers.

When the Spaniards arrived in Cuzco, they expropriated these coca fields, along with other properties of the rulers. There is evidence that, as late as 1563, relations between the coca growers and the lowlanders were friendly (AGI, Justicia 662 [tomo 3], folios 241v and 243) but, for a series of complex reasons, this situation changed. Coca became more valuable, coca plantings were expanded, and by 1576 we begin to hear of sporadic raids by the bordering lowlanders (Acosta 1954:274).

Not until near the middle of the eighteenth century is there again reference to peaceful contact between the indigenous lowlanders and the Spaniards (Esquivel y Navia 1980, vol. II: 278; Llanos y Vergara, I906: 165-166). In 1835 General William Miller made a brief visit to Cosñipata and actually spent a night in a Wachipaeri house. To my knowledge, his is the first use of the name Wachipaeri ("Guatipaires"; Miller 1836:180), as well as the only description of one of their houses (Miller 1836:182):

...we entered Francisco's well-built house, which is a hundred feet long and forty wide; its walls six feet high, and has an excellent pointed roof of red straw, or rather red leaf. The ends of the house are oval-shaped, and each end has a door, but there are no windows. The interior resembles a large barracks-room, having on each side wide stretchers [platform beds] made of cane. The whole of [Francisco's] family and dependents reside in this building, and besides himself and wives the establishment consists of nine grown up men, three women, and a few boys, but there is ample accomodation for three times the number beneath the same roof.

It is clear from both Miller's account and that of Espinar (1846), as well as information I gathered in 1955 on the pre-epidemic locations of Wachipaeri houses, that the traditional settlement pattern was one in which dwelllings like that described above were dispersed over the landscape at a considerable distance from one another. According to my informants, houses were generally located on or very near one of the major rivers, none of which is navigable. At times of increased hostilities with their neighbors or outsiders, however, they would relocate to one or another of the smaller tributaries, some of which are no more than

streamlets. Palisades were sometimes, perhaps always, erected around the houses. Each house seems to have been independent of the others, except for loose, informal relationships based on geographical proximity and, presumably, kinship.

House And Settlement Changes

In 1960, the Wachipaeri settlements to which I shall refer were located on the hacienda Keros, property belonging to Mid-Missions, a U.S.-based Protestant missionary group that had moved into the area not long before the 1948 epidemic; the missionaries, however, were now residing in Cuzco and visited the mission only occasionally. In the course of a brief visit, I found a large, European-style house, belonging to the missionaries, with a nearby chapel. A considerable distance away and well-separated from one another there were three Wachipaeri dwellings.

These houses were very like the one Miller described. They had the form of elongated rectangles with rounded ends, and their high, thatched roofs followed the same plan; there was a doorway at each end but no windows. Each house measured some 15-30 m. in length, and was large enough to house a good-sized extended family. The walls, of flattened palm wood, were about two meters high; the interior was unpartitioned. Around the inside were a number of platform beds with their heads against the wall and with fireplaces on the packed earth floor at their feet. Each of these communal houses was set in the middle of an oval, cleared area, in some cases with fields immediately adjacent, and about one half to one hour's walk from its nearest neighbor and from the mission house.

When I next visited Keros, in 1962, there were basic changes; the Wachipaeri settlement pattern and house type had both changed. The three large houses had been abandoned and their twenty-five occupants had resettled next to the mission house. There, instead of a traditional house or houses, I found a settlement very similar in form and appearance to those of the intrusive mestizo and Runa residents in the valley.

Around a large, flat, plazalike space were six houses built in a style common today throughout the Amazon Basin. They were rectangular, with palmwood floors raised about a meter above ground level on log pillars. The walls, also of palm, rested on this floor, about 30 cm. in from the edges, and rose some 2 m. above it. Each house had at least one internal partition as well as wooden doors, both external and internal, each with its padlock. Five of the houses contained a nuclear family, while the sixth and largest accommodated a widower, his son, daughterin-law, and grandson. Even in this case, however, the new pattern was unbroken since the house was actually a duplex with its two halves completely separated by a

central wall; the old man lived in one half, the rest of the family in the other.

I found only two traces of the earlier house type. One was a separate kitchen, built in the form of a miniature traditional dwelling but with a single doorway that was placed in a side wall facing the dwelling. The other reminder was in the roofs, some of which were rectangular with rounded ends like the old ones rather than being pitched- or hip-roofs like the others in the area.

Direct And Indirect Causes

As a properly indoctrinated anthropologist, I immediately assumed that the change had resulted from some outside pressure, probably from the missionaries. I was not so lost to all reason, however, that I failed to ask the Wachipaeri what had caused such a radical change in their life style; the answers were both enlightening and surprising. One of the men told me that they had moved because the women had felt lonely and isolated, since there was only one adult woman remaining in each of the large houses. The women, on the other hand, told me that it was the men who had wanted to move so that they could play soccer in the afternoons, something they could not do easily when they lived so far apart and distant from the soccer field. What I had taken for a plaza was actually a soccer field. Someone also suggested as motive a desire to live closer to the chapel so they would not have to walk so

When I asked why they did not build the usual kind of house in this new location, they said simply that the new style was the result of observing other houses in the valley. They had, of course, been observing similar houses for some four hundred years.

Probably all of the reasons given weighed in the final decision to establish the new settlement. I did observe, however, that the men spent a lot more time playing soccer and the women helping each other and socializing than anyone did going to church.

Concluding Remarks

Now, let us return to the assumptions I mentioned earlier, and consider what the interpretations might be were the changes of the sort I have just described to be observed in the archaeological record. I suspect that such an abrupt change of settlement pattern and house type would be explained as a result of conquest. Such an explanation would be quite correct, as I'll explain, even though the conquest of this area took place at least four hundred years before the changes took place.

The direct cause of the small number of adult women, and hence of their loneliness, was a smalllpox epidemic that almost wiped out the Wachipaeri; smallpox results from the European conquest. The game of soccer, another factor in the changes, was also introduced by the Europeans, as was the Christian

religion, which was the source of the missionaries who built the ehapel and eonverted the Waehipaeri. Finally, the new house type, although likely of American origin, was also probably introduced to this area by Europeans, as was the settlement pattern of nuclear-family houses arranged around a plaza.

Thus, the first assumption I have questioned holds in this ease, but not the second. That is, in the long run the changes were brought about by conquest, but they were not reflected in the archaeological record shortly after that event. Moreover, there is no way for an archaeologist to determine the proximate causes of these particular pattern changes.

As were historians until recently, archaeologists have been all too prone to interpret change in terms of supposed momentous events, either natural or cultural. In so doing, we have lost sight of the human beings we hope to understand, and of the fact that it is not cultures or societies that do things, but individual human beings. People do things because of their own motivations, however culturally conditioned these may be.

When asked why they had changed their settlement pattern, the Wachipaeri responded essentially: loneliness; boredom; and, to a certain extent, a desire to exert less effort (surely, an important motivation throughout human history). The question, "why," will usually elicit responses in terms of motivations. The reason that some archaeologists do not like this question or wish to deal with it is that archaeology is not at all equipped to deal with motivations since, if they are reflected at all in the material remains and the associations among them, it is only indirectly.

While archaeology is ill-suited to answering the question, "why," it can, if properly done, respond to a number of other questions. Our endeavors to understand the human past would be better served if the energy currently expended in a futile search for "why" were to be devoted to improving our skills in responding to "who?" "what?" "when?" and "where?" and even, occasionally, "how?" These are all questions the answers to which, with luck, skill, and hard work may be found in the remains that are left to us.

Acknowledgements

The portion of my fieldwork among the Wachipaeri referred to here was funded by the American Museum of Natural History, whose support I gratefully acknowledge. I must also thank Dra. Berta Degregori, then Director of the library of the University of Cuzco, for allowing me access to their collection of nineteenth century newspapers, and to the staff of the Archivo General de Indias for their many kindnesses while I was working there. The idea for the paper came from a comment by Deborah Pearsall, and the form of the argument from a remark by Lucy B. Rowe about the

dangers of assumptions. I hope that the argument has been improved by my attempt to respond to questions from John Topic and Katharina Schreiber on earlier versions. Any faults are, of course, entirely mine.

Earlier versions of this paper were presented at the 25th Annual Chacmool Conference, November 12-15, 1992, Calgary, and the 14th Annual Northeast Conference on Andean Archaeology and Ethnohistory, October 20-22, 1995, Providence.

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SETTLEMENT PATTERN AS ECONOMIC AND POLITICAL STRATEGY: THE XAVÁNTE OF CENTRAL BRAZIL

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Native Amazonian societies have been subjected for many centuries to powerful forces of European economic and political expansion. An historical perspective is particularly important for the study of settlement patterns in these societies, patterns that are not only the result of strategies for exploiting local resources, but, in groups that have survived to the present, have evolved over time in the context of resistance to domination. Today, native societies, as they struggle to maintain their cultural integrity and territorial base, are becoming increasingly involved with regional, national, and even international, policies and economies.

Throughout the known history of many Amerindian groups strategies of movement have been the primary defense in facing the colonization frontier. In many cases, sedentary societies suffered the most severe impacts of contact. Semi-nomadic groups like the Xavánte¹ of central Brazil, less dependent on growing crops for their food supply, could disperse to elude capture or slaughter. As Ferguson and Whitehead (1992:19) point out, mobility is often a major advantage for indigenous groups resisting state expansion.

At present, most Brazilian indigenous societies, including the Xavánte, are confined to reservations. Mobility is no longer an alternative. The settlement pattern of a group confined to a reservation depends in part on the distribution of resources within the reservation: arable land, game, fish, and other wild products. However, because of population density within the reservation and resulting environmental degradation, these resources in most cases are not sufficient to provide for the needs of the population. They must be supplemented, either by participation in the market economy or by seeking outside assistance of various kinds. Attempts to gain further resources may involve such strategies as concentration of settlement near a mission or

movement in and out of the reservation for cash labor.

In this paper, we will follow changes in the settlement pattern of the Xavante Indians as they responded to pressures of the national society. In the past, as they faced the advance of the colonial frontier, a fluid settlement pattern that involved opportunistic fission and fusion was an essential element in their resistance. For recent years we will use data collected at two different periods, in 1976-77 (by Flowers) and in 1994 (by Gugelmin) to show how the settlement pattern of the Xavante of Pimentel Barbosa reservation has changed in response to resource availability, even as it continues to be an integral element of their political strategy in a broad sense. This diachronic study demonstrates how difficult it may be to predict the direction of change at the local level when communities are subjected to pressures generated at the regional and national level.

The Xavánte

The Xavante, who now number some ten thousand, live on six reservations in eastern Mato Grosso. With the Xerénte, they are the only survivors of the Central Jê groups (which included the Xakriabá, Akroá, and Guegué) that formerly inhabited the savannas of the Brazilian plateau from Bahia to Goiás. In the traditional Xavante village pattern, still followed in several communities, beehive-shaped houses are arranged in a semicircle around a central plaza that is the site of public activities. Xavánte social organization is complex, with exogamous clans, lineages, age sets, and age grades. Public life is characterized by intense political activity and factionalism (Flowers 1983a; Maybury-Lewis 1967; Graham 1995). In recent years the Xavante have applied the political skills developed in the context of intergroup alliance and conflict to dealing with the wider society (Conklin and Graham 1995).

Mobility As Defensive Strategy

Before they were confined to reservations, the Xavante settlement pattern, like that of other central Brazilian groups, involved seasonal concentration in relatively large villages near land suitable for agriculture, alternating with dispersal into trekking parties that subsisted by hunting and gathering. This was probably an efficient way of exploiting the resources of the cerrado habitat, characterized by pronounced seasonal variation and geographical patchiness (see Flowers 1994a). This pattern of concentration and dispersal also seems to have helped them to survive invasions of their territory in previous times, as they were able to assemble a substantial number of warriors for attack and then break up to elude pursuit.

Until the mid-nineteenth century the Xavante lived east of their present habitat in what is now the state of Goiás. In the early eighteenth century a gold strike brought hordes of prospectors into the region and mining camps sprang up along the tributaries of the

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Map 1: Map showing the location of Xavante groups in the eighteenth century and migration to the Rio das Mortes region in the mid-nineteenth century.

Tocantins and Araguaia. In 1748 Goiás became a captaincy with the seat of government at Vila Boa, central to the mining district. Inevitably the movement of settlement along rivers affected Xavante subsistence. They were denied access to fishing and agricultural land, while at the same time the settlers' cattle and crops became tempting resources. Letters from the colonial governors to Lisbon about "trouble with the Indians" tell us a good deal about the Xavante strategy for dealing with the invaders.

According to Governor Mello (RIHGB) 1918:83-84) when the Xavante attacked the mining camp at Crixás in 1764 they did so in considerable force, since the Indians' advance on the settlement was only halted by arming 300 slaves who were employed in the mining operations. To forestall such attacks the settlers resolved to raise a "bandeira," numbering some 200 men, placed under the command of João de Godoy, "the most resolute and most intelligent Paulista this Captaincy has for such enterprises."

After many days of searching, the Indian trackers that accompanied the troops found a large Xavante village on which the bandeira made a dawn attack. Some Indians were killed and the rest fled, but they did not go far and appeared to be preparing to counterattack. João de Godoy sent a messenger to propose peace; the Indians promptly shot him. The Xavante then retreated slowly, drawing the bandeira in pursuit through difficult terrain. Any remaining enthusiasm among the troops for continuing the campaign was soon washed out by the breaking rains, so the bandeira retired to the settlements. As Mello (RIHGB 1918:90) pointed out, in the rainy season muskets got wet and would not fire, giving the advantage to adversaries armed with bows and arrows. Although João de Godoy informed the governor that in the next dry season his troops would attempt to drive the Xavante out of the region by burning their villages, this strategy does not seem to have been effective, for over the next ten years numerous Xavánte raids on mining camps were reported (RIHGB 1918:96-97).

> later governor succeeded in making peace with

some Xavante groups and concentrating them in mission settlements. But by the end of the century the missions were abandoned as the Indians fled or died off from epidemics. As late as 1824 Cunha Mattos (1875:18) estimated that the Xavante, the most numerous group in Goiás, still had four thousand fighting men. This would indicate a total population of at least twelve thousand. Nevertheless, the Indians were fast becoming outnumbered by colonists and the land available for their subsistence activities decreased and was circumscribed. By the 1840s the Xavánte were separating from the neighboring Xerénte and beginning to withdraw across the Araguaia. In the 1860's Xavánte groups were reported settled west of the Rio das Mortes in Mato Grosso (Magalhães 1939:99) (see Map 1). They migrated into a region which was ecologically similar to the one they had left, but where there was as yet no white settlement; it also seems to have been empty of indigenous groups, for their only neighbors, with whom they occasionally came into conflict, were the Karajá of Bananal island, and the Bororo of the upper Rio das Mortes (Maybury-Lewis 1967:11-12).

Isolation and Expansion

After they were pushed westward by the advancing colonization frontier, the Xavante maintained isolation for over eighty years and their population appears to have expanded rapidly. The Xavante of Pimentel Barbosa Reservation tell of a "great village" called Tsereprê west of the Rio das Mortes and somewhat to the north of their present location. This village, which according to informants lasted for many years, eventually fissioned, probably around 1920, and some groups moved farther west and north. From this time on it becomes possible to identify specific groups, some of whose village sites are within current reservations. Lopes da Silva (1986:31-35) distinguishes three broad groupings of communities: those that moved westward and are now mostly settled on Marechal Rondon and Parabubure reservations, those farther south that came under the influence of Salesian missions, now Sangradouro and São Marcos reservations, and the eastern Xavante, those who remained in the vicinity of Tsereprê and now are settled on Areões and Pimentel Barbosa reservations. villages of the eastern Xavante branch seem to have remained in fairly close contact. When intra-village disputes occurred, the weaker faction could leave, either to join relatives in another village or to form a new village. Young men, often a group of brothers, might seek wives in another village. As Maybury-Lewis (1967:205) notes, "They regarded their villages as temporary aggregates which could at any time undergo changes in membership, perhaps even radical changes such as would alter the balance of power between them."

