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Author(s): Edward M. Schortman and Patricia A. Urban

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Living on the Edge

Core/Periphery Relations in Ancient Southeastern Mesoamerica¹

by Edward M. Schortman and
Patricia A. Urban

Archaeological investigations on the margins of "high civilizations" have traditionally been guided by the assumption that polities in such zones were peripheral to core states. This paper argues that this assumption obscures the multiple dimensions along which core/periphery distinctions can be measured and ignores the possibility of mutual influence and interdependence among interacting societies at all size and complexity levels. This confusion is particularly evident in the study of southeastern Mesoamerica (adjoining portions of Guatemala, Honduras, and El Salvador), usually viewed as peripheral to lowland Maya core states during the Late Classic period (A.D. 600–950). In an attempt to advance the study of polities bordering complex and extensive sociopolitical systems, a general model is outlined which sets out to identify the different dimensions of peripherality and specify the conditions under which various sorts of core/periphery relations are likely to develop. Late Classic political, economic, demographic, and cultural patterns from the Naco Valley, northwestern Honduras, are then examined to determine how this area was linked to lowland Maya core states (represented here by Copan and Quirigua) and what effects these ties had on indigenous developments. The essay concludes with an overview of Late Classic lowland Maya/non-Maya interactions in the Southeast and some general suggestions for future research.

EDWARD M. SCHORTMAN and PATRICIA A. URBAN are both Associate Professors in the Department of Anthropology/Sociology

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at Kenyon College (Gambier, Ohio 43022, U.S.A.). Both received their Ph.D.'s from the University of Pennsylvania (Schortman having done his undergraduate work at the University of Delaware and Urban hers at Cornell University). They have directed research in the Lower Motagua Valley, Guatemala, and Middle Río Ulúa drainage and the Naco Valley, Honduras. Schortman's research interests are prehistoric intersocietal interaction processes, ancient political economies, and identity formation in the ancient and modern worlds. Urban's include settlement pattern studies, long-term demographic processes, ceramics, ancient craft specialization and manufacturing processes, and world-systems theory. Among their joint publications are *The Southeast Maya Periphery* (Austin: University of Texas Press, 1986), "Modeling Interregional Interaction in Prehistory" (*Archaeological Method and Theory* 11:37–95), "The Southeastern Zone Viewed from the East: Lower Motagua-Chamelecon," in *The Southeast Classic Maya Zone*, edited by E. Boone and G. Willey, pp. 223–67 (Washington, D.C.: Dumbarton Oaks), and the collection *Resources, Power, and Interregional Interaction* (New York: Plenum Press, 1992). The present paper was submitted in final form 21 x 93.

Prehistoric cultural, sociopolitical, and economic developments in areas outside recognized "high civilizations" have traditionally been viewed as pale reflections of, or reactions to, events occurring in complexly organized states. This distinction has been enshrined in such terms as "core" and "periphery." Nowhere is this tendency clearer than in adjoining eastern Guatemala, western Honduras, and El Salvador, the southeast Maya periphery (hereafter, the Southeast; fig. 1). Archaeologists have often conducted research here on the assumption that, at least during the Classic period (A.D. 200–950), Southeastern cultural and political forms were diluted extensions of their counterparts among the lowland Maya to the west and north (Schortman and Urban 1986; see papers in Boone and Willey 1988, Lange and Stone 1984, Robinson 1987, Urban and Schortman 1986). Consequently, investigations have overwhelmingly focused on the "hearth" of sociopolitical and cultural complexity in the lowland Maya "core" at the expense of systematic research in the "periphery." Excursions into the latter area, until recently, concentrated on defining the borders of Classic-period "Maya culture" (e.g., Longyear 1947, Lothrop 1939). Despite a recent spate of large-scale research projects designed to redress this imbalance (e.g., Ashmore et al. 1987; Henderson 1983; Hirth, Pinto, and Hasemann 1989; Joyce 1991; Nakamura, Aoyama, and Uratsuji 1991; Schortman 1993; Schortman et al. 1986; Sharer 1978a; Sheets 1984, 1992; Urban 1986a, b; Walters 1980), a considerable information gap still separates this area from its lowland Maya neighbors.

There are several problems with the application of core/periphery distinctions to the Southeast and other such zones. First, they tend to combine several dimensions of marginality and treat them as coincident. On the one hand, most Southeastern societies are seen as residing outside the bounds of the lowland Maya "Great Tradition" defined by criteria of monumental architecture, art, and hieroglyphic inscriptions. While the behavioral significance of such lowland Maya traits is rarely considered (but see Freidel 1979, 1986; Schortman

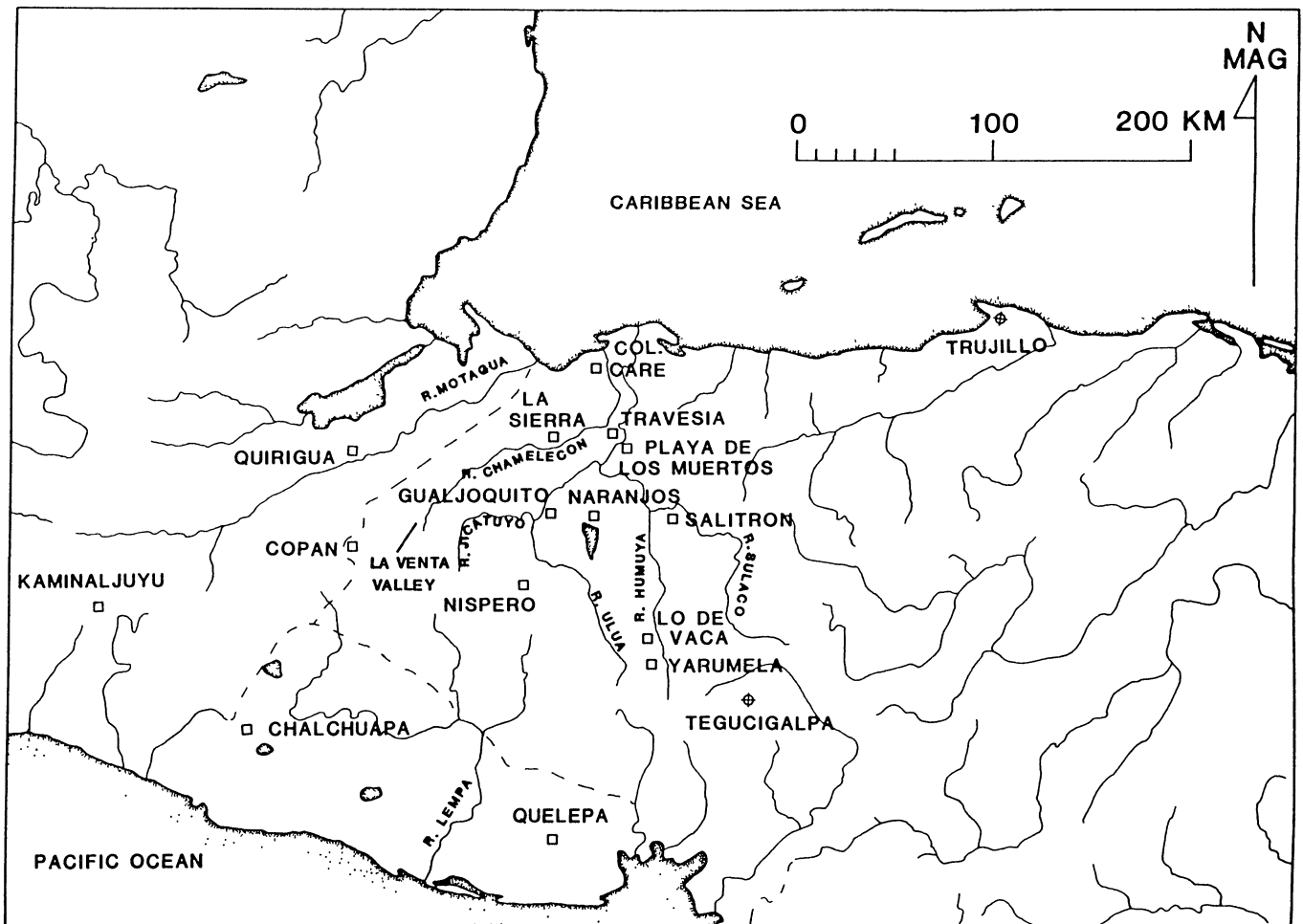


FIG. 1. Southeastern Mesoamerica, showing the location of the Naco Valley along the Río Chamelecón (marked by the Late Classic valley capital, La Sierra).

1989), the assumption seems to be that “non-Maya” societies were excluded from participation in high-prestige lowland ideologies. There is at least an implication of aesthetic inferiority. Alternatively, the periphery can be viewed in political and economic terms *sensu* Wallerstein (1974, 1980). Core states, in this scenario, politically dominate their less complex neighbors, extracting surpluses from them through unequal exchange relations disproportionately benefiting core elites. Peripheries are, then, underdeveloped and economically impoverished as a result of interregional exploitation (e.g., Champion 1989:5–10, 14). Cores, in contrast, use imports from the periphery (usually raw materials) to sustain general economic growth and elevated consumption levels (e.g., Algaze 1989:572–73; Austen 1978:2; Wells 1980a, b, 1984). Core/periphery distinctions may, therefore, be defined along political, economic, and/or ideological dimensions. There is no reason to believe that these or other possible variables coincide. Assuming that they do only serves to obscure a complex picture.

A second problem with the core/periphery distinction is the presumption that whereas core states are dy-

namic, peripheral societies are passive. Core initiatives are seen as the engine of change in peripheries. Core state expansion results in the incorporation of smaller, more simply organized peripheries. Alternatively, innovations emanating from a center spur reactions along its margins. The possibility that core and periphery societies are embedded in networks of mutual interdependence and interinfluence is rarely considered (but see Kohl 1992, Schortman and Nakamura 1992, Schortman and Urban 1987).

The core/periphery distinction as currently employed in the Southeast and elsewhere therefore tends to lump societies which do not exhibit the hallmarks of a “high civilization” in opposition to those which do, to see the former as aesthetically, ideologically, politically, and economically underdeveloped vis-à-vis core states, and to attribute patterns of change to core initiatives. What we will argue here is that these statements are not so much wrong as unproven. In order to evaluate them, a theoretical framework for defining core/periphery relations is needed, along with data against which to measure the “peripherality” of specific polities (see Chase-

Dunn and Hall 1991a). After presenting such a general model we will focus on developments within one portion of the Southeast where we have been conducting research, the Naco Valley in northwestern Honduras. The Naco Valley is *not* necessarily typical of Classic-period Southeastern regions; no one area is. The Naco data are highlighted here because we are familiar with them and valley developments are relevant to the present topic. This is no more than a first step in unraveling complex processes of intersocietal interaction, and we look forward to the input of other researchers interested in core/periphery relations.

A Core/Periphery Framework

We will attempt to formulate a hypothesis which specifies the conditions under which different sorts of core/periphery relations are likely to develop. The focus here is on the domain of interaction situations which includes hierarchically organized societies of different sizes and levels of sociopolitical complexity. This situation best approximates current understandings of Classic-period Southeast interrelations. We argue that within this class patterns of political and economic underdevelopment are *unlikely* to occur if core states (the largest, most complexly organized interaction partners) do not monopolize (1) the pooling of exports and distribution of imports within the boundaries of other interaction partners, (2) technologies of production and transport, and (3) a military threat effective over broad areas (Austen 1978; Boutilier 1989; Champion 1989:14; Kohl 1987; Wilkinsen 1987).

The first two conditions ensure that intersocietal exchanges will stimulate indigenous economic and political development resulting in larger, more complexly organized and integrated local systems. Interaction among polities, perhaps initially stimulated by representatives of core states in search of needed commodities, will enlarge the market for goods generated in any one area, encouraging intensification of production. This process, in turn, selects for the development of hierarchical sociopolitical structures to organize extraction, production, and transportation of goods in polities adjoining established states (e.g., Algaze 1989; Austen 1978:12; Schortman and Urban 1987). These effects will be especially pronounced where the primitiveness of the transport system, the long distances, and/or the dangers of areas that must be traversed make it impossible for core-state rulers to dominate and incorporate their neighbors. These same transportation conditions frustrate the attempts of core-state manufacturers to inundate markets outside the core with inexpensive finished goods (e.g., Austen 1978, Upham 1992). If core producers could flood peripheral markets, this would effectively undercut local economic development, in particular craft specialization. Instead, each polity is free to develop its own political organization and workshops producing items from foreign and immediately available raw materials for lo-

cal consumption and export (Austen 1978; Wells 1980a, 1984; Winter and Bankoff 1989:161, 170).

As employment in the artisanal sector grows, additional bureaucrats are needed to administer production, and ever-greater food surpluses are required to feed both craftworkers and administrators. Additional food can be extracted from farmers by coercive means, but such means seem rarely to be employed in early complex societies. Rather, elites tend to monopolize extraregional contacts, using the goods acquired thereby as political currency which passes down the local hierarchy in "exchange" for subsistence resources and labor (e.g., Dupré and Rey 1973; Ekholm 1972; Frankenstein and Rowlands 1978; Freidel 1986; Friedman 1982; Friedman and Rowlands 1978; Gledhill 1978; Kristiansen 1982, 1987; McGuire 1987). Local paramounts also move to monopolize the production and subsequent intrapolity distribution of generally needed items through "attached artisans" directly overseen and supported by the elite (e.g., Brumfiel and Earle 1987). Objects fashioned by these craftworkers are usually those which require considerable skill and/or imported raw materials to fabricate. Both conditions make it relatively easy to monopolize the manufacturing process (e.g., Clark 1987; Friedman 1982:183-84; Haselgrove 1982:81-82; McGuire 1987:130 Shennan 1982). The more food surplus is needed, the more deeply elites must invest in long-distance exchanges and the support of specialized workshops to attract farmer-clients and stimulate their production. The long-term effect is the creation of a centralized political economy integrating local production with intra- and intersocietal systems of exchange (Austen 1978:8-9). An expanding economy also encourages demographic growth as rulers seek to acquire more clients to intensify artisanal and food production. Households under these conditions will also perceive advantages in expanding their labor pools to meet tribute demands (e.g., Renfrew 1982, Webster 1990). This demographic upward spiral exacerbates the need for more nonfood producers, elite administrators, and craftworkers fashioning items to reward clients and acquire imports. A positive feedback system has been set in motion.

The existence of multiple core states competing for control over relations with peripheries also contributes to the unencumbered development of the latter (Kohl 1987:16). This situation undercuts whatever organizational and size advantages core states may have over peripheral societies, reducing the ability of the former to monopolize crucial production and/or transportation processes. Elites in the periphery can play one core off against another and have a freer hand in dictating the terms of exchange. Anything which short-circuits these political/economic relations will discourage the development of complex political economies throughout the interaction network. Monopolization of coercive force within the interregional web gives a core state the ability to enforce unequal exchange relations, perhaps substituting tribute exaction for equal transactions. Any circumstance, however, which permits core states to

monopolize some crucial aspect of interregional exchange relations, whether it be the production of finished goods, the transport system itself, and/or military force, gives the monopolist a decided advantage in accumulating capital which can fund core expansion and peripheral underdevelopment (Abu-Lughod 1989:371). Core preeminence is further enhanced when several peripheral societies produce or extract the same goods used by a single core state which alone fashions items needed in all parts of the network (e.g., Abu-Lughod 1989:364–65, 368–69; Algaze 1989:588; Champion 1989:14–15; Kohl 1987:16). Core elites, not their peripheral counterparts, now can dictate the terms of exchange. These conditions make it possible for core states to forge bonds of dependency which a few central paramounts manipulate for their own advantage. Peripheral societies give up more resources than they receive in return, local economic development is undercut, and capital is steadily depleted. Here we can speak of real political and economic underdevelopment.