Contact and Sedentism

In the 1940s the Xavante were finally brought into permanent contact and the wide territory they had occupied was fragmented by land claims (Maybury-Lewis 1967:6). In the late 1950's, the eastern Xavánte group led by Apowe, the first group to accept the gifts of the pacification team, had built their village near the banks of the Rio das Mortes, 20 minutes walk from the S.P.I. attraction post at São Domingos, which they regarded as "a source of provender and manufactured goods" (Maybury-Lewis 1967:28). according to David Maybury-Lewis who studied them at this time, in 1957-1958 the group still covered an extensive area in their seasonal treks, and there was considerable contact, often hostile, among Xavánte villages. In spite of the Indian agent's status as a source of gifts, most of which he distributed to the chief and the members of his lineage, he was unable to persuade the Xavánte to give up nomadism or take up agriculture systematically. According to an informant who was an Indian post employee at that time, there were years when they planted no crops, since there was no good agricultural land near the Indian post. They subsisted on wild foods supplemented by generous handouts of manioc flour from the post. In resisting sedentism the Xavante frustrated implicit government policy which was to reduce the territory controlled by Indians so that the region could be opened to settlement.

It was not until the 1960s that the Pimentel Barbosa Xavánte suffered the full effects of the contact that started in the 1940s. This was a period of many deaths from infectious diseases, and infant mortality was particularly high. On his return in 1962, Maybury-Lewis (1967:28-29) noted a decrease in population and a different attitude toward outsiders.

...the Shavante had learned by now of their comparative impotence, and they were acutely conscious of their own dwindling numbers, a topic to which they returned again and again in their conversations with me, who had known their village in the days when it was numerous and strong. They were therefore more inclined to imitate the ways of the outside world. They had, for instance, planted a much larger area than they did in 1958, and had adopted the cultivation of manioc, a thing they had resolutely refused to do before.

Land that the Xavánte had roamed freely a few years before had been divided up and sold to companies from São Paulo which engaged gangs of workmen to clear their holdings. "The powerful Shavante bands that had previously managed to keep settlers off these reaches had been reduced to enclaves which were, for the first time, aware of their impotence in the face of encroachment" (Maybury-Lewis 1967:6).

Finally, in the early 1970s, a reserve was demarcated with an area of 205,000 hectares and named for Pimentel Barbosa, the leader of an early S.P.I. pacification team who was killed by hostile Xavante warriors. The group led by Apowe moved away from the Rio das Mortes and built a village at the site that it As other Xavante groups were still occupies. contacted and settled near Indian posts and missions, separated by growing Brazilian settlements and ranches, and with territories eventually defined by reservation boundaries, communication and movement between them became more difficult. The fluid settlement pattern that had served the Xavante both when they were resisting the colonial frontier and when they were defending their isolation was no longer an option.

Settlement Pattern and Subsistence in the 1970s

At the time of Flowers' 1976-77 fieldwork on the Pimentel Barbosa reservation, the community occupied one village with a population of around two hundred and fifty. Twenty-three palm leaf houses, some in the traditional conical shape and some square like those of rural Brazilians, formed a horseshoe with the open side toward a small stream and the cultivated gardens. The place had been occupied before; informants showed Flowers the site of a previous village where pottery shards indicated a pre-contact occupation. Another nearby village site was probably occupied in the 1950's, as shown by the remains of sieves and other Western goods that the Xavánte were acquiring from the Indian post.

Rice, which had been introduced a few years previously, had already become the agricultural staple. Several men were cultivating large gardens in order to produce surplus rice for sale. The reservation was surrounded by large farms where Xavánte men occasionally worked. The ranchers tried to cultivate good relations with the Xavánte by small gifts and by providing transportation to Matinha, the town on the new highway, as well as giving community leaders an occasional lift by plane to Brasilia.

Flowers' time allocation data clearly showed the effect of rice production on community life. Agricultural work, mainly planting and weeding, practically monopolized adult labor during the early months of the wet season (Flowers 1983b). There was relatively little hunting and gathering during that time, and rice dominated the diet, although the amount consumed diminished as stocks ran low. After the harvest, in February, there was more time for hunting, fishing, and collecting, although a number of men left the village to help harvest rice on neighboring farms.

Even as interaction between the Xavante and the neighboring ranchers increased, relations became more and more tense. In 1975, about a year before Flowers' arrival, some local FUNAI officials had persuaded the community to cede a portion of land to a

rancher in exchange for sewing machines, cattle, and construction of a bridge. This proved to be a poor deal for the Xavánte, as the cattle were not delivered and the bridge was built so flimsily that it washed away in the heavy rains. The southern part of the reservation was occupied by several ranches that had obtained title based on a map that the Xavánte believed to have been falsified by a FUNAI cartographer. Under the leadership of the chief's son, Warodi, the Xavánte cut a trail marking what they held to be the correct boundary.

The "Xavante Rice Project" of the 1980s

In the late 1970s the Pimentel Barbosa Xavante were starting to market part of their rice crop, and were lobbying FUNAI for a tractor to increase production. FUNAI was beginning to implement a well publicized scheme to make Xavante reservations scale rice producers by introducing mechanization. In large part the "Xavante Project" was a political response to increasingly militant demands by Xavánte leaders that their reservations be demarcated and ranchers who encroached on Xavante land (having sometimes obtained title through corrupt FUNAI officials) be expelled. Xavante delegations appeared frequently in Brasilia, embarrassing FUNAI by confronting high officials, and presenting their case to the press and the political opposition (Graham 1995; Maybury-Lewis 1985; Menezes 1982).

At the same time, the Brazilian military government was targeting southeastern Mato Grosso for economic development—building roads, encouraging colonization, and providing tax incentives for largescale agricultural and cattle raising enterprises. With the Xavante Rice Project FUNAI hoped to appease those who claimed that large Indian reservations were incompatible with economic progress because the land was held unproductively. By making the Xavante producers within the regional economy, they were to economically become self-sufficient, investments in agricultural and processing machinery as well as improved health care and education. FUNAI officials also hoped to diminish Xavante political activity and their constant visits to Brasilia by keeping them busy on the reservations (Graham 1995:46).

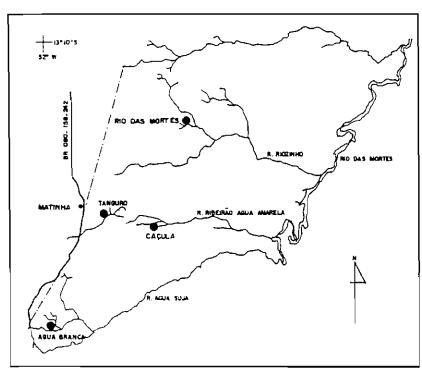
At first the Pimentel Barbosa Xavánte engaged in the project with enthusiasm. In 1982, according to Graham who was present at the time, nearly the entire population was engaged in harvesting the crop from a 100 hectare field cleared in the cerrado on the outskirts of Matinha, at a distance of some 60 km from the village (Graham 1995; Maybury-Lewis 1985). But by 1988 the expensive agricultural machinery was rusting on the cerrado, and the Pimentel Barbosa Xavánte were planting rice only in their swiddens for their own subsistence. FUNAI was no longer financing the Project, which had become an economic burden and a political embarrassment. Nor was rice production any

longer the economic staple of the region, which had turned to soybeans and cattle raising.

In 1979, two years after Flowers Pimentel left Barbosa, Warodi, who had succeeded his father as chief, mobilized the leaders of other Xavánte communities who met at Pimentel Barbosa to plan a joint strategy (Graham 1995). With the backing of the other communities, Pimentel Barbosa men, painted and armed with war clubs and bows and arrows, surrounded the encroaching ranches and expelled the occupants. But there was no violence. As a young cowboy who was present reported to Graham (1995:38):

At dawn the house was surrounded. One of them [Xavánte] summoned the foreman to inform him that we had until noon to be gone... Then they helped us pack the pickup with all we could carry. Just before noon they sent us on our way. They'd always been friendly to us but, Jesus, they were angry then! We didn't even try to resist.

Finally, FUNAI bowed to Xavante resolve,



Map 2: Map of Pimentel Barbosa Xavánte Reservation, Mato Grosso, Brazil as of 1994.

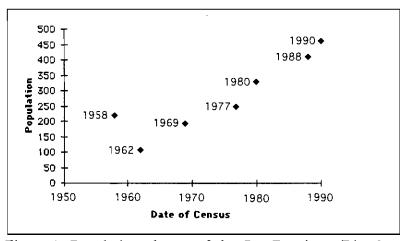


Figure 1: Population change of the São Domingos/Rio das Mortes Xavánte group from 1958 to 1990.

demarcating the Pimentel Barbosa reserve in 1987 with its present area of 328,966 hectares, a more than 50% increase over the area of the reservation in 1977.

In 1988, Flowers returned with Daniel Gross for a brief visit to Pimentel Barbosa. They found the village in the same location as in 1977, but its population had grown, mostly by natural increase, to over four hundred.² The Xavánte Rice Project had come and gone.

The visual aspect of the village was

particularly striking: although it was larger than 11 years before, and the trees that had grown around the houses gave it an air of permanence, it looked more "traditional," as the new houses were all built in the old conical shape, whereas in 1977 square houses like those of rural Brazilians were the fashion. The political leadership of the community was also A group of young men changing. educated in São Paulo and Goiânia had returned to the village with new ideas. The older generation of Xavante leadership had become expert in manipulating and pressuring FUNAI to gain advantages for their communities, but the younger group stressed independence from FUNAI. They had different connections with outsiders, with the National Union of Indigenous Nations and with national and international NGO's. With the help of the Inter-American Foundation and the World Wildlife Fund these young leaders were implementing a "sustainable development" plan to harvest and market native fruits and forest products.

The 1970s and the 1990s compared

Since 1990 Flowers, Carlos Coimbra of the Fundação Oswaldo Cruz in Rio de Janeiro, and Ricardo Santos of the Fundação Oswaldo Cruz and the Museu Nacional, have been engaged, with the cooperation of the community, in a study of the effects of contact and change on the subsistence, health, and nutrition of the Pimentel Barbosa Xavánte (Coimbra et al. 1996; Flowers 1994b; Santos et al. 1995, 1996; Friedman et al. 1992; Gugelmin 1995).

In 1991 the village, which had been in the same location since 1972, split, nearly half the population leaving to join two small splinter groups. In part the split reflected internal factionalism, as the chiefs of both the dissident villages are older men, while a young man who represents the "new leadership" became chief of the main village. However, there were also strategic reasons to occupy more effectively the larger reservation. As Graham (1995:50-51) notes, each village is entitled to claim its own Indian post, with the resulting benefit of several jobs with salaries paid by FUNAI, which makes fissioning advantageous. Both the new villages are on land from which ranchers were expelled; occupying this land

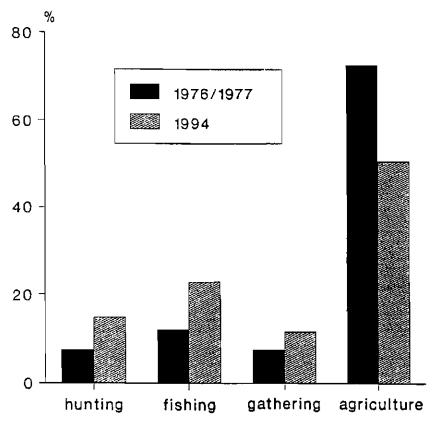


Figure 2: Time allocated to different subsistence activities by Xavánte adults of the Rio das Mortes village in 1976/1977 and 1994.

stresses the permanence of Xavante occupation. The population continues to increase: in 1994 there were 311 people in the main village and the population of the other two villages was around two hundred. Since 1990 our studies have concentrated on the main village.

In 1994, Gugelmin, as the research project for her masters' thesis, undertook a restudy of subsistence, nutrition, and children's growth, employing the same protocols, including time allocation, as those used by Flowers in 1976-77 (Gugelmin 1995). She spent two periods in the field, one in the dry season and one in the rainy. The data collected by Gugelmin, when compared to Flowers' data for the same seasonal periods, reveal changes in subsistence activities and their relationship to settlement pattern.

Figure 2 presents time allocation data for the principal subsistence activities of Xavante adults in 1976-1977 and in 1994. In the 1990s as in the 1970s, agriculture is the primary subsistence activity, with fishing second, and hunting and gathering third. The data show, however, that in the recent period agriculture has become *less* important than in the 1970s, and more time is now being allocated to

hunting, gathering, and fishing. Flowers (1983a, 1983b) reported food consumption data

reported food consumption data collected at Pimentel Barbosa. In 1976-1977 Flowers made observations at three periods of the year, noting the kinds and quantities of food consumed in two different households on three consecutive days. To investigate food consumption changes, Gugelmin (1995) carried out a new study at Pimentel Barbosa in 1994.

Figure 3 compares the composition of the Xavante diet in the 1970s with that of the 1990s according to the origin of the foods (horticulture, hunting/ fishing/ gathering, purchased foods). We can see that at present the Xavante are eating fewer cultivated foods and more foods obtained by foraging than in the 1970s. Although the consumptions of purchased foods has increased somewhat, they still account for only a small percentage of the Xavante diet. A more detailed analysis of dietary changes shows that rice consumption has declined and manioc has increased. Also, the consumption of wild plant foods (fruits, nuts, and tubers) has increased. Xavánte women are now collecting again considerable

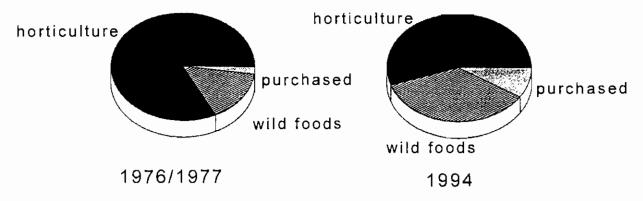


Figure 3: Composition of Xavante diet in 1976/1977 and in 1994.

quantities of the wild tubers that Maybury-Lewis, who went on trek with the Xavánte in the late 1950s, referred to as the basis of their diet: "They are gathered in large quantities in certain parts of the savannah and provide a nourishing, if starchy, diet" (Maybury-Lewis 1967:44). In 1977 Flowers saw only a few of these roots that women showed her as a curiosity of the "old days." In spite of the increase in time devoted to hunting and fishing, the consumption of animal foods is approximately the same. The increase in the contribution of purchased food, especially coffee, sugar, salt, and cooking oil is largely because those who receive social security payments or a FUNAI salary spend much of it on food.

Another interesting finding is that seasonal differences have diminished In 1976 Flowers found that in the rainy season people's time was so monopolized by agricultural tasks that little was left for other subsistence activities. Although agriculture is still the most important rainy season activity it is no longer so absorbing, so the diet remains more diverse. This is probably because rice is no longer being

produced as a cash crop. Figure 4 compares subsistence activities by season in 1976/1977 with 1994.

Transportation and Subsistence

How are the changes in subsistence strategy revealed by time allocation related to settlement pattern? At present the community has a Toyota pickup and a truck available for transportation. People are eultivating a few gardens near the village, but the large collective garden that the men were clearing May, 1994, is 5 km from the village. The men usually travel there on their bicycles, or the whole group may go by truck. Many of the family gardens are not accessible by truck, and the women, who do not use bicycles, often walk long distances to bring crops from the fields to the village. Cultivating a collective garden appears to be a strategy for the more efficient use of transportation.