Cores and peripheries can also be defined in ideological terms. This situation is marked by a flow of innovations primarily from core states to less complexly organized polities. The primary interactors, as in the political and economic discussion, are elites, who have the greatest freedom and opportunity to develop and maintain contacts beyond their home societies (e.g., Barnes 1986; Renfrew 1986). Here we focus on the adoption of symbols developed in the context of elite core ideologies by peripheral rulers who may restrict their use within the populace to varying degrees.

There is considerable variation in the freedom peripheral leaders can exercise in selecting and adapting foreign symbols and their meanings to fit within preexisting cultural systems. At the one extreme, exotic ideologies may be imposed in the course of conquest, any reinterpretation of symbols occurring covertly (e.g., Gailey 1987; Spicer 1961). More commonly in prehistoric and early historic situations, distant elites select those symbols and precepts which suit their own purposes, changing meanings as they see fit. Hinduism spread through much of coastal Southeast Asia during the 5th to 7th centuries A.D. as rulers sought to increase their local preeminence through association with a hierarchical religion stressing divine associations of kingship (Hall 1985:6, 71–72; Wolters 1967:246–47). The spread of Catholicism in western and central Europe following the fragmentation of the Roman empire can be accounted for, to some extent, as part of elite strategies to enhance their local power; Catholic doctrine supported hierarchical sociopolitical distinctions with control centralized in the hands of an anointed monarch (Havlik 1989, Sawyer 1979, Trigger 1978). Hinduism in Southeast Asia and Catholicism in Europe were also linked in the minds of converts with distant, high-prestige realms. Manipulation of foreign symbols by local elites transmitted some of the sacredness associated with such places to the rulers (Helms 1979, 1988; see also Algaze 1989:585).

We may be able to speak, therefore, of intersocietal

ideological hierarchies instituted and supported by different degrees of coercion. It may well be that the maintenance of any intersocietal interaction network requires that participants share a symbolic system to some degree (Schortman 1989; Schortman and Nakamura 1992; Schortman and Urban 1987). People thus linked will find it easier to establish the bonds of trust essential to goods exchange and to communicate with and understand each other. Where monopolies over the local distribution of foreign goods are important foundations of elite power, access to intersocietal contacts is often restricted to factions displaying the appropriate symbols (e.g., Cohen 1969; Curtin 1975, 1984; Donley 1982). Extensive exchange networks are, therefore, frequently underlain by commonly held symbolic, especially religious, systems (e.g., Abu-Lughod 1989:16–17; Austen 1978:7; Cohen 1969; Curtin 1984; Donley 1982; Hall 1985:36–38; Santley, Yarborough, and Hall 1987; Schortman 1989; Schortman and Urban 1987). That the ideology linking interactors usually derives from a core state could reflect the high esteem in which the most complexly organized participant in the net is held. It may also result from calculated efforts by peripheral rulers to legitimate novel hierarchical relations by adopting new, frequently sacred rationales developed for much the same purposes elsewhere.

Ideological, political, and economic intersocietal hierarchies are not necessarily coterminous. Certainly a society may be an ideological periphery of a core state while showing no signs of political or economic underdevelopment. The conditions favoring political and economic domination of a network by a single or few polities also make possible enforced adoption of core ideologies. This development is not inevitable, however. Forcible religious conversion may or may not be a component of elite domination strategies. Much research remains to be done before we know the circumstances under which core political and economic expansion is accompanied and supported by ideological subordination.

The Naco Valley

OVERVIEW

The Naco Valley, encompassing 96 km² in northwestern Honduras, is watered by the Río Chamelecón and bounded by the steep escarpments of the Sierra de Omoa. The valley floor is 100–200 m above sea level, and annual precipitation hovers around 1,300 mm (Andrade 1990). Investigations of local prehistory were sporadic prior to 1975, when J. Henderson of Cornell University initiated the Naco Valley Archaeological Project (hereafter NVAP [Henderson et al. 1979]). We took over this work in 1978 and have since directed six seasons of field research there (Schortman and Urban 1991a, b; Urban 1986a, b; Urban et al. 1988; Wonderley 1981). Overall, NVAP studies have defined an occupation sequence stretching from the Middle Preclassic (800–400 B.C.) through to the Spanish conquest in the 16th cen-

tury A.D. During this long interval there were at least three periods of political centralization. The most marked of these occurred during the Late Classic (A.D. 600–950), when the entire valley and immediately surrounding zones were under the control of rulers living at the large center of La Sierra.

The Late Classic also witnessed cultural and sociopolitical florescence throughout the Southeast, including the lowland Maya polities of Copan and Quirigua and such “non-Maya” regions as the Sula Plain, ca. 15 km north of Naco (Henderson 1981, Joyce 1991), the La Venta and Florida Valleys, 60 km southwest along the Río Chamelecón (Nakamura, Aoyama, and Uratsuji 1991), the Sulaco and Humuya drainages 50 km to the east (Hirth, Pinto, and Hasemann 1989), and the middle Ulua drainage 40 km to the south (Ashmore et al. 1987, Schortman et al. 1986). The contemporaneity of these developments and Naco’s strategic location on potential communication routes leading to five of them (the Lower Motagua Valley [including Quirigua], Copan, the La Venta and Florida Valleys, the Sula Plain, the middle Ulúa drainage) suggest that the Late Classic valley is an appropriate “laboratory” in which to evaluate the nature and significance of intersocietal contacts in the prehistoric Southeast.

POLITICAL ECONOMY

We began our Naco investigations with the assumption that the Late Classic valley would exhibit a relatively decentralized political and economic organization. This fit with prevailing notions of Naco’s “peripheral” location. Presumably, it was an area exploited by much larger neighbors, specifically Copan and Quirigua. At the end of fieldwork in 1988 we suspected that this was wrong, and the 1990–92 seasons only confirmed our error.

A near-total ground survey of the valley coupled with excavations in Late Classic settlements of all sizes and locations (259 structures excavated in 35 sites, representing approximately 13% of all known Late Classic buildings) revealed a far more complex picture. The Late Classic apparently witnessed a tremendous growth in population throughout the region (fig. 2). The three-and-a-half century span also saw the development of a five-tier settlement hierarchy dominated by the centrally located capital of La Sierra. La Sierra itself contains 468 surface-visible constructions crowded within 0.7 km.² Thirty-seven monumental platforms (1.5 m or higher), arranged in a rough D shape around several adjoining plazas, define the site core (fig. 3). La Sierra is larger by a factor of ten than centers in the next settlement tier (Tier 2 sites have 41–44 constructions). This primate distribution strongly argues for a concentration of power as well as people at the capital.

Supporting this view is the overall distribution of Late Classic population. Sites of this period are found throughout the valley, but roughly 37% of all recorded coeval platforms are located at La Sierra and in a densely settled zone within a 1-km radius of it (the latter area

is referred to here as La Sierra’s “near periphery”). There is no obvious concentration of physical resources which might account for this settlement pattern. In fact, the La Sierra zone did not support sizable populations prior to A.D. 600 and was largely abandoned after A.D. 1200. Settlement nucleation in and around the capital must be related to the establishment of the political center, possibly to elite strategies of centralized control. It has been argued elsewhere (Montmollin 1987, 1989; Roscoe 1993) that it is in the best interests of paramounts to concentrate as many supporters as possible in the immediate environs of their capitals. Nucleation reduces costs of supervising “dependents,” collecting tribute, distributing goods and services, and exacting sanctions. Population concentration also undercuts the ability of subordinate elites to compete effectively with paramounts for commoner labor and surpluses. Comparable patterns of population packing, albeit on a larger scale, have been interpreted as symptomatic of powerful, centralized bureaucracies (e.g., Tzacualli-phase [A.D. 1–100] Teotihuacan in the Valley of Mexico and Monte Albán Early I [500–350 B.C.] in the Oaxaca Valley [Blanton et al. 1981:66–75; Parsons 1974; Sanders, Parsons, and Santley 1979]). There is no reason to doubt that the same processes were at work in the Late Classic Naco Valley.

La Sierra’s rulers administered the Naco Valley through 17 subsidiary centers (Tier 2–4 sites). Each of these loci contains some monumental architecture pointing to the existence of resident elite subordinate to the La Sierra paramounts. Investigations along potential communication routes exiting the valley to the north, east, south, and west indicate that each passage was dominated by a sizable Late Classic center. None of these settlements approaches La Sierra in size (the largest contains 100 constructions). Extensive excavations at La Sierra, 5 near-periphery sites, and 10 rural settlements, along with more limited probes in 19 primarily rural loci, provide some insights into how this settlement hierarchy was maintained and related to production and exchange processes.

The Late Classic capital and its environs supported a large number of workshops processing a diverse array of goods from both locally available (e.g., clay) and imported (e.g., polyhedral obsidian cores) raw materials. Every one of the 14 patio-focused structures groups laterally cleared here in 1988 and 1990 yielded evidence for manufacturing activities. Prismatic obsidian blades, pottery censers, and kiln-fired ceramics, in particular, were fashioned in large quantities at La Sierra (table 1). Dependent on imported raw materials (polyhedral cores) and/or specialized skills requiring considerable time and effort to learn and maintain (blade knapping, censer manufacture, kiln firing), these crafts would have been relatively easy for La Sierra’s rulers to control. Access to foreign raw materials, presumably acquired by the valley paramounts, and knowledge could have been restricted (e.g., Clark 1987:280–81).

Although evidence for manufacturing of these items is primarily limited to La Sierra, the products were widely distributed. Obsidian prismatic blades are com-

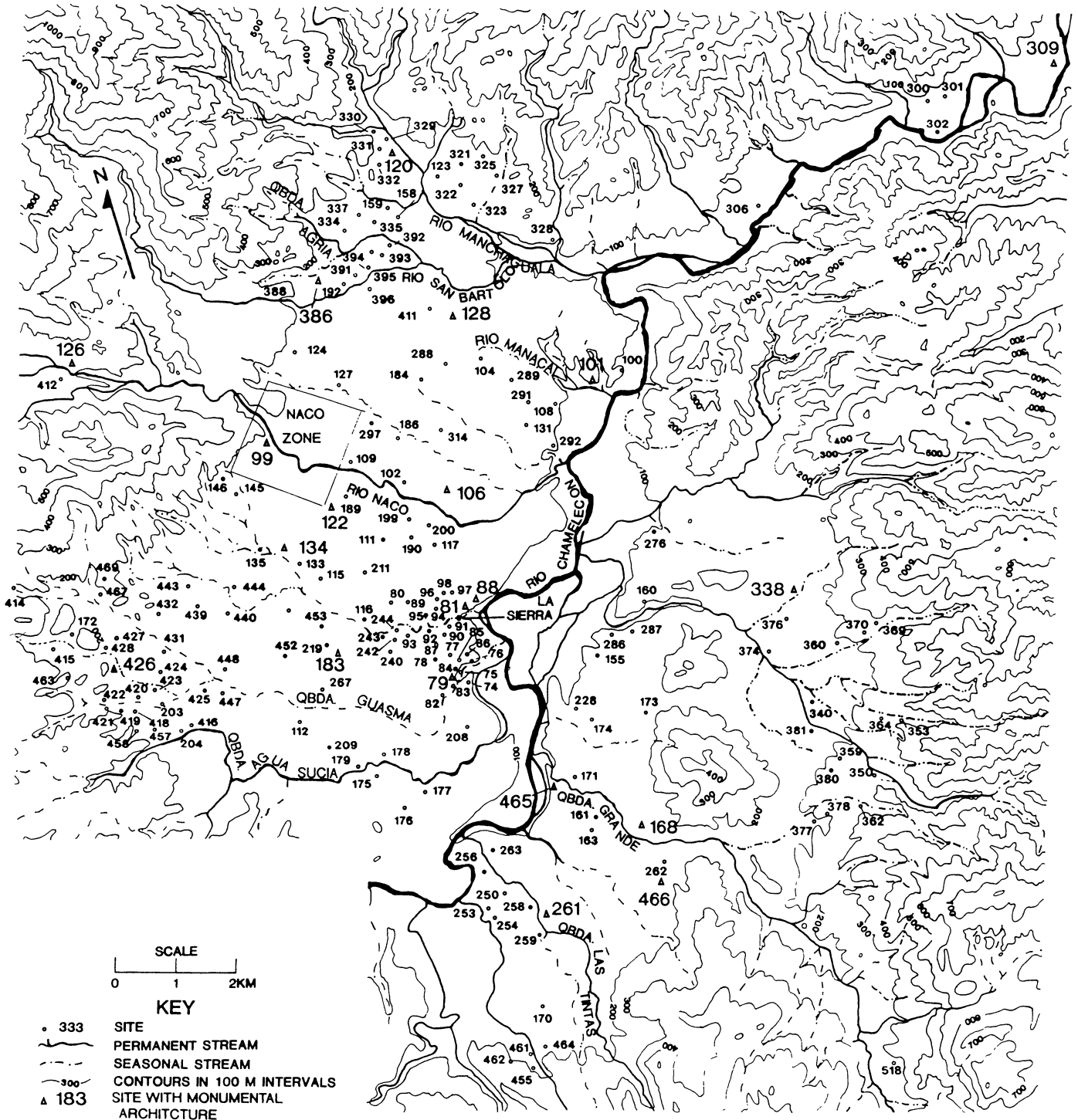


FIG. 2. Distribution of Late Classic settlements in the Naco Valley and immediate environs.

monly found in Late Classic household assemblages throughout the valley, despite the need to import the cores from which these implements are made and the locally availability of chert and small nodules of perlite (a volcanic ejecta very similar in appearance and chipping properties to obsidian). Similarly, censers and all ceramic taxa are recovered in most excavated Late Clas-

sic Naco sites. Blades, censers, and pottery vessels of all types were apparently used by members of every social stratum within the La Sierra polity but produced in a few centrally located areas.

Marine shell (mostly conch) artifacts diverge from this pattern. A total of 1,256 pieces of shell debris, primarily conch, have been recovered from a single patio group at