The main village remains at the same place it has occupied since 1972. In previous times it would have moved as garden land within walking distance

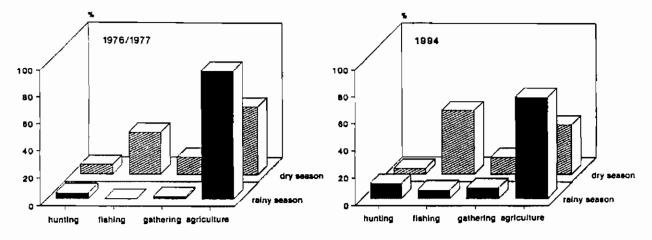


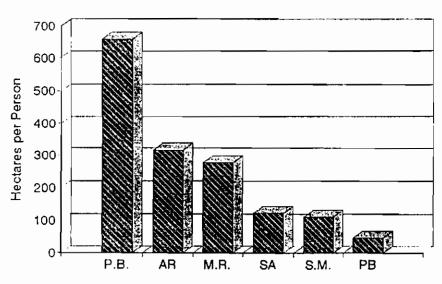
Figure 4: Seasonal differences in percentage of time allocated to subsistence activities by Xavánte adults in 1976/1977 and in 1994.

became exhausted. In 1977 most of the gardens were across a stream from the village, within 15-30 minutes walking distance. A few families were making gardens in more distant parts of the reservation, so they moved there and remained throughout the planting and harvest seasons.

The reservation borders on the Rio das Mortes, where the fishing is much better than in the small tributaries, on one of which the village is located. In 1977, fishing was practically limited to the dry season; family groups would travel to the Rio das Mortes and remain for a week or more. Some fish was smoked to bring back to the village. In August and September of 1976, more than half the village was away "on trek." At present people travel the 40 km to the Rio das Mortes by truck and return the same day with fresh fish. For this reason, fish has become a more important item in the diet.

Hunters also use the truck to take them to more distant hunting locations. The men from the main village hunt over only about half the reservation. Hunting and fishing areas seem to be divided between those exploited by people from the main village and those from the splinter villages. Women, however, do not have the same access to truck transportation for gathering as the men do for hunting and fishing. The women go on foot to gather, even to distant locations. The truck also takes people to town to collect their social security payments, for medical treatment, and to shop. In summary, the availability of transportation allows the Xavánte of Pimentel Barbosa to exploit their reservation extensively while their village sites remain "sedentary".

XAVANTE RESERVATIONS HECTARES PER PERSON



Settlement Pattern and Pressure on Resources

The Xavante population at Pimentel Barbosa almost doubled in the past 18 years. Despite this population increase, pressure on natural resources does not appear to be a problem yet, in part because the reservation has also increased in size.

It should be noted that the settlement pattern, and the subsistence system of the Pimentel Barbosa Xavánte with its extensive reliance on wild foods, are to a great extent made possible by the low population density on the reservation. Pimentel Barbosa is by no means typical of Xavánte reservations. In 1994, with a total population of 841 and an area of 328,966 ha, there were 391.2 hectares per individual. At the other extreme, Parabubure, with a population of 4,908 and an area of 244,447 ha, had 45.7 hectares per individual (see Figure 5).³

Conclusion

As we have seen, the Xavante have been affected by political events and economic policies that originated far beyond their local habitat. But they have not been passive objects. When they were resisting colonial expansion their strategy involved mobility and a settlement pattern characterized by alternate concentration and dispersion. During the period of pacification groups were attracted to Indian posts and missions, not only to acquire trade goods but also as protection against the attacks of settlers. As reservations were set up, Xavante groups became more isolated from one another. When FUNAI was the controlling power, Xavante leaders accepted on a superficial level the imposed goals of participating in

the local economy through rice production. This involved increased sedentism and agricultural intensification. At the same time

Figure 5: Land area per person on different Xavánte reservations.

P.B. Pimentel Barbosa

AR Areões

M.R. Marechal Rondon

SA Sangradouro

S.M. São Marcos

PB Parabubure

they exploited their status as a showcase for FUNAI's policy of economic integration to attain their own ends: recognition of their territorial base and expulsion of invading ranchers.

In the specific case of the Pimentel Barbosa group political action was particularly successful, since they gained an increased area for their reservation. They have responded with a more dispersed settlement pattern and increased exploitation of the wild resources of their territory. This may not be possible on other Xavánte reservations such as Parabubure where population is aiready outgrowing the available land.

The Pimentel Barbosa Xavánte, as politically astute actors, continue to have close links to outsiders, whom, they seek to manipulate, and in turn are manipulated by. They are now exploiting the resources of their territory in ways that may seem more "traditional" than in 1977 when they were beginning to produce rice for the regional market. But in fact, their present mode of exploitation depends as much now as it did then on the availability of modern transportation.

The Pimentel Barbosa Xavante, through the connections of their young leadership with national and international sympathizers, also appear to be satisfying some of their needs by marketing less material aspects of their culture. An example is the CD of traditional Xavante singing recently produced by an NGO from São Paulo. "The first Amazonian Indian music video", also featuring Xavánte music and filmed at Pimentel Barbosa, was shown in New York in the fall of 1995 at the Native American Film Festival at the Museum of the American Indian. These activities are less likely than agricultural intensification to contribute to habitat degradation, although their eventual effects may be no less far-reaching (see Conklin and Graham 1995).

In conclusion, this paper has outlined how Xavánte groups have adjusted over time as they reacted to the increasing presence of the Brazilian national economy and society in Central Brazil. The Xavánte underwent profound changes in demographic patterns, subsistence activities and food ecology. However, these changes were not always in the directions that models aimed at explaining trends in acculturation would predict. The Xavánte case shows how fundamental are diachronic data in the understanding of long-term human ecological changes and how these may be closely tied to historical processes.

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Notes

¹The spelling of Xavánte and the names of other tribal groups is according to the spelling convention recommended by the Associação Brasileira de Antropologia (Rodrigues 1986).

²As the entire group led by Apowe moved their village from São Domingos to Rio das Mortes, the population can be considered continuous. The sources of the censuses in the graph are as follows:

1958. São Domingos (Maybury-Lewis 1967).

1962. São Domingos (Maybury-Lewis 1967). At this time São Domingos had lost population in part because approximately 80 people, according to Maybury-Lewis's estimate (1967:333), had split off and for several years made their village at a place called £ Tõ. A few years later they rejoined São Domingos.

1969. São Domingos (Giaccaria and Heide 1972).

1977. Rio das Mortes (Flowers 1994b).

1980. Rio das Mortes (Queiroz 1980).

1988. Rio das Mortes (Flowers 1988).

1990. Rio das Mortes (Flowers 1994b).

³ Of course, the land/person ratio tells us little about the quality of the land for subsistence -- the abundance of game and other wild products and the land available for agriculture. However, we have no indication that there are significant differences between the cerrado in the Parabubure area and that of Pimentel Barbosa. Over time population pressure tends to lead to overuse of land and other natural resources with the result that they become less and less able to support the population by traditional subsistence practices.

Changing Perspectives on Cashinahua Residential Practices: 1955-1995

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The village, mae, is the largest political and social entity in Cashinahua society. Although all Cashinahua consider themselves to be kinsmen because they are all huni kuin, that is real people, not all are equally real kin. Those with whom one resides are more real than those who live in other villages because most if not all co-residents are close kin, sharing one or more grandparents in common. Moieties and marriage sections provide them with a framework and a kinship vocabulary for establishing social ties to anyone who is Cashinahua; they do not provide the social and political structure within which daily life is lived. It is the autonomous village that provides that context. This essay examines the continuities and changes in the residential patterns of the Peruvian Cashinahua between 1955 when I began my first fieldwork and my most recent research in 1993 and 94.

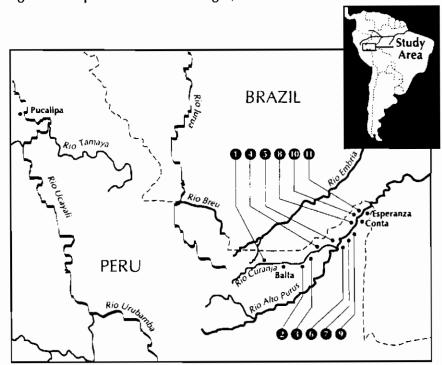
Village Structure.

The ideal traditional Cashinahua village eonsisted of a single longhouse, headed by two focal males and their extended families. The focal males, one of whom was recognized as headman, were cross cousins who had exchanged sisters in marriage. Each focal male was identified with half of the house where he lived with his wife/wives, their unmarried children, their married daughters and sons-in-law, and their daughters' children. The household could be augmented by the siblings of either of the focal males and their children, by their elderly parents, etc. When and if the longhouse became overcrowded, it could divide. One of the focal males might build a separate house near to the previous one. frequently, younger brothers of the focal males would jointly establish independent household, often moving to a new site, particularly if the group became factionalized over unresolved disputes. At the retirement or death of either of the focal males, the village was realigned, often around the eldest sons of the focal males or around a pair of their younger siblings.

By the time of my arrival in 1955 the Cashinahua had abandoned their longhouses. Each focal male had his own uxoriloeally extended family household. Each village consisted of the houses of the two foeal males and other houses inhabited by siblings of the focal males and other assorted affines and consanguines. By 1965 the extended family household was frequently transformed into a cluster of nuclear family households, although many houses continued to include a couple and one or two of their married daughters, sons-in-laws and grandchildren. This was the pattern still found in 1994.

Although each village is named for the site at

Figure 1: Map of Cashinahua Villages, 1993-94



Key to Map:

- 1. Santa Rey
- 2. Colombiano
- 3. Curanjillo
- 4. Nueva Luz
- 5. Miguel Grau
- 6. Lidia
- 7. Cashuera
- 8. Bufeo
- 9. Canta Gallo
- 10. Pikiniki
- 11. San Francisco

which it is located, usually the Peruvian and/or Cashinahua name of a nearby stream that flows into the main river, each is also identified with its headman. Most but not all villages still center around a pair of focal males, i.e., the headman and one of his coresident brothers-in-law. Each village also has a Peruvian political structure, with a tiniente gubernador and often other officials, appointed by the mayor of Esperanza, the capital of the Purus district of the state of Ucayali. In some cases, these officers are the focal males, but more often they are younger men, sons or sons-in-laws of the focal males who have sufficient fluency in Spanish to deal with Peruvian officials.

Until 1963, the houses tended to be clustered around a central plaza and the men of each village would gather near the headman's house in late afternoon where they sat in a circle around bowls of food brought by each man to eat and discuss the day's activities, their plans for the next day, and on rare occasion to resolve village disputes. By 1994 all villages had lost their centers, except for two where the houses line the sides of a soccer field; in none did men gather daily for communal meals. Even the community-wide feasts associated with the fertility rituals now often lack the men's eating circle.

Although villages were formerly identified by their physical location, ties to a particular site were seen as transitory. Until 1960, villages changed their physical locations about every 5 to 6 years, depending on how quickly game resources were reduced and/or on the availability of good garden sites within a short walk from the village; women complained if they had to walk more than 30 minutes to reach their gardens. Since there were no other groups living on the Curanja River, land was readily available; groups could move or fission and move to any unused area without getting permission from any person or agency.

This situation began to change in the mid-Those groups wanting to settle along the Purus River east of the mouth of the Curanja had to resident Marinahua, compete for land with the Sharanahua, Mastanahua, Chandinahua, Culina, and Peruvians. On the Curanja, several villages continued to move their locations at regular intervals throughout the 1970s and 80s. For example, Pipi's group lived at five different sites between 1959 and 1990 when it settled at its present location. Despite the often heated discussions I heard before I left the field in 1968 about the need to move the village, Balta has been occupied continuously since 1960. After the construction of an airstrip in the mid 1960s and the opening of a school and clinic in the 1970s, moving the village became increasingly difficult.

On November 30, 1977, Balta received legal title to 2,266 hectars of land surrounding the village. The villages of Conta on the Purus River and Curanjillo on the Curanja also received titles to

their land. In 1994, all thirteen Cashinahua villages received land titles through the efforts of the Asociacion Interétnica de Desarrollo de la Selva Peruana with financing from the Danish government. The land granted to Balta, Conta, and Curanjillo more than quadrupled that awarded to them in 1977. The implications of these changes are not yet clear, particularly as they relate to village fissioning.

Demographic History.

In 1951 a Brazilian research team visited eight Cashinahua villages on the Curanja River with a total population of 500 (Schultz and Chiara 1955). These were the descendants of a group of Cashinahua who, sometime during the early decades of this century, fled to the headwaters of the Curanja River from the Juruá region after killing an abusive rubber patron. Shortly after Schultz's visit, although not necessarily as a result of it, an epidemic killed off about four-fifths of the adult population. The survivors fled to Brazil, but many returned in 1954, not having found conditions there to their liking.

When in July 1955 I arrived at Maneya, the most downriver of three Cashinahua settlements on the Curanja River, there was a total population of 96. (See Kensinger 1995:134-36 for description of the composition of these villages.) Within two months the two groups living upriver inoved down to Maneya to gain access to the medicine and goods I had with me. During the four years that the three groups lived together they all acknowledged the leadership of the focal males of Maneya but, although there were several marriages among the three groups, they never fully merged forces but operated as factions, that is the dominant faction of the headman Awa and his co-focal male Noa, plus the factions of two other men, Pipi and Shiku, each of whom had been headman of his village before moving to Maneya...

In March 1958 the plane returning me to the Curania was blown off course and the pilot landed by chance in Brazil at a Cashinahua village on the Embira River, some of whose inhabitants had been part of the 1951 emigration from Peru. Although we spent only ten minutes there, I was able to give the residents news about their kinsmen in Peru. Several months later a delegation from the Brazilian village arrived in Maneya. It included primary kin of each of the local factions. Following this visit, Pipi's faction cleared a garden site four to five hours downriver with the expectation that they would establish a new village there and some of their kinsmen would join them when they returned to Peru from Brazil during the following year as promised. They left Balta and moved to Xanxu in time to harvest their maize crop in December 1958, returning frequently to Maneya to harvest plantains and manioc in their old gardens until their new gardens were in full production.

After I left the field in April 1959 to return to the US for a year, Awa's and Shiku's factions made new gardens at Balta, a site halfway from Maneya to the confluence of the Curanja and the Purus rivers where a float plane could land in both rainy and dry seasons. They assumed, and rightly so, that I would be more likely to request supply flights if the plane landed in Balta, saving me the eight day round trip to the Marinahua village at the mouth of the Curanja. When I returned to the field in November 1960, they had already abandoned Maneya and moved to Balta.

Two groups totaling 98 people migrated from Brazil in 1961 thus more than doubling the 1955 population of the Curanja. Some joined Pipi's village, but most settled in Balta. It was not long before new factions developed there. In 1962, Shiku's faction, strengthened by several in-marrying sons-in-law and migrants, established a new village about an hour below Balta. In 1964 Sam's faction, consisting largely of migrants, moved to Santa Rey, a site a half an hour upriver from Balta. Two groups, composed mostly of migrants from Brazil, established villages on the Purus River in 1966 and 1967. The total population increased to about 450 living in seven villages by the time I left the field in August 1968.

Recruited by a young headman from one of the Purus River villages and attracted by the schools, clinics, and the availability of goods from the Peruvians in Esperanza, about one hundred more Cashinahua migrated from Brazil in the early 1970s and settled mostly in the pre-existing villages on the Purus River. During the mid-70s the population of Balta swelled to over 500 as many of the Cashinahua moved there to take advantage of the bilingual school, medical clinic, and a store established by SIL missionaries Dick and Sue Montag but staffed and run by Cashinahua. However, as soon as teachers were trained and appointed, groups returned to their old village sites or established new ones.