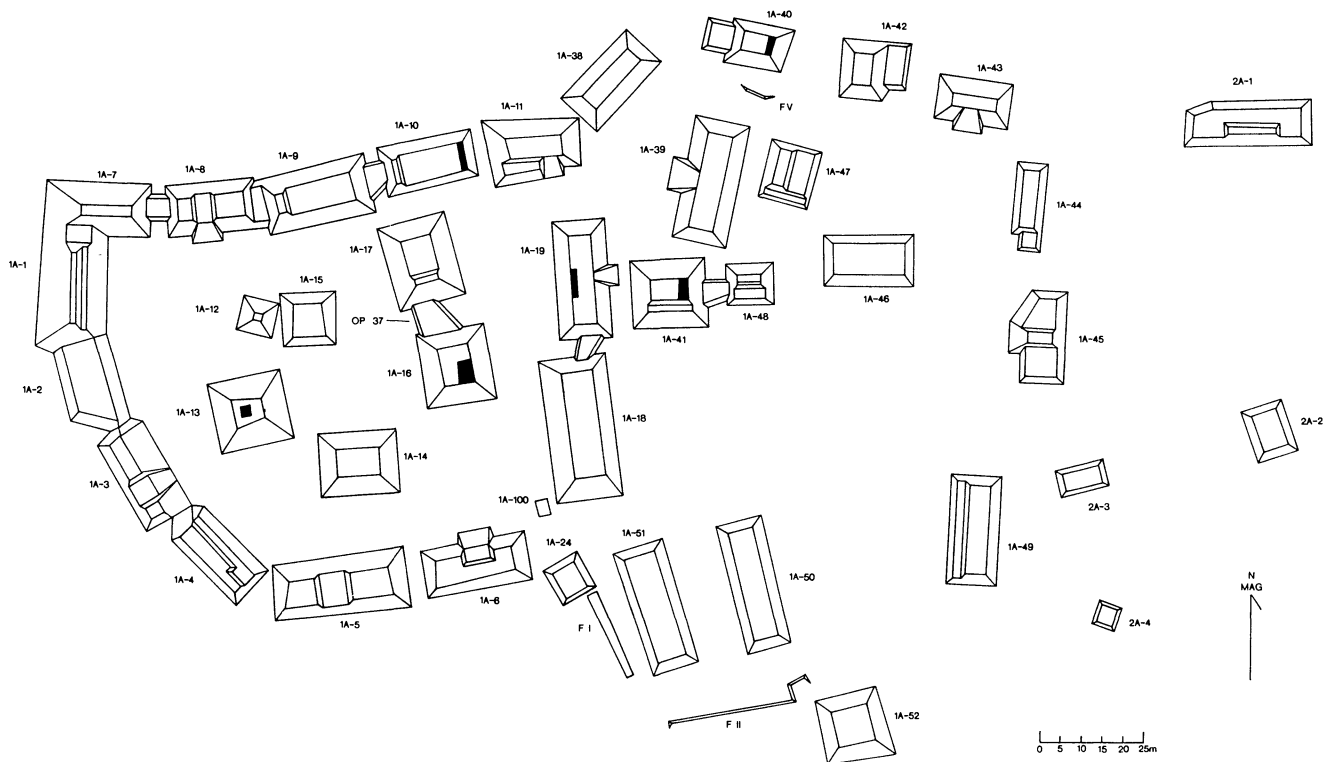


FIG. 3. *The La Sierra site core.*

La Sierra (Operation 19) in association with a distinctive, sturdy-pointed chert tool suitable for heavy cutting and engraving tasks (Schafer 1990). No other marine shell workshop has been identified in the Late Classic valley. Despite the large volume of production attested at Operation 19, only one finished shell artifact has been unearthed in all our excavations. Marine shell items may have been interred in deposits not encountered by the NVAP, such as elite burials. It is equally likely, however, that much of the output was destined for export. One possible recipient is the Copan polity, which invested shell artifacts, including those made of conch, with considerable symbolic significance (e.g., Baudéz 1989). Nevertheless, the single shell workshop identified in the Late Classic Copan Valley yielded only small quantities of debris, including conch, and no tools suitable for the cutting and shaping needed to convert raw shell into finished artifacts (Randolph Widmer, personal communication, 1992). Marine shell apparently arrived at Copan after already having undergone significant initial shaping elsewhere, Copanec artisans carrying out only small-scale modifications of the imports. The Operation 19 workshop, with its sturdy tools and significant quantities of shell fragments, could have been one of the places where such preliminary steps took place. Obsidian may have moved from Copan to Naco in return for shell artifacts passing in the opposite direction. Roughly 73% of the 55 Late Classic obsidian artifacts sourced to date are from Ixtepeque (Bouey 1991). If Copan controlled access to these flows within the Southeast, as is

generally believed, then its residents may have exchanged Ixtepeque obsidian for shell objects manufactured by artisans at La Sierra.

Polychrome-decorated ceramics have been found in varying proportions throughout the Late Classic Naco Valley. Given their frequency and the presence of local antecedents, some are almost certainly of indigenous manufacture. Using the same criteria, others, however, are of foreign derivation (ongoing neutron activation studies of relevant sherds should place the local/foreign distinction on firmer ground). Imported vessels tend to be concentrated at La Sierra, where they comprise 2.8–4.6% of all Late Classic ceramics from nine extensively excavated groups. Five comparably cleared structure clusters in the near periphery yielded somewhat reduced percentages of imported containers (1.1–4.0%). More remote, rural loci have even smaller proportions of imported ceramics (0–4.2%), most (16 out of 23 cases) yielding less than 2% of foreign pottery.² Despite some overlap in the numbers, it appears that exotic polychromes were acquired by the La Sierra rulers, who subsequently distributed them down the regional sociopolitical hierarchy.

The ubiquity of prismatic blades, censers, local ceramics of all taxa, and foreign polychromes implies that these commodities were needed by every household in the La Sierra polity. Paramount power, we argue, was

2. Only sites from which 1,000 or more Late Classic sherds were recovered and analyzed are included here.

TABLE I
Specialized Production in the Late Classic Naco Valley

Operation	Location	Tier	Workshop(s)	Evidence
11	La Sierra, North Cluster	I	Textiles Food(?) processing	13 stamps, 6.6% of stamp assemblage 60 grinding stones, 8% of ground stone assemblage
12	La Sierra, North Cluster	I	Figurines	1 mold; 115 figurine fragments, 4.5% of figurine assemblage
19	La Sierra, North Cluster	I	Stamps, textiles Ornaments	15 stamps, 7.6% of stamp assemblage 1,256 marine shell fragments, 12 coral pieces, 12 distinctive chert tools presumably used in fabricating shell artifacts
			Figurines	2 molds; 152 figurine fragments, 5.9% of figurine assemblage
			Censers	534 censer sherds, 11.9% of censer assemblage
			Obsidian blades	14 polyhedral core fragments
			Stamps, textiles	14 stamps, 7.1% of stamp assemblage
			Pottery	Possible ceramic firing facility, dense sherd concentrations
31	La Sierra, North Cluster	I	Pottery	At least one kiln, proximity to clay borrow pits, dense sherd concentrations
			Censers	769 censer sherds, 17.1% of censer assemblage
			Figurines	2 molds; 261 figurine fragments, 10.1% of figurine assemblage
			Obsidian blades	11 polyhedral cores/core fragments
32	La Sierra, North Cluster	I	Stamps, textiles Pottery	35 stamps, 17.8% of stamp assemblage Possible firing facility, slag
			Food(?) processing	43 grinding stones, 5.7% of ground stone assemblage
33	La Sierra, west of the Main Group	I	Obsidian blades	2 polyhedral core fragments
			Textiles	7 polyhedral core fragments
36	La Sierra, North Cluster	I	Figurines	7 stamps, 3.6% of stamp assemblage 1 mold; 125 figurine fragments, 4.9% of figurine assemblage
			Censers	296 censer sherds, 6.6% of censer assemblage
			Stamps, textiles	12 stamps, 6.1% of censer assemblage
			Obsidian blades	2 polyhedral core fragments
38	La Sierra, south of the Main Group	I	Obsidian blades Figurines	58 polyhedral core fragments 1 mold; 92 figurine fragments, 3.6% of figurine assemblage
			Textiles	13 stamps, 6.6% of stamp assemblage
			Woodworking(?)	Concentration of large bifaces, spokeshaves and scrapers
39	La Sierra, south of the Main Group	I	Obsidian blades Figurines	3 polyhedral core fragments 1 mold
			Textiles	8 stamps, 4.1% of stamp assemblage
79	200 m south of La Sierra, near-periphery	3	Obsidian blades Celts	4 polyhedral core fragments 5 celts, 12.8% of celt assemblage; 1 smoothing stone possibly used in celt manufacture
81	300 m north of La Sierra, near-periphery	3	Figurines	3 molds
			Obsidian blades	4 polyhedral core fragments
84	300 m southeast of La Sierra, near-periphery	5	Obsidian blades	3 polyhedral core fragments
92	440 m northwest of La Sierra, near-periphery	5	Obsidian blades	2 polyhedral core fragments
96	320 m northwest of La Sierra, near-periphery	5	Obsidian blades Figurines	3 polyhedral core fragments 1 mold; 90 figurine fragments, 1.9% of figurine assemblage
			Textiles	11 stamps, 5.6% of stamp assemblage
			Food(?) processing	38 grinding stones, 5% of ground stone assemblage
101	5 km north of La Sierra, rural zone	3	Figurines Woodworking(?)	1 mold 4 celts, 10.3% of celt assemblage
			Celts	1 celt blank
108	3.3 km north of La Sierra, rural zone	5	Figurines	1 mold
			Pottery(?)	Located on a good source of clay still used today
112	3 km southwest of La Sierra, rural zone	5	Limestone quarry Chert quarry	Proximity of raw material Numerous chert flakes, tools and cores, proximity of raw material
113	2.4 km east of La Sierra, rural zone	5	Figurines	1 mold
123	7.5 km northwest of La Sierra, rural zone	5	Figurines	1 mold