In 1984-85 McCallum (1989) recorded a total of 833 Cashinahua living in 9 villages in Peru, ranging is size of 17 to 283 people. By 1994 there were 1291 Cashinahua living in 13 villages, ranging in size from 12 to 284 people, all but one with its own bilingual elementary school; Balta and Conta also had secondary schools. (See map.)

Although the influx of migrants from Brazil in the 1960s and 70s contributed to the increase in population, it would be even higher if some of the Peruvian Cashinahua had not moved downriver to Brazil in the mid- to late- 1970s where they joined forces with other Cashinahua who migrated from the Embira and Juruá region to an area now designated as the Area Indígena do Alto Purus (McCallum 1989). But immigration is only partly responsible for the population increase. More of it is due to a decrease in the infant mortality rate and an increase in the number of live births per woman. Between 1955 and 1968 few

women had more than four children, which were spaced about four years apart. In 1993 many women had six or more children, spaced about every other year. Many of the men spoke favorably of the increased number of children as a guarantee of their survival as a society even though it has resulted in serious changes in men's responsibility for economic activities (Kensinger 1995:265-279).

Consequences of Changes.

Two major changes in subsistence activities have resulted from living at the same site for more than thirty years. Game resources have been somewhat depleted. Hunters now must go farther from the village and for longer periods of time. Meat is not as abundant as it was in the 1960s. But this reduction in game is only partially to be explained in terms of depletion. With the adoption of shotguns as the preferred weapon and the shortage of ammunition, hunting patterns have been modified. The number of species hunted has been cut nearly in half with kills being restricted to larger game, such as peccaries, deer, tapir, spider and howler monkeys, as the only economic expenditure of shotgun shells.

In order to allow old gardens to go to fallow, new gardens have to be cut at increasing distances from the villages. As a result of this distance and the growing number of children per woman, as well as the increase in the frequency of nuclear family households, men are increasingly responsible for harvesting garden produce, as well as providing the household with firewood, both previously the responsibility of women. Plantains are now harvested from old gardens for a least three or four years longer than they were before. As a result, plantains have replaced manioc as the major vegetable staple in the diet.

Until the early 1990s, villages often fissioned when factions were unable to resolve their differences. One or more of the dissenting factions would move to a new site and establish a new village on unoccupied territory. But now, all land on both sides of the Purus River, from the Brazilian border to well above the mouth of the Curania River and on both sides of the Curanja as far as Santa Rey, the most upriver village, is vested by land titles in the inhabitants of each village and thus controlled by the headman and his faction. Dissenting factions will either have to convince the dominant faction of their village or the owners of another village to share part of their territory with them or they will have to move upriver. This is something they probably would be reluctant to do, since it would mean a greater distance to travel to get to the Peruvian town of Esperanza, the most important, if not the only, source of goods on which they have become increasingly dependent.

The Cashinahua are increasingly engaged in the Peruvian economy. It was a desire for axes and machetes that led them to break their twenty-five year isolation in the late 1940s and make contact with Peruvian patrones from Esperanza, resulting in their debt peonage and exploitation. With my assistance, most of the Cashinahua were free of debt by 1963 and had established trading relationships with their former patrones and with merchants Esperanza. Increasing contact brought with it an increase in the range of goods purchased. In addition to the axes, machetes, shotguns and shell, mosquito nets, clothing, beads, aluminum pots and pans, and enamel dishes that were the most highly sought after items in the 1950s, cosmetics, soap, candy, rice, pastas, radios, flashlights, batteries and a wide assortment of other goods are now considered essentials, resulting in greater involvement in the national and hence the world economy.

The 13 elementary schools, staffed by Cashinahua teachers, and 2 secondary schools, staffed by mestizo and Cashinahua teachers are supervised from Esperanza, requiring regular trips to the town. All these teachers were trained in the Pucallpa area and are paid by the Peruvian Ministry of Education.

Political ties to Esperanza and the national government were established in the 1970s. Many Cashinahua now have official papers and participated in the last three mayoral elections in Esperanza.

These economic and political changes have contributed to a sharpened sense of their ethnic identity and a redefinition of their relationship to the land.

Postscript.

When I returned to the field in July 1997 1 found numerous changes. Dissatisfaction with the leadership of the headman in Balta resulted in more than half of the population (286 in 1994 but 125 in 1997) moving to the Purus river where they established two new villages: Nueva Esperanza consists of 25 families, most from Balta but including those who formerly lived in Lida and others from Curanjillo, and San Martin Miraflores consists of the Balta headman's former co-focal male and several of his sons and their children, who indicated during a visit to see me that he intended to return to Balta. His village site is near another one, San Martin Porras, established in 1994 by the father's brother of the Balta headman, his son and son-in-law. All three villages are located on the south side of the Purus river. Villages belonging to the Sharanahua, Yaminahua, and Culina occupy the territory on the north side of the Purus. The headman in Balta argues that the migration of people to Nueva Esperanza, San Martin Miraflores and San Martin Porras was motivated by a desire to move closer to Esperanza and the goods available there. Although this may have been a significant factor, dissatisfaction with the headman's leadership was the reason given by most of the migrants with whom I spoke. A fourth new village, San Jose, consisting of a faction from San Francisco was established on the south side of the Purus about ten minutes by canoe from the Peruvian town of Esperanza. Finally, Enrique Nonato Naita, a young Cashinahua from Conta, became the acting mayor of Esperanza following the death of the mestizo mayor.

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DISPERSED, NUCLEATED, DISPERSED: CHANGING MATSES SETTLEMENT PATTERNS, 1969-1995

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The following account describes what happens when a little contacted Amazonian people accept the patronage of a missionary organization, in this case the Summer Institute of Linguistics. The general pattern is familiar. The tendency for Amazonian peoples to migrate towards missionary stations and other contact agencies is well known. The impact this has on previously dispersed, semi-nomadic groups often is pronounced. Descola (1981) and Taylor (1981), writing about the Achuar, report a tendency toward nucleation followed some years later by dispersion, a pattern similar to the Matses. Frechione (1990) describes the formation and persistence of the Yekuana village of Asenöña, a community of 450 which as of his writing had remained in the same place for 20 years, almost as long as the longest-lived Matses community.

The Matses illustrate well the "unsettled communities" theme of the present volume, and they help us to move toward a general theory of indigenous behavior in the contact context. The Matses case is particularly important because, until they accepted SIL missionaries in 1969, the Matses were little influenced by—and except by reputation, little known to—the outside world (Romanoff 1984). On the eve of the SIL contact, Ribeiro (1967:145) even declared them to be extinct in Brazil, where most of them were living at the time.¹

One conclusion from the Matses data is that single factor--ecological, ideological, social-alone is adequate to account for the course of events. On the contrary, all these factors come into play at various times and in various combinations. This paper is therefore in part an argument against reductionistic explanations of population movement and settlement pattern that would privilege any one of these factors over the others. I describe in detail the history of population movements since 1969 together with what is known about the reasons for these movements, or what I have been able to gather about them. The data are often patchy, the result of a reliance on frequently unsystematic written reports and interviews with persons who have had extensive contact with the Matses-Harriet Fields of SIL who made the initial contact in 1969 and has been working with them ever since then; Luis Calixto Méndez, a Peruvian anthropologist who has been working with them for the last 15 years; and Steven Romanoff, who did his doctoral fieldwork with them between 1974 and 1976, within a few years of SIL contact. Although I visited Peru in the summer of 1995 and worked for a few days in one village (Aucayacu), I have not yet undertaken long-term fieldwork with the Matses.

Historical Sketch

In earlier sources, the Matses are called Mayoruna, but since Romanoff (1984), Mayoruna has been used as an umbrella term for northern Panoan peoples, including the Matis and Korubo as well as the Matses (Erikson 1994). The modern Matses inhabit a remote area about 180 kilometers southeast of Iquitos, on both the Peruvian and Brazilian sides of the upper Yavarí (Yaquerana) River. Their territory lies two days walk east of the towns of Jenaro Herrera, on the Ucayali, and Requena, on the lower Tapiche, rivers unconnected to the Yaquerana/Yavari except at highest water. Peru declared some 344,687 hectares a Reserva del Estado for the Matses in 1973, and in 1993 surveyed and marked slightly more than 450,000 hectares in a proposal for land entitlement, although the Matses do not yet have official title to this land. In Brazil, their territory lies within the Parque do Vale do

The history of Matses-or more properly, Mayoruna—contact begins with the first explorers and missionaries to penetrate the Amazon basin from the Andean highlands in the sixteenth century. In the course of the "Jesuit century," from 1636 to the expulsion of the order from Spanish crown lands in 1767, Mayoruna local groups were occasionally "reduced" in mission settlements, where they came into contact with other indigenous peoples. majority, however, appear to have remained independent. The later rubber boom seems to have had a more considerable impact on the general population, and it is with its conclusion around 1920 that the modern Matses begin to come into focus. By the end of the rubber boom, the Matses population had fallen to a critical low, and the group embarked on a period of raiding indigenous, mestizo and settler communities on the peripheries of their territory. Romanoff (1984) credits the group's survival to this practice, which continued until the acceptance of SIL in 1969.

Traditionally the Matses lived in large longhouses, housing 100 persons or more, organized on patrilocal residence principles. The houses were located on ridges or hills close to streams, with cultivated fields on the tops of surrounding ridges.

Each longhouse had its own headman, generally the most senior male, but sometimes a group of related longhouses would locate in clusters under a common leader or chief. Fields would then be cleared on top of a hill in the middle of the group, a defensive posture befitting their belligerent stance toward the outside world. During the period of raiding, the Matses also maintained secondary houses to which they could move in case they were threatened, presenting their attackers with a sort of shell game (Romanoff 1984:46-47).

Every few years, the large or super longhouses would move. Moves might occur for any of several reasons, including a decline in garden productivity, a fall in hunting returns, altercations among kin, avoidance of outsiders, and death, particularly that of a senior man. In moving, the super longhouses would break up into smaller longhouses, housing single extended families, which would rejoin when a new permanent location was found. The longhouses did not always come back together in the same combinations, however. Not uncommonly, some families chose to go their own ways, and there was a good deal of shuffling of position (Romanoff 1984; Calixto Méndez n.d.-a).

Changing Settlement Patterns, 1969-1995

The group of Matses that SIL made contact with in 1969 was small, but once contact was established, other groups came to join them on the upper Choba. Map 1 is the first of a series of maps which trace changes in settlement locations at key intervals. Map 1 represents the situation in 1969 and a few years after, with arrows indicating the movement of houses to the upper Choba. The group originally contacted by SIL was on a Choba tributary, but soon moved to another tributary after an airstrip was cleared there for SIL aircraft. No fewer than 16 of the traveling longhouses congregated in the vicinity of the airstrip and a house built for the missionaries. The 16 houses were derived from four super longhouses in Brazil. Three of these moved in their entirety, whereas the fourth broke up into families, some of whom chose to move to a series of locations along the Lobo river in Brazil (Romanoff 1976, 1984). There was a good deal of movement in the early days, and some of those who moved to Peru from Brazil later returned there (according to Harriet Fields in a 1995 interview).

SIL personnel designated one of the longhouse headman as "chief" and funneled work activities through him (Romanoff 1984). Over a period of a few years the loose congregation of longhouses on the upper Choba evolved into a more formal arrangement under his charge, and came to called Chëshëmpi, or "black," the Matses name for the Choba. At Chëshëmpi, the traveling longhouses failed to combine into the super longhouses in the traditional manner. They established themselves at varying distances apart

in the forest, out of sight from one another through the trees, and each built a secondary house at several hours' walk from the center. Gardens were cultivated around these secondary houses and hunting paths radiated out from them. The houses at Chëshëmpi were utilized mainly when the SIL missionaries in residence, the outlying houses at other times (Romanoff 1976, 1984).

This is the situation that obtained between 1974 and 1976, when Romanoff was in the field. Note that Map 1 shows only one scttlement in Peru at this time that is not part of the Chëshëmpi congregation. This small group on the lower Choba, which came to be called San José, was associated with a Franciscan missionary who rarely, if ever, put in an appearance (Romanoff 1984).

In 1978 (Map 2), a conflict broke out among the families living along the Lobo, a Yaquerana tributary, in Brazil, and some families relocated (or were relocated by FUNAI) to the lower Yavari at a place called Lameirão. According to Harriet Fields, this community has recently crossed the river and now lives in Peru. Other communities along the Lobo also moved in 1978, some families migrating north to settle in the border town Palmeiras (Melatti 1981). Two new villages, San Juan and Santa Sofia, were formed along the middle Yaquerana in Peru. The reasons for these other movements have not been recorded, but some at least appear to have been related to the same set of conflicts that led to the founding of Lameirão.

About 1980, two of the Chëshëmpi chiefs nephews, not wanting to be under his authority, moved out and founded their own villages along the upper Gálvcz. This is shown in Map 3, which depicts the situation circa 1980-1981. Note that by this time the village of San José on the lower Choba was no longer in existence, its citizens having moved and founded the village of San José de Añushi, on the lower Gálvez. Most of the inhabitants of San Juan, located on the middle Yaquerana, moved first to the Lopes in Brazil, and then returned to the middle Gálvez as Nuevo San Juan (Calixto Méndez n.d.-a, n.d.-b), leaving only a few persons in the old San Juan.

The last Peruvian village on the middle Yaquerana, Santa Sofia, broke up around 1980 as well, its residents moving in various directions (Map 4). Some traveled up the Yaquerana to found Paujil, just south of the Peruvian garrison town of Angamos. They were later joined there by some of their relatives who went first to Chëshëmpi. Other families from Santa Sofia moved to the Gálvez, some augmenting the population of Nuevo San Juan and others founding the new village of Nueva Chova (Calixto Méndez n.d.-a, n.d.-b).

Chëshëmpi lasted until 1982 when the large village was moved a short distance away and its name changed to Buenas Lomas (Map 5). At Buenas Lomas, the space between longhouses was cleared for fields, following the traditional pattern of planting in the

middle of a group of houses, but outlying houses continued to be utilized by some families.

Two years later, in 1984, families living on a tributary of the Ituxi in Brazil crossed the Yaquerana into Peru to found the village of Nuevo Cashispi. The next year they were joined by families from the Lobo. In 1985, some families left Buenas Lomas to found Nueva Ideal on the middle Yaquerana. Meanwhile, an altercation led some families from Remoyacu, on the upper Gálvez, to leave and found their own village, Seite de Junio. A year later, Remoyacu and its neighbor Buen Perú relocated to the middle Gálvez. And sometime after this, following an attack on the village by a jaguar that led to the deaths of several children, Seite de Junio broke up, its residents dispersing to Remoyacu and Nuevo San Juan.

During the same period, a rather different drama was unfolding elsewhere (Map 6). In 1984, Nueva Chova was induced by a representative of a missionary organization (Lighthouse Ministries) to move en masse to a location on the Aucayacu, a secondary tributary of the Ucayali just north of the mestizo town of Jenaro Herrera. They were shortly joined by families from the Brazilian village of Trinta e Um. But the new community was short-lived. The inducement to move had included the promise of being allowed to live in the traditional manner, but no sooner had they built a longhouse, shed their clothes, and painted their bodies, than tourists were brought in to The Matses were quick to respond by see them. charging for photographs and proceeded to burn their longhouse (building single-family dwellings in its place), then gradually moved back to the Gálvez. In 1986, some families moved to the Brazilian side of the upper Yaquerana to found a new village called Santa Sofia (not to be confused with the old Peruvian Santa Sofia, which broke up in 1980). When I visited Aucayacu in 1995, only one extended Matses family (originally from Brazil) remained. Most of the rest of the 70-odd villagers were Cocama-related mestizos.

By 1992 (Map 7), further changes had occurred on the Gálvez and Yaquerana/Yavarí. The village of Paujil had moved from the Yaquerana, just above Angamos, to the lower Gálvez. A new village, Jorge Chavez, had been founded on the Gálvez, and another, Fray Pcdro, on the Yavarí, below Angamos.

In 1995 (Map 8), the Gálvez River communities were much as they were in 1992. Nuevo Cashispi was still in existence on the Peruvian bank of the Yaquerana, and Trinta e Um and Santa Sofia on the Brazilian side. But important changes came to the Choba.

Santa Rosa was founded out of Buenas Lomas, which finally broke up in the Spring, when its headman (called "chief" by SIL) led about a third of the village downstream to a new location, appropriately named Buenas Lomas Nueva (New Buenas Lomas). This chief is the son of the old Chëshëmpi chief, who

died at the end of 1993. He is the parallel cousin (and classificatory brother) of the headmen of Remoyacu and Buen Perú. These men recognize his authority, whereas they had not recognized the authority of their uncle. This chiefdom, if we can call it that, represents something of a novel development in that it is composed of geographically distant communities, rather than co-resident ones. On the other hand, it is still kinship-based, and not all Matses communities, even in Peru, follow the chief's lead in all matters.

Discussion

About a third of the population of the original Buenas Lomas remained behind when the chief moved (a third moved to other locations, but return occasionally), but for all intents and purposes, that community has collapsed (Fields interview). remarkable thing is that it lasted as long as it did. Chëshëmpi encompassed 508 people in 1976 (Romanoff 1984:65). The 1993 Peruvian Census lists Buenas Lomas as having a population of 706, or 60% of the total 1177 Matses counted in Peru (Instituto Nacional 1994:188). If the three successive communities (the original unnamed community, Chëshëmpi, and Buenas Lomas) are treated as one, this large community was in existence for twenty-five years, with only infrequent and minor changes of location and defections. Nothing of its size or longevity was known traditionally, and its continued existence must be credited to the influence of SIL and Peruvian government policies that encouraged permanency of In Brazil, also, there has been a concentration of the population, in the village of Trinta e Um. Informants in Iquitos regularly described this as a very large village, population estimates ranging up to a staggering (and unbelievable) two thousand. A large village would imply some concentration of formerly smaller communities, but unfortunately I have found no data on the development of Trinta e Um.

Besides this tendency to concentrate the population in communities on a scale far larger than anything known traditionally (and, in the case of Buenas Lomas, subsequently to disperse), there has been a marked tendency to settle on rivers rather than streams. At least in the decades immediately prior to 1969, there were no settlements on the Gálvez, the Yaquerana, or even the Choba, but only on streams tributary to them. Having accepted contact, the Matses no longer find it necessary to withdraw into the interfluvial hinterlands.

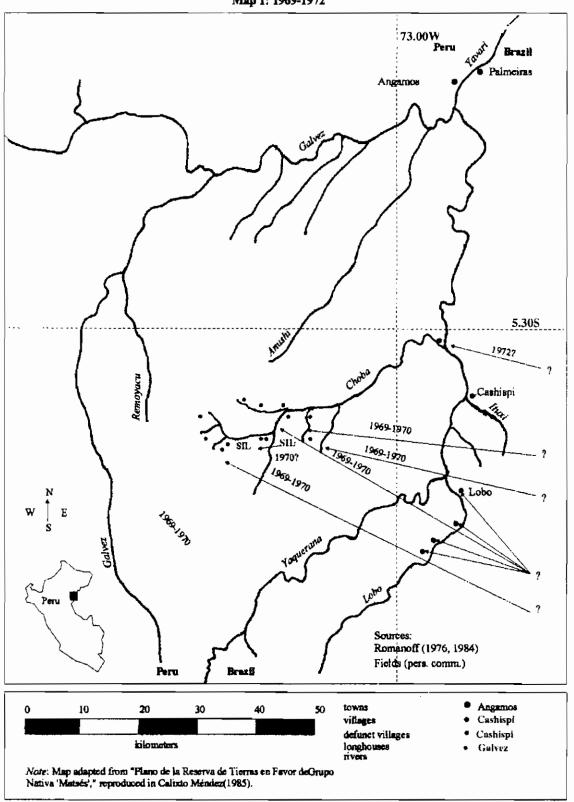
A third tendency toward change, especially over the last ten years, has been the giving up of longhouses for single family houses. The majority of Matses communities now consist of single (extended) family houses of the sort typical of this part of Amazonia. Only two longhouses remain, one at the much reduced Buenas Lomas and other at Santa Rosa on the Choba. However, despite these changes, other

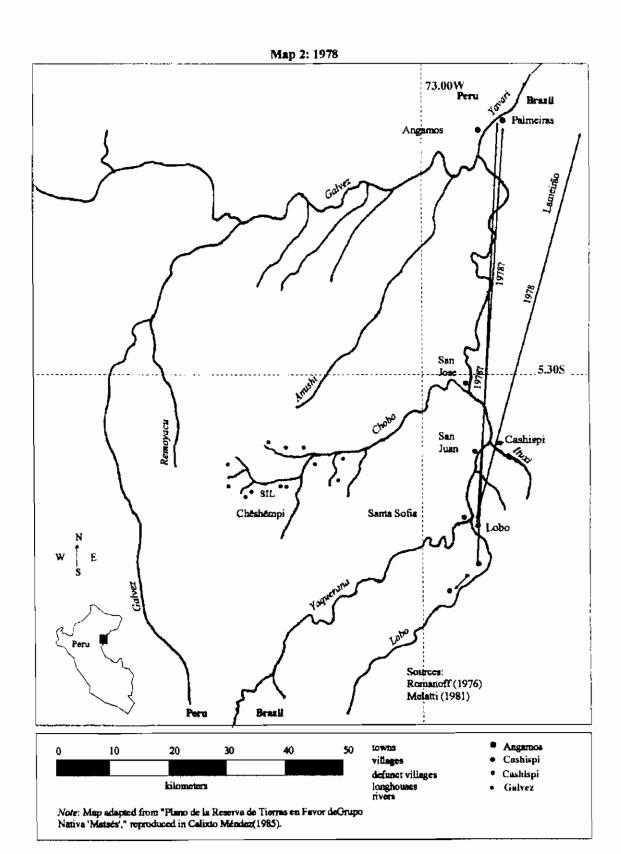
factors have remained the same. The tendency for communities to move every few years is very striking. Although some villages have stayed in place as long as 10 or 15 years--a good deal longer than was the case traditionally--like Buenas Lomas, they have ultimately moved.

The reasons for increased sedentism are part of the greater situation of contact-increased exposure to and influence from Peruvian national patterns, including schools and clinies, typically built with an eye toward permanency. The reasons for movement, however--fields giving out, hunting productivity falling, altercations, death-are among the reasons longhouses moved. Moreover, the tendency for families co-resident in a village to move independently of the others has its precedent in the period before 1969. Co-resident families have not always separated, of course—in several cases, entire villages have moved together. Good examples are the movement of Remoyacu and Buen Perú from the upper to the middle Gálvez and the transplantation of Nueva Chova to Aucayacu. This alternative pattern also had its precedent in the earlier period, when an entire longhouse might move together.

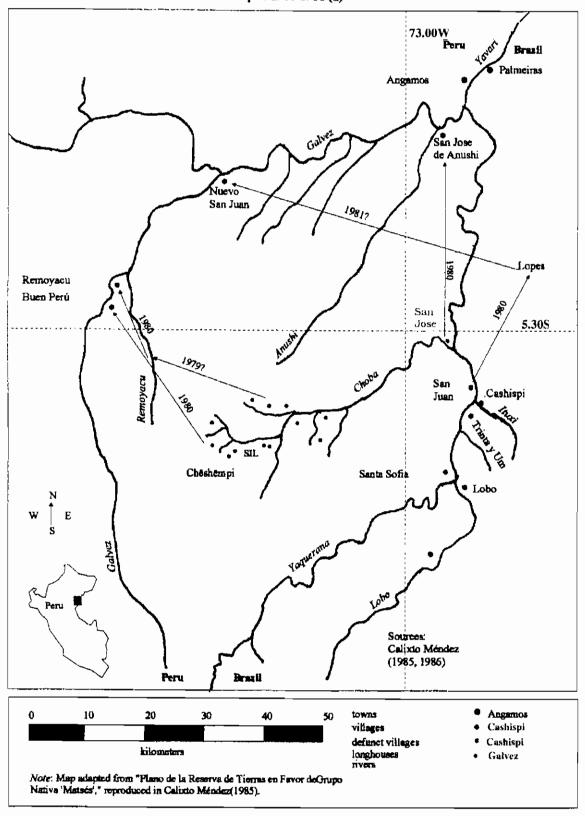
I would like to take this argument further. My impression is that villages are, for the most part, composed of patrilineally related kinfolk living patrilocally, with the village houses lined up like longhouse compartments. Such a village plan appears in Aucayacu, where the original longhouse was replaced by a string of houses, and it has been described for the Panoan Sharanahua (Siskind 1973:67), Shipibo (Roe 1980:80; Siegal and Roe 1986:98-99), and Isconahua (Momsen 1964:50) as well. However, since kinship data and settlement plans are not available for Matses villages other than Aucayacu, this remains an hypothesis to be tested.

Map 1: 1969-1972

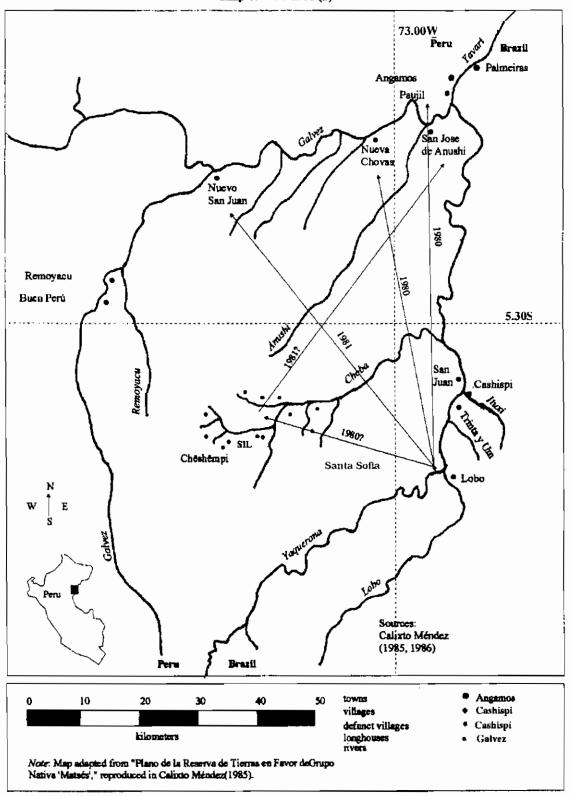




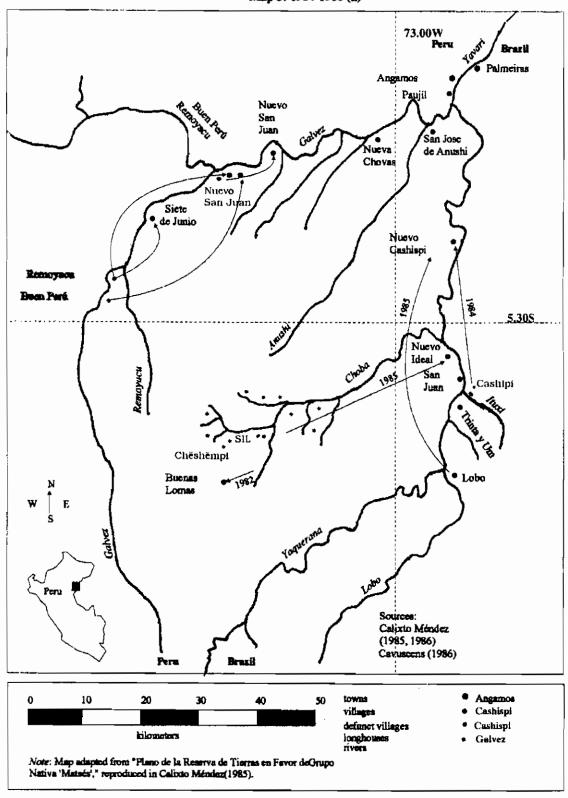
Map 3: 1980-1981 (a)



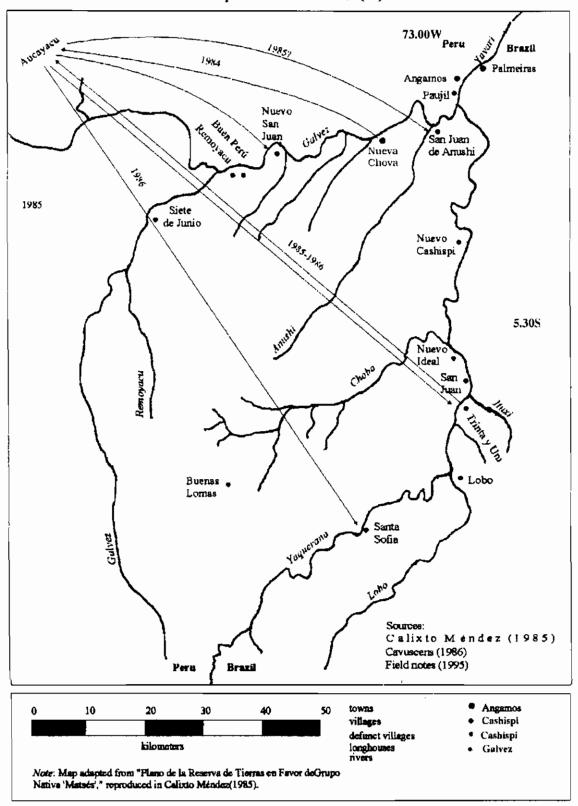
Map 4: 1980-1981 (b)



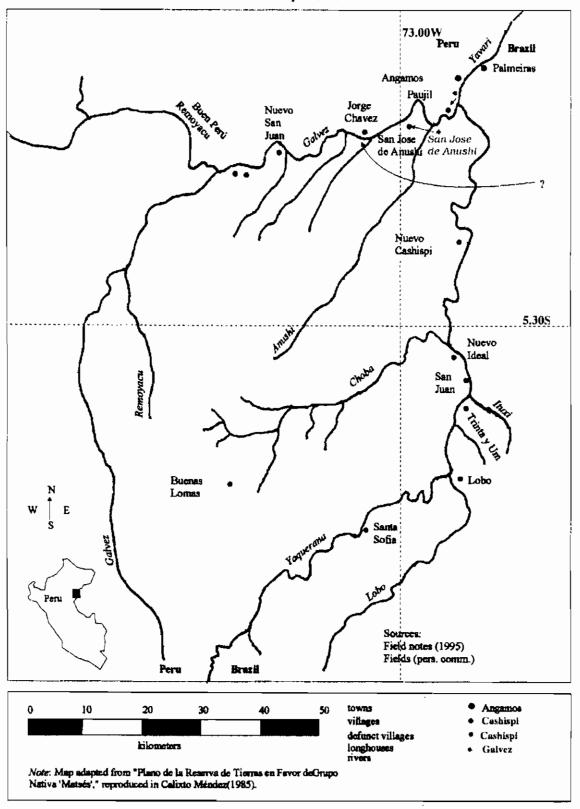
Map 5: 1984-1986 (a)



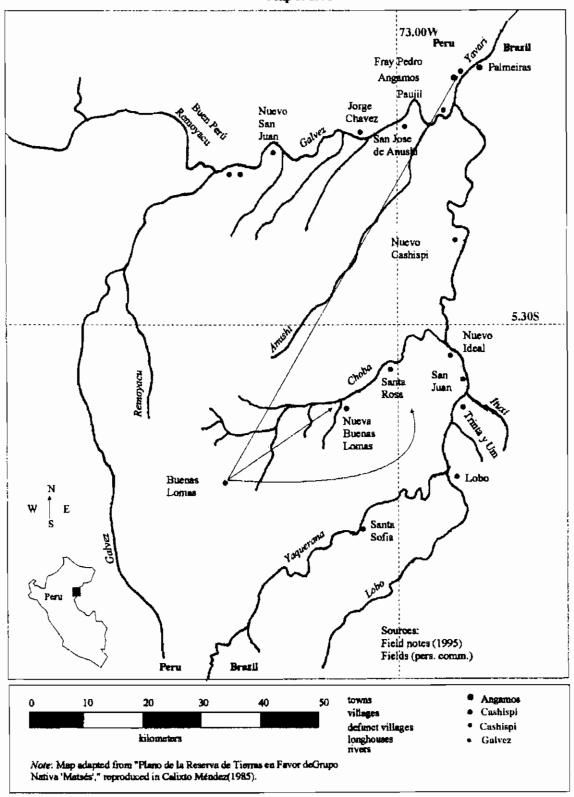
Map 6: 1984-1986 (b)



Map 7: 1992



Map 8: 1995



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Notes

This synopsis glosses over an important series of events in the early history of modern contact with the Matses. In 1963, SIL missionaries spotted a Matses village on an overflight, and began dropping trade goods to them. In 1964, a civilian-cum-military expedition left the Ucayali river town of Requena for Matses territory, bent on colonizing the area. The Matses attacked this group, who took refuge in an abandoned longhouse, and were later rescued by U. S. military helicopters flown in from the Panama Canal Zone. The Peruvian air force then bombed Matses villages, sending most Matses fleeing across the river into Brazil, where most were living when SIL trade goods were finally accepted in 1969. See Romanoff (1984) for the fullest available account of these events.