TABLE 1
(Continued)

Operation	Location	Tier	Workshop(s)	Evidence
168	4.5 km southwest of La Sierra	2	Obsidian blades	1 polyhedral core fragment
120	8.5 km northwest of La Sierra, rural zone	5	Figurines	1 mold
262	5.4 km southwest of La Sierra	5	Ground stone Paper/cloth	2 incomplete manos, 3 incomplete metates 1 bark beater
335	7.3 km northwest of La Sierra, rural zone	5	Celts Paper/cloth	1 unfinished celt, 1 celt blank 1 bark beater
337	7.5 km northwest of La Sierra, rural zone	5	Figurines Pottery	29 molds 3 bowl molds
338	6 km east of La Sierra, east side of valley	3	Figurines	1 mold
386-Grp.1	6.1 km northwest of La Sierra	5	Obsidian blades(?)	1 polyhedral obsidian core, reused
386-Grp.2	6.1 km northwest of La Sierra	5	Figurines Obsidian blades(?)	1 mold 1 polyhedral obsidian core
386-Grp.4	6.1 km northwest of La Sierra	5	Figurines Wood/hideworking(?)	4 molds 4 drills, 1 spokeshave
418	5.5 km southwest of La Sierra	5	Masonry(?)	1 smoothing stone, possibly for finishing cut blocks
423-SW Grp.	5.2 km southwest of La Sierra	5	Figurines Obsidian blades Woodworking(?)	4 molds 5 polyhedral obsidian cores, 3 reused as tools 4 celts, 10.3% of celt assemblage
423-Centl. Grp.	5.2 km southwest of La Sierra	5	Figurines Celts	1 mold, 1 lump of unfired clay 1 celt blank
423-NE Grp.	5.2 km southwest of La Sierra	5	Figurines	2 molds
426	5.8 km southwest of La Sierra	4	Figurines Stamps Pottery(?) Drilled stones(?) Sculpture Obsidian blades	12 molds 1 mold Possible small kiln (Str. 426-3) 11 examples, 17.7% of drilled stone assemblage 1 incomplete example, a possible tenoned sculpture 2 polyhedral obsidian cores, 1 reused as a tool
428	5.8 km southwest of La Sierra	5	Figurines	2 molds
462	8.4 km south-southeast of La Sierra, rural zone	5	Ground stone	2 incomplete manos, 2 incomplete metates, from surface collections

NOTE: Only evidence of specialized production conducted to meet the needs of a social unit larger than the household is included here. All of the above designations remain tentative pending further testing with additional analysis and fieldwork.

based on monopolies over the acquisition, production, and distribution of such generally needed goods. Potentates could "exchange" foreign and centrally manufactured items with commoners for subsistence resources and labor, thus maintaining the fiction of reciprocity. Because La Sierra's rulers were the sole source of these items, closely supervising production and intersocietal contacts, commoners and secondary elites had no choice but to take part in this unequal exchange system.

Reinforcing the preeminence of La Sierra's monopolists was their ability to exclude intrapolity competitors from participation in intersocietal transactions through which valued commodities, such as polyhedral obsidian cores, were acquired. We will probably never be able fully to reconstruct the strategies deployed in this effort. One element of them, however, seems to have involved the marine shell artifacts fashioned solely by the Operation 19 residents. The shell industry is unique among

known valley crafts in that its sizable output was destined primarily for export. It may well be that shell items functioned as essential "currency" in interpolity exchanges. The possible use of conch artifacts to secure obsidian cores has already been suggested. By localizing the manufacture of shell items in one patio-focused structure group, and that within 45 m of the La Sierra site core, valley paramounts could have effectively controlled production and guaranteed that they alone took part in the transactions through which highly valued, locally needed goods were obtained.

This top-down view of the La Sierra political economy glosses over the extent to which centralizing strategies were resisted by the Naco population in general. A wide range of crafts, including the manufacture of ground stone tools, figurines, whistles, ocarinas, ceramic stamps, masonry blocks, and sculpture along with textile decoration, were widely dispersed throughout the

La Sierra polity. These production processes employed locally available raw materials and relatively simple techniques outside centrally controlled monopolies. Production intensity, as measured by the amounts of tools, debris, and/or specialized facilities used in or resulting from artisanal activity, varied among sites (compare, for example, the 29 figurine, whistle, and ocarina molds recovered from Operation 337 with the single example unearthed at Operation 96). The number and distribution of Late Classic workshops do, however, point to widespread involvement in craft activities, a veritable economic "boom" measured by total output and the proportion of the polity's population committed to specialized manufacture (only one thoroughly excavated Late Classic site lacks any evidence of craft activities). Rural artisans may have been spurred to become involved in specialized manufacture by elite efforts at craft monopolization. Local economic autonomy could have been preserved to a limited extent by producing to meet some immediate needs. The material conditions of rural producers might also have been simultaneously enhanced through the generation of surpluses exchanged with rural and urban populations within the Naco Valley. La Sierra's rulers apparently sought to establish domination through economic means while their subordinates resisted such centralization by contesting paramount economic monopolies.

Political and economic processes, then, were in a dynamic relationship that both maintained and threatened the preeminence of regional paramounts. The above reconstruction meets the specifications for autonomous periphery development outlined in the previous section.

The Late Classic Naco Valley does not seem to have been undergoing economic and political exploitation resulting in underdevelopment. Instead, we see demographic increases, a proliferation of elite administrators and artisans, and increasing political centralization. Craftworkers fashioned objects from immediately available and imported raw materials for local use and export. Some of these items flowed down the hierarchy, presumably stimulating surplus food production. Others moved laterally among households, contributing to some degree of local independence. The Late Classic Naco economy was undergoing a regionally unprecedented expansion which was never to be repeated prehistorically. In part, this synergism was stimulated by contacts with lowland Maya core states. We have already mentioned the possible exchange between Copan and Naco of obsidian for marine shell artifacts. Small quantities of distinctive Lower Motagua Valley ceramics have been recovered from Naco contexts, though whether they ultimately derive from Quirigua or from its non-Maya contemporaries in that region remains unknown (Schortman 1993). Copanec pottery is *very* uncommon and does not seem to have constituted a significant exchange item. There is no evidence, therefore, that Copan, Quirigua, or any other single polity dominated the exchange network in which Naco was embedded. Quite the contrary, the linked political, demographic, and eco-

nomical changes attested here seem to indicate that La Sierra's rulers enjoyed great freedom in manipulating extrasocietal exchanges for their own benefit. The Late Classic Naco political system was certainly smaller and possibly less complexly organized than lowland Maya examples. It was not, however, economically and politically exploited by them.