NORTHERN ARAWAKAN PEOPLES AND EXTRALOCAL FACTORS IN THE VENEZUELAN AMAZON

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Introduction

Ten years have passed since I spent the summers of 1984 and 1985 conducting a regional survey of changing marriage practices and settlement patterns among Northern Arawak-speaking peoples of the Venezuelan Amazon Territory. This volume on "Changing Perspectives on South American Indigenous Settlements" is the first time I have had a clear opportunity to present the basic rationale and results of my regional survey to fellow South Americanists and anthropologists. Over these ten years, my research has been primarily focused on intensive analyses of cultural history and political ecology within the 'core' region of Wakuénai phratries -- their ancestral lands along the Guainía and Isana rivers in Venezuela, Colombia, and Brazil -- (Hill 1989, 1993) and on developing a macro-regional, comparative approach to indigenous histories in Lowland South America (Hill 1988, 1996). It is appropriate, therefore, to turn my attention now to the "inissing link" between the local and the global, the vast regional diaspora of Arawak-speaking individuals, families, neighborhoods, and communities stretching from the highway north of Puerto Ayacucho, through the barrios of San Fernando de Atabapo and nearby villages, and down across the ancestral territories along the Rio Negro (Guainía) and its tributaries.

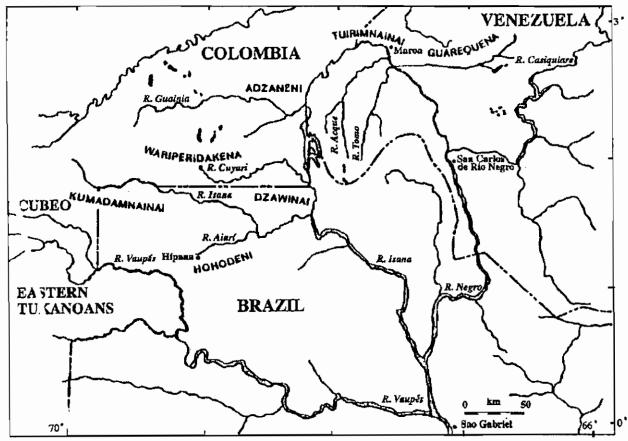
My theoretical approach to this sprawling, internally diverse regional formation was drawn from processual ecological anthropology. The general hypothesis of the research was that the cultural diversity of Northern Arawak-speaking peoples was not simply a reflection of traditional linguistic and cultural differences or a generalized process of acculturation but a complex set of processes of adjusting and reinterpreting indigenous modes of structuring behavior around new social, economic, and demographic conditions. More specifically, the research examined the hypothesis that the situation of Northern Arawakan peoples in Venezuela during the 1980s could be understood as the emergence of three distinct, yet overlapping, cultural orientations. Each of these identity systems resulted in a different direction of socio-economic change, depending upon the type of interethnic relations among indigenous groups and upon which of two indigenous modes of ecological orientation were emphasized as a model for decisionmaking in response to extralocal factors.

This study seeks to expand and open up the anthropological concept of settlement pattern in several ways. First, by focusing on regional patterns of interethnic marriage and economic trade relations, the study expands the concept of settlement pattern beyond local communities' interactions with the natural environment and among themselves to include the way sets of communities position themselves in relation to missionaries, markets, and other powerful outside forces.1 Second, this study looks at changes in settlement patterns as a complex process outlining multiple historical trajectories rather than a simple, unidirectional change from one type of settlement pattern to another (Murphy and Murphy 1974; Saffirio and Hames 1983). Additionally, this study aims at understanding changing settlement patterns as reflections of underlying factors that are simultaneously rooted in indigenous modes of ecological adaptation and projected from national and global institutions of economic production, political authority, and cultural hegemony.

Ecology and Ethnology in the Upper Rio Negro Region

The Arawakan peoples of the Upper Rio Negro region today are survivors of a much larger set of Northern (Maipuran) Arawak-speaking societies that formerly extended from the Central Amazon floodplains to the Ature rapids on the middle Orinoco in the north and the headwaters of the Guaviare River in the west (Key 1979, Lathrap 1970). Because of the remote location of their lands and an ability to dissolve normal social relations temporarily and later re-establish them (Wright 1981), such groups as the Wakuénai, Piapoco, Guarequena, and Baniwa are among the few Arawakan peoples who have endured the historical processes of conquest and depopulation.

The historical survival of Arawakan peoples in the Upper Rio Negro region also needs to be seen in the context of the nutrient-poor, blackwater ecosystem that they inhabit. Soils in the area are extremely acidic and nutrient-poor, even by Amazonian standards (Nicholaides et al. 1983). Research on nutrient-cycling in terra firma forests near San Carlos de Rio Negro has demonstrated the importance of thick layers of root mat on the surface of the ground in capturing available nutrients from falling plant debris, rainfall, and animal matter (Jordan 1979). Only a fraction of 1% of free



The Isana-Guainia drainage area of Venezuela, Colombia, and Brazil.

nutrients ever reaches the soil beneath the root mat (Herrera et al. 1978). In short, the forest feeds on itself in tightly closed nutrient cycles. Rivers and streams that drain these forests contain both low in situ production of phytoplankton and low levels of nutrients. Fish and aquatic animal species are thus highly dependent upon external sources of food along river margins. In blackwater areas, the aquatic system is replenished by the forest rather than alluvial soils, as in whitewater rivers (Chernela 1982: 18). Like the trees and other plants of the forests, fish and aquatic animals depend on tightly closed nutrient cycles of the forest for their growth and reproduction.

These physical and biotic factors have had, and continue to exert, a profound influence upon the efforts of outsiders to develop the area, the native Arawakan system of adaptation, and the interface between non-native and native peoples in the region. The extremely low productivity of soils and rivers is one of the major reasons that the number of *criollo* settlers has remained at a very low level, considering the size and ease of navigation of rivers in the area. With no major influx of non-native settlers, native Arawakan people continue to have sufficient land and river frontage for their subsistence economy based on swidden cultivation and fishing. Also, Northern

Arawakan social organization is specifically adapted to cope with rapid, severe cyclical deprivation that occurs on an annual basis when the rivers rise and fishing becomes unproductive. The flexibility of Arawakan social organization is based on two distinct modes for structuring behavior around ongoing events in the natural environment (Hill 1984, 1989). The first mode (Mode I) allows for redistribution of surplus foods from horticulture and fishing and for the establishment of widespread affinal alliances among phratries of equal status. Mode I is based on a cognitive model of individuals and groups as undifferentiated social animals who form part of the natural environment. The second mode (Mode II) provides a means for contracting the social order in times of scarcity by placing emphasis upon a sacred hierarchy within and among local patrilineal groups.

Hierarchy in Northern Arawakan societies is primarily a function of differential access to, and control over, a secret ritual language as manifested in songs and chants performed in rites of passage and in a cycle of sacred myths. Ritual specialists, called chant-owners (málikai limínali) and shamans (malirri), are also leaders in everyday social life, and their control over ritual power provides a way of sustaining and augmenting social order in periods of scarcity by

shifting the emphasis of their actions to "control over power resources the availability of which is not affected in any direct way by deprivation" (Laughlin and Brady 1978: 40). In villages where indigenous ritual leaders were active, the processes of building ritual hierarchy were directly linked with those of exchange and redistribution through adhering to the rule that men from highest ranked sibs married only women from the highest ranked sibs of other phratries.

Taken together, the two modes of ecological orientation constitute an indigenous adaptive strategy for coping with the extreme fluctuations in the availability of basic aquatic resources in the Upper Rio Negro region. In contexts of relative abundance, the social system opens up, or expands, through ceremonial cycles (pudáli) of feasting and exchange between patrisibs of different phratries. In contexts of scarcity or other stressful events (e.g., epidemics), ritual specialists play a key role in closing the social order into a more coherent, hierarchical organization. At the same time, the two modes of eeological orientation are the primary cultural resources with which Northern Arawakan peoples are currently adapting to extralocal factors in the Venezuelan Amazon.

Older informants spoke of phratries as localized confederations of ranked sibs which could unite as a defensive political unit if the territory of any member sibs were invaded by other phratries or ethnolinguistic groups.² The phratry could expand in size by admitting remnant groups as lowest-ranked sibs who were called "workers" (makú). In one phratry, the lowest ranked group, or youngest brothers, a sib named "Grandchildren of the Rat" (Jirridakéna), were said to be descendants of enemies taken in warfare (jimáiruti) during an earlier period of conflicts with Tukanoan peoples of the Vaupés basin.

In the early 1980s, these once powerful phratries, occupying continuous riverine territories and bolstered by practices of bride service and cross-cousin marriage between sibs of equivalent rank, were rapidly giving way to new forms of local and regional settlement patterns. In some villages, indigenous ritual leaders had been replaced by indigenous pastors appointed by North American missionaries of the New Tribes Mission, while in others ritual authority was either absent or less significant than entrepreneurial headmen who organized production teams of adult daughters and sons-in-law in order to trade surpluses of manioc flour and other foods with the criollo populations of nearby towns. Catholic missionaries were busy promoting a system of trade in indigenous handicrafts for clothing, canned food, and other manufactured items. These political, cultural, and economic forces were accompanied by an increase of interethnic marriages between either I) the Wakuénai and other Arawak-speaking peoples (Baniwa, Baré, Guarequena, and Piapoco) or 2) the Wakuénai and

other non-Arawakan indigenous peoples (Yeral, Yekuana, and Puinavi). From the perspective of villages along the Rio Negro-Guainía in 1980-81, it was clear that these varying patterns of intra- and interethnic marriage covered vast spaces, from the Vaupés and upper Isana and Guianía basins in the west to the Upper Orinoco and Casiquiare basins in the east, and from the Rio Negro basin in the south all the way to the confluence of the Orinoco and Atabapo rivers in the north. One informant described this entire region as a single "wheel" (see Map 1).

Jean Jackson's masterful study (1983) of marriage practices in the Central Vaupés region strongly influenced my decision to focus on emerging patterns of interethnic marriage relations. Indigenous economies of the Northwest Amazon region are inelastic, relying on bride service, cross-cousin marriage, and similar practices to regulate distributions of male and female labor. Major changes in marriage practices are thus a likely source of insight into broader socio-economic strategies of local peoples as they become articulated with and entangled in new forms of economic production and exchange.

Specific Hypotheses and Areas Studied

In designing my field study, I hypothesized the existence of three overlapping, yet different, trajectories of social change. In particular, I set out to test the degree to which these different directions of social change could be understood as emerging patterns of interethnie relations among indigenous groups. Furthermore, I was interested in knowing the extent to which indigenous modes of ecological structuring were responsible for guiding and shaping these developing interethnic configurations and, if so, how. In 1984 I set out to study three basic patterns:

- Yeral/Wakuénai: A highly diverse identity system consisting of Wakuénai individuals married to speakers of Yeral, or lingua geral (a Tupí-derived trade language of the region), many of whom claim to be descended from Arawakan peoples. On the basis of my earlier fieldwork, I hypothesized that the Yeral/Wakuénai orientation would tend toward the emergence of a regional peasantry in which the subsistence mode of fishing and agriculture (Mode I) acted as a means for economic exchange with other local indigenous groups and with semi-urbanized criollo populations. The ritual-hierarchical mode (II) had become correspondingly de-emphasized, since cooperation was largely a function of productive activities and egalitarian forms of exchange.
- 2) Guarequena/Baniwa/Wakuénai: An emergent, pan-Arawakan orientation of various groups whose cultures and languages had diverged in colonial or prc-Hispanic times but who were in the process of reintegration. These groups shared

basic terrestrial and aquatic resources in a manner that approximated the localized phratries of the Wakuénai and other Arawakan societies prior to recent dislocations. However, they had not developed the subsistence mode of fishing and agriculture (I) into an economic strategy of exchange with non-Indians. The ritual mode (II) of hierarchical organization played an essential role in the formation and maintenance of interethnic alliances in addition to its traditional role of adapting local groups to severe cyclical deprivation.

3) Puinave/Wakuénai: A relatively homogeneous identity system centered around Curripacospeakers from the Upper Guainía River and the Puinave living to the north and west. These groups were the focus of an ongoing process of missionary transculturation in which the indigenous ritual mode (II) was apparently replaced from top to bottom by a fundamentalist Protestant hierarchy of missionaries (or Bible translators), native pastors, and laymen. One goal of the survey was to clarify the extent to which this transculturation had actually led to irreversible, historical changes rather than merely behavioral, situational ones and how this change was related to preliminary evidence that a greater percentage of people in this category were migrating out of their ancestral lands into new areas and urban environments.

To test these hypotheses, I collected historical, demographic, social and economic data in 1) peri-urban villages and fully urbanized neighborhoods in the vicinity of Puerto Ayacucho, the capital of the Federal Amazon Territory; 2) Arawak-speaking communities along the middle and upper Orinoco centered around the town of San Fernando de Atabapo; and 3) Arawakan villages and households located on ancestral lands along the Negro-Guainía river and its tributaries (i.e., the southern and western-most region of the Amazon Territory; see Map 2).

Results of the Study

The survey resulted in a general profile of Arawakan peoples in the Venezuelan Amazon Territory in the mid-1980s. Nearly one half (46%) of the 118 families included in the survey for whom reliable information was obtained were interethnic (i.e., the parents were members either of different Arawakan groups or of the Wakuénai and a non-Arawakan group). Among the Wakuénai families who formed the central focus of the project, more than one half (54%) of the families were interethnic: I4% were Yeral/Wakuénai, 24% were Guarequena/Baniwa/Wakuénai, and 16% were Wakuénai/"Other" (including Puinave, Yekuana, Piaroa, Guahibo, and non-indigenous criollo). Thus, the general empirical results of the survey confirmed my hypothesis that there were essentially three broad

types of interethnic orientations emerging among Arawakan groups of the Venezuelan Amazon.