IDEOLOGICAL HIERARCHIZATION

There is a great range of variation in the spread of lowland Maya symbolic elements within the Southeast. Neighboring areas at times exhibit markedly different material and cultural patterns (Quirigua shares the Lower Motagua Valley with at least nine other hierarchically organized polities, but they adopted virtually none of its lowland Maya ideological trappings [Schortman 1993; Schortman and Nakamura 1992, Urban and Schortman 1988]). Other zones manifest remarkable similarities in architecture, sculpture, and hieroglyphic inscriptions (Los Higos and El Abra in the La Venta Valley share sufficient material and behavioral similarities with Copan, ca. 40 km to the southwest, to be classed as lowland Maya sites [Nakamura, Aoyama, and Uratsuji 1991, Schortman and Nakamura 1992]). Late Classic Naco falls between these two extremes; evidence of lowland Maya symbolic intrusions is restricted to La Sierra.

Structures 1A-50 and 51 at La Sierra define a ball court which mimics in certain telling details a similar construction at Copan. Both are oriented roughly north-south and backed on the south by terraced eminences. The massive artificial acropolis provides the backdrop at Copan; a 3-m-high natural rise mounted by 13 stone-faced terraces performs a similar function at La Sierra. There is no reason to believe that the ball game or its facilities had a long history at La Sierra. Rather, it appears that this ritually charged activity was modeled on lowland Maya prototypes, most likely the Copan example.

Excavations into a low platform connecting La Sierra site-core Structures 1A-16 and 17 unearthed a sizable ritual deposit the west end of which was buried by as much as 1 m of ash. This limited work (only 97 m² was cleared) yielded roughly 25% of the censers fragments found anywhere in Late Classic valley contexts ($n = 4,504$ total). Uncovered along with the censers were locally rare, ritually significant objects such as *Spondylus* shells (whole bivalves and broken, frequently burnt, fragments) and a cache of six small cups. Intermixed with these esoteric objects were pieces of some of the only stone sculpture recorded in the Late Classic valley. One of them is a tenoned portrait head wearing a turban and earplugs, its face purposely disfigured in antiquity by battering the nose and mouth.

This locally unprecedented concentration of ritual items implies that the religious dramas enacted here were conducted on a large scale, possibly for the entire polity. The unusually large number of modeled censers recovered from this deposit (75.3% of the Late Classic

assemblage, $n = 788$ total) supports this interpretation; modeled censers have been linked to the performance of public rites in lowland Maya (Quirigua [Benyo 1978]) and other Southeastern centers (Las Quebradas, Lower Motagua Valley [Schortman 1993]). The deposit's location, deep within the site core and associated with two of La Sierra's largest buildings, also points to paramount control over the rites. The interment of an apparent portrait sculpture in this context may in fact indicate that elite personages were themselves central players in site-core devotions. Monopolizing the performance of rituals with politywide significance would have served to legitimate centralized rule, giving paramounts a privileged relationship to the supernatural realm (Balandier 1970; Gledhill 1978:277; Kristiansen 1982; Swartz, Turner, and Tuden 1966).

A closer examination of the ritual paraphernalia included in the deposit suggests a foreign inspiration for at least some of the rites performed in the site core. The headdress adorning the tenoned sculpture appears to be a simplified version of the distinctive turbans worn by Late Classic Copanec monarchs or *ahaws* (Baudez 1986). Several censers are decorated with modeled cacao-pod effigies pendant from the rim, strongly reminiscent of examples from contemporary Copan (e.g., Longyear 1952: figs. 105b, 109f, 112n-q, 114a). Use of *Spondylus* shell in sacred contexts has antecedents among the lowland Maya, as does the purposeful burying of ritual deposits with ash or some form of white soil; the intentional defacing of the tenoned head and, perhaps, the fragmentation of the other sculpture may hint at the conduct of termination rites similar to those attested in the Maya lowlands (Schele and Freidel 1990). Elements in the Structure 1A-16/17 ritual deposit, taken together with the La Sierra ball court, reflect the adoption of some elements of lowland Maya ideology and symbols by valley paramounts.

The behavioral significance of these ideological "borrowings" is far from clear. The case has been made elsewhere that many of the traits used to define lowland Maya "culture" (such as hieroglyphic inscriptions and carved stelae) were symbols of a spatially extensive social identity shared among potentates from different societies (e.g., Freidel 1979, 1986; Joyce 1991; Schortman 1989, 1993; Schortman and Nakamura 1992). Participation in this common identity made intersocial communication and goods exchange possible among occupants of the highest social echelons. Restricting participation in intersocietal transactions to holders of this identity also facilitated the creation of elite monopolies over the acquisition and distribution of foreign items within individual polities. The extension of lowland Maya traits to political units in which they did not appear previously would, then, be symptomatic of political/economic alliances linking ruling houses. Alternatively, the absence of definitive lowland Maya material forms at Southeastern centers may reflect competition among polities, each stressing its distinctiveness through different material symbols (e.g., Hodder 1978, 1979).

Instead of such clear patterns of incorporation in or exclusion from the lowland Maya identity system, most Southeastern societies exhibit the selective adoption of aspects of that affiliation. Late Classic Naco falls in this last category. What La Sierra's rulers chose for incorporation was elements of lowland Maya ideology related to elite-associated religious devotions. Ball courts are central components of lowland monumental centers. The "game" itself was an important prerogative of the nobility (Schele and Miller 1986). Turbans distinguished Copanec lords, *Spondylus* shells functioned in rites conducted by lowland Maya *ahaws*, and ritually potent sculpture linked to rulers was terminated at lowland centers by defacement in a manner similar to that reported at La Sierra. We would argue that these selections were not haphazard, nor were they forced on Naco paramounts by rulers of hegemonic lowland Maya polities. They reflect, instead, a strategy calculated to enhance the power of La Sierra's rulers within the polity. By clearly associating themselves with the symbols of distant rulers, Naco paramounts could partake of whatever supernatural aura was associated with those remote realms (e.g., Helms 1979, 1988). Elite monopolies over these associations and symbols within the La Sierra polity would also serve to differentiate rulers from subordinates. It is also possible that lowland Maya models of political centralization and the ideology which legitimated them provided the Naqueños with a blueprint for domination lacking in their local tradition. Exposure to such an organization might have been a catalyst for local sociopolitical change (e.g., Flannery 1968).

It may well be, therefore, that there is a restricted sense in which Naco can be seen as peripheral to a Late Classic lowland Maya core. Whereas the flow of goods between Naco and its lowland Maya contemporaries may have been balanced, the spread of ideological innovations was more one-sided. The latter features seem to have emanated from Copan (and, possibly, Quirigua). There is no good evidence for the adoption of symbolic elements originating in the periphery by core states. Residents of centers such as Copan and Quirigua may therefore have enjoyed a "prestige advantage" over other Southeastern polities which stimulated emulation. This advantage did not translate into an economic edge or political domination.

Even within the ideological domain it would be a mistake to see peripheral societies as passive recipients of lowland Maya innovations. La Sierra's rulers, for example, purposefully chose those core symbols for adoption which would best serve their political interests at home. Lowland Maya elites may have seen an advantage in disseminating some components of their ideology to Naco, if only because the spread of a common symbol system "greased the wheels" of intersocietal transactions. Ideological diffusion, therefore, was not accidental or inevitable. Instead it was guided and channeled by the shifting interests and goals of elite interactors, their decisions now preserved in the imperishable material symbols excavated from Naco Valley sites.

Discussion

The Naco data have provided a basis for arguing that what was assumed to have been a periphery does not conform to our expectations of such societies. We are confident that as more research is published the same conclusions will be drawn for other regions. The Late Classic Southeast, in sum, best approximates interaction conditions conducive to autonomous development. Lowland Maya polities such as those centered on Copan and Quirigua did not exclusively control the production of goods needed throughout the area. Workshops are found at both lowland Maya capitals and in their immediate hinterlands, but the levels of production represented do not seem equal to manufacturing items for large numbers of dispersed consumers in the periphery (Ashmore 1981; Baudez 1983; Sanders 1986; Widmer, personal communication, 1992). Even more to the point, the numerous Late Classic Naco Valley workshops were capable of meeting local demands as well as producing for export (e.g., marine shell ornaments). Lacking a monopoly over the production of needed goods, lowland Maya elites would have been unable to create the unequal exchange relationships that contribute to dependency. Similarly, transportation of goods within the Southeast was by means available to all societies—human carriers and, presumably, canoes. It is possible that more complexly organized polities with large populations to draw on could have held an organizational advantage in moving items over considerable distances. Nevertheless, there are no data to suggest that polities such as Copan and Quirigua exercised exclusive control over long-distance exchanges in the Southeast. More likely, goods passed through a number of elite hands to their final destinations.