The Yeral/Wakuénai families were geographically centered around the lower Guainía river, with strong connections to peoples living along the Rio Negro in areas south of the border with Brazil. However, the survey did not support the hypothesis that families in this group would tend towards the adoption of a single socio-economic strategy. Among the Yeral/Wakuénai, some villages had elevated their subsistence economies to a means for producing surplus for cash sales, whereas other villages had not chosen to follow this strategy. In my initial hypothesis, I had rather underestimated the complexity of adaptive strategies being pursued by these families. The wide range of economic strategies within this orientation was perhaps best seen as a response to the differential effects of extralocal factors at different times and in different places.

The Guarequena/Baniwa/Wakuénai orientation was also centered along the lower Guainía river. These three Arawakan groups had continued to develop horizontal ties of intermarriage, trade, and sharing of basic resources along the Guainía, and the ritual mode of hierarchical organization was becoming increasingly important as a channel for interethnic alliance. However, among the Guarequena/Baniwa/Wakuénai families who had left the Guainía to live in San Fernando de Atabapo, fishing had become an important means for earning cash to buy clothes, food, and other items. This change probably reflected the much higher productivity of fishing along the Orinoco River, the declining importance of the ritual-hierarchical mode among families living in San Fernando, and the larger scale of the local cash economy in San Fernando.

Finally, the project confirmed the hypothesis that migration to urban environments was strongly correlated with the process of missionization. The third, highly transculturated orientation was better characterized by the name Wakuénai/"Other", since its members included not only Puinave but also Yekuana, Piaroa, Guahibo, and non-indigenous individuals married to Wakuénai spouses. These families were geographically centered around Puerto Ayacucho and surrounding villages. Marriages between Wakuénai and non-indigenous criollos were found only in the Wakuénai/"Other" orientation, and in all cases these marriages were between Wakuénai women and criollo men. The results of the survey strongly supported the conclusion that the twin processes of urbanization and missiomization were irreversible, historical changes rather than merely temporary, situational adjustments.

Another important dimension of Arawakan adaptations to extralocal factors is the timing of internal factors that weaken group cohesion in relation to the timing of extralocal factors that attract group members, or entire groups, to move to new locations. For example, several individuals mentioned the importance

of the death of a parent as a key factor in their decision to leave their natal villages and participate in the extractive industry of *chiquichique* collecting along the Orinoco River. In another case, the founding of a new village along the Orinoco resulted from the combined effects of a factional dispute between two families within a village along the Guainía River and the opportunity to collect *chiquichique* along the Orinoco.

Conclusion

The results of my survey of Northern Arawakan peoples in the Venezuelan Amazon demonstrate the importance of viewing indigenous adaptations to extralocal factors as a complex set of processes that result from the interaction of two evolving socio-ecological systems rather than a simple either/or process of choosing between indigenous or non-indigenous cultures. The notion that indigenous societies of Lowland South America are static and unchanging has often led to the conclusion that they will inevitably fail to adapt to the presence of rapidly changing, developing societies. The Wakuénai and other Arawakan groups of the Venezuelan Amazon show that such consequences are not inevitable and that the complexity of processes of social change cannot be reduced to a traditional versus modern opposition. Arawakan peoples have accepted many of the rights, goods, and services shared by other Venezuelan citizens at the same time as they have rejected others.

Recent studies of the interfacing of global and local power, transnational migrations, and diasporas have found it difficult to overcome the tendency to work within implicit dichotomies between a "dynamic core" and a "static periphery." Anna Tsing, for example, warns that "In the grip of this dichotomy, some places appear to generate the global, while other places seem stuck in the local. With these dichotomies, we can neither fully localize the concerns of European-origin peoples nor appreciate the global impact of the agency of non-Europeans" (1994: 282). The present study of dynamic, interethnic regional formations emerging in the Venezuelan Amazon during the male. Sos offers a way to step out of the tired old of core and periphery. No one is "stuck in the seat," rather everyone is participating in the active and these ongoing regional, and these ongoing regional constructions offer individuals, families, and entire villages a broad range of alternative directions of social and economic change. Moreover, these multifaceted, flexible diasporas are quite likely more significant than ephemeral localities for understanding long-term historical and evolutionary processes of survival through social adaptation and change (Jackson 1983; Jane Hill 1978). The areas around Puerto Ayacucho and San Fernando de Atabapo being re-inhabited by Northern Arawakan peoples in the 1980s were, after all, the same geographical space that had been occupied by Northern Arawakan peoples prior to the colonial period.

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Notes

- See Hill and Moran (1983) for a more detailed analysis and comparison of settlement patterns in two communities along the lower Guainía river in Venezuela.
- ² Although the term "ethnolinguistic group" may seem unusual in this context, the term is appropriate for describing indigenous peoples of the Northwest Amazon and Upper Rio Negro region. Eastern Tukanoan peoples of the Vaupés basin define themselves primarily through the practice of language

group exogamy (Jackson 1983). Also, the indigenous term of self-reference among Arawakan phratries of the Upper Rio Negro region is Wakuénai, or "People of Our Language," indicating that linguistic differences are a basic way in which Arawakan peoples different themselves from other indigenous groups.

THE TELEOLOGY OF KINSHIP AND VILLAGE FORMATION: COMMUNITY, IDEAL AND PRACTICE AMONG THE NORTHERN GÊ OF CENTRAL BRAZIL.

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Community and Settlement

Most ethnographers of lowland South America have taken community and village to be essentially the same thing. Given the usual settlement patterns villages of several hundred people or less, widely separated from others of similar size without any external control—such an assumption seems plausible. Nonetheless, several well known Amazonian institutions make it difficult to regard the village as identical with community. Village and linguistic exogamy in the Northwest Amazon (Chernela 1993; Jackson 1983; Sorensen 1967) comes to mind as does obiligatory intervillage celebration of festivals among the Yanomamö (Chagnon 1968; Ramos 1995). The cultural similarities among the peoples of the upper Xingú and the social importance of intervillage visiting and trade also cast some doubt on the easy equivalence between settlement and community (Basso 1973).

While the Kayapo, who are the focus of this paper differ from the peoples mentioned, the prominence of their factionalism and village splits, revealed both in myth and in fact, also challenges our understanding of community. Kayapo settlements are found over broad areas within Southern Pará and Eastern Mato Grosso states of Brazil, but despite great distances between them, intervillage visiting is today fairly common. Visits may be undertaken to fraternize with relatives, and official visits by leaders undertaken with specific political objectives are also common. Notwithstanding the flux of people and constant radio communication between Kayapo settlements nowadays, villages have a stubborn autonomy. Each village insists on exercising what amounts to an independent foreign policy towards extra-village actors such as the government Indian agency, loggers, mineral prospectors, and other Kayapo villages.

Given the autonomy of villages, it is not surprising most ethnographers make the fairly straightforward equation between "community" and "settlement." This equating of one with the other, I think, directs anthropologists to ask certain kinds of questions with a functionalist bent, namely, "what makes this group of people adhere within the same settlement?" Perhaps more commonly this question is not even openly posed and loyalty to the village is assumed. Within this framework, common belief, ritual, organization, institutions, and opposition to other

peoples or Brazilian society can all be taken to be reflective of community.

As shown by other contributions to this volume, however, indigenous village patterns are never static. Settlement patterns change, village age groups may be reorganized using different criteria, villages suffer influxes and outmigrations of individuals, and settlements frequently split or fuse. While external or extralocal factors often play a decisive role in triggering such events, the identification of the influence of a "field of forces" requires attention to processes internal and external to the village.

Both community formation and settlement fracture appear to be particularly significant benchmarks in Gê peoples' own accounts of their histories (e.g. Verswijver 1992, Crocker and Crocker 1994). To understand the genesis and maintenance of communities within the context of extravillage processes, we need an account of process through which communities are formed and reproduced. By focusing on how communities are produced we can avoid assumptions that community is necessarily isomorphic with settlement. Here, I provisionally use a rough definition of community as something that people themselves point to as providing the grounds for common residence. Highlighting the distinction between processes of village and community formation may place both concepts on new terrain and open spaces for analysis beyond the boundaries markers of Durkheimian solidarity, on the one hand, and the constraints of carrying capacity on the

The existence of Kayapo villages within a field of regional social relations is evident to the Kayapo who recognize their chiefs as intermediarics between their society and the outside world. Dependent on the outside world for manufactured goods, such as machetes and aluminum cooking pots, Kayapo are no longer able to construct their social relations purely in accordance with their own system of values. An understanding of Kayapo community thus entails attention to how Kayapo believe village life currently falls short of the ideal. I examine the adoption of the Brazilian term for community among the Kayapo and discuss how its usage involves a critique of social reality. By contrasting the critical use of the imported Brazilian term for community with the biological and emotional basis of community expressed in food and behavioral taboos and ritual we can better understand the uneasy relationship between community ideal and practice generated by recent Kayapo dependency on imported goods. Despite this dependency, however, an indigenous *telos* can be seen to drive the formation and cessation of relationships through which community is constructed.

Kayapo Use of Comunidade

To this point I have been using a rough and ready idea of community familiar to Western readers. There is, of course, no such idea that quite corresponds to this concept among the Kayapo. The strategy I use to highlight indigenous conceptions is to examine the way the Kayapo themselves have seized on the Portuguese word for community in order to emphasize different means of creating relationships. I will be concerned here to contrast Kayapo understanding of the Portuguese comunidide with other native ways of creating collective sociality.

In translating the Portuguese word comunidade into local usage, Kayapo have struck on an unusual application. The term comunidade is used to describe those men in the village who are not benadjwyr or chiefs. Ten years ago, before people of the Bakajá village where I did my fieldwork had begun dealing extensively with gold prospectors and loggers, non-chiefs were called me katáp. In whichever of the many contexts where it was deployed, me katáp refered to whomever was left out, left over, or just a sideline observer to the main action.2 Instead of treating the rendering of me katáp in terms of comunidade as a simple case of poor translation or cultural misunderstanding, it is worthwhile pursuing this matter a bit further to see what light might be shed on the Kayapo concept of community.

The Kayapo know that non-Kayapo live in communities and their use of the term, therefore, is both a description and a comment on the parallels between their own society and the outside world. That is, implied in Kayapo usage of *comunidade* within their own orbit is a kind of self-critique and this quality becomes evident in the often ironical way that the term may be used in conversation. "I'm the comunidade, I have nothing," a man may remark in mock sadness as he extends his open palms forward. "Hey! where's the *comunidade*'s portion?" a man might bark out to signal his desire for food as he approaches a group of people eating.

For all practical purposes, comunidade has replaced me kàtàp when denoting an assemblage of adult male non-chiefs. For example, accusations of overspending or dishonesty on the part of chiefs may be made in the name of the communidade or money may be divided between the chiefs and the comunidade. The comunidade often declaims the moral obligation of the chiefs, not always realized, to pass along a good part of what is received from outside interests in return for allowing gold mining or logging on Kayapo lands.

Without doubt the introduction of the term comunidade derives from Kayapo exposure to ubiquitous directives, originating from Indian Agency bureaucrats and passed on to reservation functionaries, to "consult the community" on certain matters. Given the decision making structure within Kayapo settlements, when the Indian Agency requests "input from the community" on decisions, chiefs and their followers hold council. As adult men are the only ones with an official voice on such occasions, it is not surprising that the Brazilian term comunidade has taken on a limited sense that excludes women and children. However, although the origin of the term comunidade is clear enough, its meaning cannot be inferred through recounting the story of its introduction by a bureaucracy attempting to impose protocol across cultural boundaries. A fuller understanding of the meaning of the term comunidade emerges from what is excluded: the process through which inclusive shared participation is achieved among the Kayapo is thought to have nothing to do with comunidade. In order to draw out this distinction, I must first describe the sorts of mechanisms that generate a feeling of universal common participation among the Kayapo--in short, the kinds of processes that would lead to community in the sense most commonly understood by other contributors to this volume. Understanding of community must begin with some notion of the kinship ties that form the backdrop for village residence.

Kinship and Community

Ethnographers in the Amazon and beyond are never surprised to find that kinship ties are subject to manipulation to attain desired ends (e.g. Gregor 1977, Murphy 1979). Geneologies, pedigrees, or some other seemingly rigorous method of calculus are never a bar to flexibility. All genealogically traced relationships are not recognized, while relations between people who are initially non-relatives may be created through means other than marriage. This is especially easy to see when people have moved to villages in which they have no pre-established kinship ties. Inevitably they acquire a full range of relatives. It is harder to document the inverse process of sloughing off of genealogical kin because this does not occur without some sort of eonflict, either emotional or otherwise, and is much more difficult to acknowledge. As Gregor (1977: 299) illustrates for the Mehinaku, "biological kinsmen are occasionally said to be unrelated; unrelated individuals are often incorporated into the kindred; and kinship terms are used assymetrically and applied without respect to the genealogical network of relatedness." Amazonian and North American kinship fields, then, share a characteristic described by Schneider (1980); to grasp how a particular configuration of kin is assembled, it is necessary to identify criteria lying outside the domain defining kinship itself.

Ties of kinship are not equally distributed throughout the village but kinship is said to provide the

basis for village co-residence. This pattern is widespread in Northern and Central Gê eommunities (Crocker 1990, Verswijver 1978 Maybury-Lewis 1967). Among the Gê, the domestic and public domains are not only conceptually opposed to one another but rely on different principles of recruitment. If such principles as the prohibition of kinship as a criterion for recruitment were adhered to, one might expect members of men's and women's clubs and political factions to be more or less evenly distributed throughout village households. However, if we follow Schneider (1980) and look outside the conceptual domain of kinship in order to determine how persons are classified as kin, we should also search beyond explicit rules governing recruitment to explain how certain persons are classified in the public domain.

As has been documented for the Kayapo (Verswijver 1978; Fisher 1991), factions resting on publicly constituted authority commonly cluster in certain households. Nonetheless people in a single village identify one another as kin (it is normal for the anthropologist to add "at another level of contrast") even if unwilling or unable to specify clear connections. Kinship in this sense is an idiom of unity, and this makes perfect sense as far as it goes. However, in the same vein, I have heard this use of kin idiom employed with respect to other Kayapo villages, friendly non-Kayapo outsiders, other Brazilian indigenous peoples and also indigenous peoples in the United States. Clearly, designation of kin is contextual. Equally clearly, the use of the label "kin" does little to identify the specific way people in a village experience a common unity or define themselves as a community.

Shared Sentiments and Community

What is shared through participation in public (non-kin-based) activities is held by the Kayapo to be analogous to the connectedness of immediate kin (i.e., of the nuclear family). Kayapo stress jointly experienced emotions such as happiness or sadness. A normative level of involvement in non-kin-based associations does not define people as part of a community, although these have been referred to in the literature as "communal" institutions (Turner 1978, 1979).

We cannot assume that the very existence of corporate groups or communal institutions produce something like a shared sense of unity or purpose. The kinds of institutional mechanisms that organize production, reciprocity, ceremony, or the public and domestic domains are not thought to link everybody in the village with one another. When men are asked why they participate in a particular men's club, for example, they point to their relationship with the chief and never to their relationship with other members. Not only are there varieties of organizational forms, residence arrangements, and levels of individual participation in group activities, but some individuals come very close to being social drop outs by virtue of their non-

participation in any of these. If we foeus merely on the superficial evidence of an individual's affiliation with recognized non-domestic groups, we may mistakenly conclude that something the Kayapo consider significant is being shared.

Despite Kayapo failure to identify specific public institutions as the basis of community, all Kayapo, from the most marginalized hanger-on to the most gung-ho age grade leader, point to a shared emotional state as significant. Unlike institutional membership or kinship bonds, shared emotions, such as happiness or sadness, are thought to be universally experienced by all village residents. During a name ceremony, for example, roles are differentiated, but a general sense of elation is felt by all. As I will explain further below, this elation is not merely the by-product of collective activity but is conceived of as the goal of such an activity-that is, what it seeks to produce.

I am not suggesting that it is unimportant to pay attention to organizational forms or patterns as indices of community. Organization by itself, however, does not automatically result in the kind of sentiments Kayapo associate with community. To be effective, group activities must produce combined physical/social states which are correlated with certain emotions. These sentiments are powerful because they are social, public, and collective expression of sentiments that, when experienced in the domestic domain, are felt to be natural outgrowths of feelings of close kin for one another due to their sharing of a common physical essence.

Close kin share a single vital substance (termed *i*). Within the nuclear family, sentiments of happiness, sadness, and longing, are thought to spring directly and naturally from the well-being or hurt experienced by the shared physical substance of the nuclear unit. While, "an injury to one is an injury to all" describes the common fate of the nuclear family unit, so, too, does the well-being of a single member reflect on the well-being of the unit as a whole.

The Collective Production of Physicality

It is no exaggeration, therefore, to claim that physicality and sociality are part of a single complex. Social age, role, and activity are interpreted according to ethnophysiological beliefs that link human bodies with one another. Social activities have as their goals the adjustment or manufacture of bodily capabilities. These capabilities are not only thought to be appropriate for people of determinate age and gender categories, they are thought to **constitute** these groups of persons, or at least their central social qualities.

Parenthood, for example, simultaneously denotes a social age, role, and activity. The biological facts of childbirth establish the social status of age grade membership and the overwhelming number of social acts that new initiates into parental status are urged to undertake have to do with food consumption and

avoidance and behaviors to be engaged in or avoided. All of these acts and non-acts are to ensure the physical well-being of parent and offspring. The birth of a first child is particularly dangerous. If one's firstborn dies while very young, one becomes literally ill with sadness. While other Amazonian peoples, such as the Wari' (Conklin 1995: 85) believe that prolonged sadness endangers individual health, for the Kayapo sadness reflects a certain physical state resulting from a dehabilitation of jointly shared substance.

It is to ward off danger to one's offspring and also, not secondarily, to oneself that food and behavioral prohibitions called *angri* are observed. These isolate a person from both natural and social sources of danger to the body's fragile constitution while the boundaries of self are being physically redefined. Ties of substance are of such compelling emotional force that they are both the basis of sociality and its antithesis. Physical bodily state and social status are thus inextricably entwined.

Hence the anti-social potential of certain kinds physical potential. Emotional ties between family members are indications of physical unity and this family togetherness can be carried to the extreme of introversion. If the family group becomes emotionally introverted or closed in on itself, it runs the risk of becoming indifferent to and cut off from the wider ties of kin and society. For the Kayapo, boundaries of kinship are not merely symbolic; the emotional and physical entailments of shared bodily substance have real social consequences.

Emotions that result from physical attachments have their parallel in collective emotional states, principally produced through ritual. Viewing ritual ornaments publically displayed and properly separated and arrayed on the occasion of a naming eeremony, brings a pervasive feeling of happiness. While viewing and participation makes people happy, the dances and songs performed during these same rituals, associated as they are with particular departed kin, make people sad. Thus part of the experience of ritual is the ereation of a tension between sadness as experienced individually and happiness as experienced collectively, both within the same formal context. While the emotional bonds between kin, especially between nuclear family members, are self-evidently strong since they entail sharing of physical substance, they are dangerous because they are subject to the finiteness of that same physical substance; all kinship relations run their eourse and disappear forever. While kinship ties have overwhelming emotional strength, only community can ensure a collective sharing of positive sentiments, ultimately creating bonds that compensate for the finiteness of physical ties.

Name ceremonies gain their potency from the juxtaposition of private acts of mourning with collective elation. Kayapo vividly experience an overwhelming sense of individual sadness through collectively created reaffirmations of group well-being. Because ritual action

depends on a felt response from participants, the lack of feeling by participants can destroy a ritual and the village in the process. When the gap between the collective emotional union asserted by ritual and the antagonism harbored by people against one another ensures that ritual action is unsuccessful in creating unity, ritual can be felt to fail. The self-referentiality of ritual action means that ritual either succeeds as an assertion of community or it does not. Failure makes it almost impossible for people to continue to coexist within the same village and ceremomies are particularly propicious times for village splits or fights.

Significantly, with the single exception of the new corn rite, ceremonies are not calendrical, or tied to annual events. Rituals usually drag on for months during which time aspects of collective expression that may be interpreted as sharedness are **created** through repeated activity. The build up of collective enthusiasm by means of repeated activity and the improvement of song performance after many rehearsals mark the time as ripe for staging the ceremonial finale. The extensive song and dance rehearsals, distributions of food, and the manufacture of complex ornaments needed for the finale continue over the course of several months in order to create the proper elimate for performance.

Other emotional states, such as anger, are produced collectively as well. In times of fighting, men undertake eertain dances which result in their becoming collectively enraged. After such a dance, men would comment on how angry they felt, that they felt angry enough to kill someone, and the like. As with other emotions, anger is indicative of a particular physical/social state and is accompanied by certain alimentary practices, in this case, abstinence from food, as well as the experiencing of certain bodily sensations and the use of some bodily decorations.

Professions of eollective happiness or anger may give a Westerner the idea that such assertions are made to convince oneself or others of a sentiment that is not fully felt. However, this would be to misread what Kayapo perceive as the relationship between emotions, consciousness, and action. Emotions are not a cause of action. Emotions are an objective corollary to changes in physical and social states. If, for example, one is slighted and thus feels angry, one gets revenge by hitting back. This response is not caused by the anger, however. Balancing the score is thought of as reversing the objective social state. Anger or shame is erased as a matter of course. To continue to be angry after reciprocating is to be antisocial. There is, theoretically at least, no reason to hold a grudge.

To the outsider, Kayapo interpretation of events can seem excessively emotional. Happiness, sadness, longing, anger, and fear are used to refer to results of political processes or events occurring between the village and the wider world. Such manner of expression, however, should not be mistaken for a misplaced personalization of the political, nor as a

hegemonic ruse to assert a eommonality of outlook that obscures a divergence of real-world interests. For the Kayapo, the same emotions that are experienced as a corollary to biological interconnectedness are also experienced collectively between non-kin. Emotions are felt indicators of a sharing with those who are non-kin when participating in common endeavors or suffering common fates.

Healthy emotions, for the Kayapo, are more than a metaphor. The direct association made by the Kayapo between bodily emotion and collective well-being reverses the relationship between seen and unseen and inside and outside common in the the revelatory symbolism of Christianity. Bateson's (1979: 252) notion of a sacrament as "an outward and visible sign of an inward and spiritual state of grace" is the inverse of the inward projection of experienced emotion as if originating outside the body in collective ritual. Although invisible, experienced inner emotion becomes a sign of visible achieved community. In matters of community, the Kayapo appeal to no external observer or omnipotent authority; subjectively experienced emotions are the ultimate arbiter.

Significantly, only the idiom of kinship is used to express sharedness (aben pydji) or oneness in which the emotional, biological, and the social are all implicated. Kayapo distinguish between this state, which is conceived in ethnophysiological terms, and participation in age grades or chief-led associations which may or may not generate such sentiments. Collectively created states of sharedness are not merely the automatic consequence of participation in communal structures, they are themselves held to be the embodiment and direct product of social activity. Performances can indeed be empty and participation can be merely formal and the Kayapo are painfully aware that all the complex social forms, for which the Gê-speaking peoples are justly renowned, comprise necessary, but not sufficient, conditions for community.

Comunidade versus Community

When not splitting in an endless sequence of mitosis (Bamberger 1979), Kayapo villages are envisioned as housing kinsfolk. Ultimately, this refers to the feelings that hold among kin or generalized sentiments of the same sort. As previously mentioned, these feelings are not simply normative representations of ideals but are indices of physical/social states. Kinship produces such states and associated feelings but these may be produced through analogous processes as well. But mere village coresidence does not automatically produce community or collective sentiments. When I asked a man if he missed his village when he travelled and worked in the environs of Altamira, the closest Brazilian town, his reply was illustrative: "Why would I miss the village? All my kin perished during first contact with the Indian Agency?"

Contrary to what one might suppose, given the public/domestic dualism that organizes Kayapo life, political or public associations do not determine the exclusion or inclusion of individuals within a particular village or community. Neither, strictly speaking, does kinship determine inclusion, for people have kin in other villages and inevitably make kin ties when moving into a village. The bottom line is that communities are formed and maintained by people who wish to stay together. While everyone is not joined through social relationship to all others in the village, all participants in a community share a living ideal regarding common participations in activities that create common sentiments. The social significance of these sentiments is that they are indices, or monitors, of particular social/physical states which social action seeks to achieve.

Action is needed to realize the potentialities of kinship and action is needed to create communities. Thus residences are arranged in certain ways to reflect correct or desired social relations and public collective activities are organized towards the same ends. Kayapo villages just never "are." They are the outward manifestation of striving to create community, sometimes successful and sometimes less so. Consequences of failure can mean the wholesale movement of people out of the village.

If community can be thought of in these terms, then it becomes problematic to define chiefs as representatives of communities. Community is not defined as "consensus," and although egalitarian notions are powerful, there are no "democratic" mechanisms. Instead, chiefs act in the interests of themselves and their followers, and such actions may be liked or disliked but are acknowledged as legitimate, even if they do not serve interests of all villagers. Chiefs are political leaders or leaders of age associations which, interestingly enough, are not operative in the above-mentioned name ceremonies or anger dances that generate collective emotional states.

Indian Agency directives implicitly excludes chiefs from the *comunidade* (since they are the ones consulting rather than consulted) and Kayapo do not think of their chiefs as "standing in" as representatives for a communal consensus. It is not immediately clear, however, why the term *comunidade* could not be applied to kin relations or to women. The answer lies in the fact that *comunidade* is always employed in the explicit or implicit context of extra-village relations, primarily those involving the Indian service, loggers, and gold prospectors.

Kayapo believe that Brazilian communities, towns, and cities differ markedly from their own settlements. One of the hallmarks of Brazilians is thought to be the skewed way they reckon kin and their employment of a commercial mentality with even their closest relatives. Apocryphal tales of Brazilian brothers who sold things to their own siblings circulated among

the Kayapo during my last fieldstay. In this sense Brazilian society could be seen to be the inverse of Kayapo society, inasmuch as Brazilians calculate the value of exchange among even close kin. For the Kayapo such transactions are repugnant not only because they violate cannons of morality but because close kin relation are thought to contain one another in a direct physical sense. There are no separate positions across which exchange may occur, since anything suffered by one's brother or sister only results in a diminishing of self. Anything other than free uninterested generosity not only violates the basic conditions of Kayapo kinship relations but also the sentiments that underlie a feeling of oneness or community among the Kayapo.

Parallelly, if chiefs want to maintain their positions as conduits to in-flowing commodities, they cannot extend free, uninterested generosity to their followers. Supplies are not unlimited, and chiefs depend on complex accommodations with surrounding Brazilians of various stripes. Distribution must be carefully thought out to achieve certain political ends, including the balancing of obligations to kinsfolk with those to followers in public associations. The latter comprise a chief's base of public support but are always ready to defect to associations led by a rival chief. What could be more natural, then, to identify the sorts of commercial transactions that are the basis of a Kayapo chief's redistribution of goods to his followers with the organization of the community understood, not in Kayapo, but in Brazilian terms? The genuine basis for community as reflected in kinship is implicitly represented as the opposite of the Brazilian version of community represented by comunidade.

Chiefs are excluded from the comunidade which is used for all other men without distinction, so that the followers of different chiefs are lumped together. Thus a collectivity of several chiefs is opposed to the block of their followers identified as the comunidade. What identifies all members of the comunidade with one another is their structural position within the system of cross-cultural transactions between Kayapo and the wider world. These men are prey to the arbitrary actions of their own chiefs who mimic the generosity of kin when distributing goods. But such goods, unlike other products, such as food and ritual ornaments, whose circlation is emblematic of kinship are not collectively produced in ways that create the emotional and physical entailments of oneness. Thus chiefs are not constrained by sociality that is reciprocally constructed and experienced. Followers are left without organizational recourses to collectively create, through social action, the appropriate physical/social state to reestablish desired sorts of sociality. Brazilian community (or comunidade) in which commercial transactions regulate relations between kin can be seen to surface within Kayapo society itself, inasmuch as chiefly redistribution of manufactured goods is couched in the language of reciprocal obligation. The very inversion of correct social relations embodied in Brazilian *comunidade* is the spectre behind Kayapo use of the term *comunidade*. This use illuminates an aspect of their own social practice that most Kayapo find unavoidable but discomfitting.

Conclusion

In contrast to widespread notions that predetermined racial, ethnic or cultural identities are the basis of community, Kayapo hold that community is constructed through common production of a shared physical/social state marked by collective sentiment of specific persons in specific relationships. Certain persons must be excluded as certain outsiders are included. The creation of community is a two-way process involving both the creation and the disavowal of relationships. This is reflected empirically in frequent village splits which represent the sloughing off of relationships and also in the demographic reality of present village populations. In the case of the Bakajá Xikrin-Kayapo, for example, 29% of the current village population are immigrants or offspring of immigrants adopted into relationships, and hence into the community, within the last 30 years (Fisher 1991).

Unfortunately, Kayapo social life involves more than attempts to realize their concept of community. Their containment on reservations and their willing and unwilling involvement in processes of broad regional scope entail the creation of new sorts of social relationships within Kayapo settlements. For better or worse, aspects of these relationships are at odds with Kayapo production of sociality even as they become essential for daily tasks of material production. Within this context the restricted use of the term comunidade acquires a critical edge as evidenced, among other things, by the irony with which it is frequently used and by its organizational role in mobilizing men in ways that counteract chiefly power derived from privileged access to manufactured goods. The contrast between Kayapo concepts of community and comunidade thus furnishes us with further insight into the forging of indigenous sociality under conditions not of their own choosing.

Unlike contemporary apostles of community as a cure for societal anomie, Kayapo do not long for community in the abstract. Their world is filled with specific people with whom they interact not because these fit the abstract definition of kin but because they have built a relationship with them. Kinship is teleological in two senses. It is driven by changes in physical/social states of coordinated and linked kin relations of higher and lower generation (see Fisher, n.d.a.). More importantly for the topic of this volume, communities, like kin fields, are composed of people. Community is an ongoing product of the production and selection of relationships that can collectively experience shared social states. The ability to participate rests on the inclusion of persons in determinate social rather than ideas more familiar to relationships

Westerners regarding the notion of an intrinsic quality of a racial or ethnic self.

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Notes

- ¹ This concept, proposed by Eric Wolf (1982, 387) is a useful way to conceive of the processual interplay of "internal" and "external." "[T]he explanation of cultural forms must take account of that larger context, that wider field of forces. 'A culture' is thus better seen as a series of processes that construct, reconstruct, and dismantle cultural materials, in response to identifiable determinants."
- ² Those without food, those who observed ceremonially decorated dancers, non-chicfs, etc., all could be referred to as *me katáp*.
- ³ Properly speaking, the idea of a nuclear family based on the symbols of shared genetic substance peggcd to biology is not found among the Kayapo, although there are some parallels. For a more detailed description of Kayapo close family relations see Fisher n.d. a. and n.d. b.
- ⁴ For example: "The communal structure of Kayapó society, in short, can be seen as a generalised projection of the life cycle of Kayapó men and women, as defined in terms of the successive 'moves' made by each sex through the structure of the extended family household" (Turner 1978: 267).
- I am tempted to equate the production of collective emotional states to the Grahams' (1995) idea that Xavante public discourse is produced in such a way as to be irreducible to individual speakers or individual opinion. In contrast, however, Kayapo children and women are not excluded, but rather emphatically included in collective physical/social states when they have attained a minimal (social/physiological) age.