Evidence for militarism is most prominent at Copan and Quirigua, and comparable bellicose displays in art and sculpture are not clearly attested elsewhere in the Southeast (e.g., Baudez 1986; Fash 1988; Fash and Fash 1989; Sharer 1990; Stuart 1992:175–77). It is possible, therefore, that these lowland Maya centers held a coercive edge which could have been used to enforce unequal exchange relations. It is equally likely, however, that Quirigua's and Copan's sculptural and artistic traditions provided imperishable media for expressing military themes not available or emphasized among other Southeastern polities. Similarly, recently deciphered inscriptions from lowland Maya centers provide insights into military (as well as other) behavior which are not easily obtained from archaeological data alone (Schele and Freidel 1990). Monumental art and hieroglyphic texts in fact provide most of the available information on Southeastern intersocietal conflict and its importance in elite affairs. Strictly archaeological data bearing on this topic, such as fortifications and a proliferation of weapons, are relatively few. We cannot, however, dismiss the notion that military exploits were commonly pursued throughout the Late Classic Southeast but are durably enshrined in only a portion of it.

Even if militarism was more pronounced in lowland

Maya polities than elsewhere in the Late Classic Southeast, there is reason to doubt its effectiveness in subjugating or threatening distant realms. Hieroglyphic texts from Copan and Quirigua recount the secession of the latter from the control of the former in A.D. 737 (Jones and Sharer 1986; Riese 1986, 1988; Sharer 1990; Stuart 1990; Stuart 1992:175–77), when Quirigua, a much smaller center, was able to engage and defeat Copanec forces, capturing the rival monarch, 18 Rabbit. Even at the height of its Late Classic power and demographic growth Copan could not control an unruly subordinate located a scant 50 km to the north. Within the Lower Motagua Valley, Quirigua, in its turn, was unwilling or unable to conquer contemporary polities situated as close as 25 km from the center (Schortman 1993). How could Copan and Quirigua have posed serious military threats to more remote polities such as Naco (roughly 115 km and 90 km distant from Copan and Quirigua respectively)?

The presence of two competing lowland Maya political units within the Late Classic Southeast also raises the possibility that non-Maya polities such as La Sierra might have played one off against the other in an effort to achieve the most favorable exchange relations. Evidence for contact between Naco and Copan has already been noted. In addition to the ceramic links between Naco and the Lower Motagua Valley cited earlier, a few fragments of Naco obsidian derive from the El Chayal flows (4%, $n = 55$ Late Classic pieces sourced). These blades may have arrived in the valley by means of Lower Motagua entrepreneurs who apparently controlled access along the river to the El Chayal source (Hammond 1972). It is possible, therefore, that the La Sierra polity maintained relations with both Southeastern lowland Maya states and was not exclusively dependent on one or the other for whatever goods/ideas they provided.

What we are left with is a picture of Late Classic Southeastern prehistory in which political and economic patterns of development and underdevelopment are not clearly attested. There is evidence of ideological hierarchization, with core lowland Maya states serving as sources of inspiration for aspiring peripheral elites. Even here, however, there is no sign of interregional exploitation. Innovators and recipients together seem to have used long-distance ties to advance their own agendas. Core rulers were unable to monopolize crucial production, transportation, and military processes and therefore could not transform autonomous societies into dependent peripheries. One indication of persistent regional autonomy is the time lag separating processes of political fragmentation at Copan and in the Naco Valley. Political centralization in the latter area seems to outlast the disappearance of similar institutions at Copan by at least 200 years. The situation at Quirigua and in other Southeastern regions remains uncertain. In general, however, non-Maya polities may well have survived the demise of Copan and Quirigua by a century or more.

This is not to say that systems of *mutual interdependence* did not develop among all participants in the Late

Classic Southeastern interaction system (see also Kohl 1987:16). A wide range of polities were linked by the exchange of goods and ideas. It is also true that, despite the aforementioned time gap, political fragmentation was widespread among Southeastern societies after A.D. 1000, suggesting a "domino effect" born of close intersocietal ties (Hirth 1989). It is even possible that individual polities monopolized the distribution of crucial items over long distances (e.g., Copan controlling access to Ixtepeque obsidian). The important point, however, is that no entity was able to manipulate resource control to the detriment of its partners. In the example followed here, Copan may have monopolized the exchange of Ixtepeque obsidian, but other sources were available (e.g., El Chayal), and Copan's rulers were themselves dependent on Southeastern polities for essential goods (e.g., marine shell objects). This network is one we have described elsewhere (1987) as *coevolutionary*: individual polities are embedded in interaction networks, each one losing its ability to reproduce itself without inputs (ideas and/or goods) from its partners.

It seems clear that when considering cores and peripheries we must be clear about the dimensions along which attributes of "coreness" and "peripherality" are measured. We have suggested that there are at least three such variables, politics, economics, and ideology, and that they do not necessarily coincide. More attention should now be paid to determining the conditions under which different types of core/periphery relations develop. We have offered a hypothesis which is but a first step in this direction. Whatever its defects, this formulation suggests how we might profitably unpack (or defuse) such loaded terms as "core" and "periphery" and better understand their interconnections. Finally, it would probably be best to jettison the phrase "southeast Maya periphery" when referring to the area discussed here (cf. Schortman and Urban 1986). Such a designation conjures up an image of hegemonic lowland states dominating a politically simple, culturally homogeneous periphery. It also encourages us to overlook the complex interaction processes which once linked polities within this zone. If we cannot dislodge the label from the literature, it would be well to use it skeptically. Perhaps, in the long run, future generations of archaeologists will learn to appreciate its irony.

Comments

CHRISTOPHER CHASE-DUNN

*Department of Sociology, Johns Hopkins University,
Baltimore, Md. 21218, U.S.A. 8 III 94*

The comparative study of world systems is yet in its infancy. The world-systems perspective was developed primarily as a tool for understanding the rise of European hegemony and the contemporary global political economy. In the past decade scholars have begun to ex-

amine the relevance of world-systems concepts to the study of earlier and smaller intersocietal interaction networks (for a review, see Hall and Chase-Dunn 1993). The conceptual apparatus employed by Schortman and Urban contributes to an explicitly *comparative* framework for understanding similarities and differences among different kinds of world systems.¹ Schortman and Urban use concepts of core and periphery that are general enough to be applied to very different sorts of systems without assuming that all systems are the same. Their investigation of intersocietal relations between Mayan states and the Naco Valley polity is a great advance over abstract debates between functionalists (who see all hierarchy as serving system needs) and conflict theorists (who see all inequalities as based on exploitation or domination). Some systems really are based on core/periphery exploitation that produces the development of underdevelopment in peripheries, while in others coevolution and "peer-polity interaction" spread development more evenly. Schortman and Urban conceptualize core/periphery relations clearly and specify general conditions under which core societies can exploit and dominate peripheral regions. This is scientific progress.

Schortman and Urban find little direct evidence that La Sierra was a dominated and exploited periphery and some indirect evidence that the emergence of a complex and hierarchical society in the Naco Valley was stimulated by the adoption of politico-religious ideas from the Mayan states. I would, however, raise several additional questions about the Mayan-centered world system of Southeastern Mesoamerica. Whether the Copan/La Sierra relationship was typical of the system as a whole is an important question for the project of comparing world systems. It has been hypothesized that chiefdom and early state world systems have less stable and less exploitative core/periphery hierarchies because the "techniques of power" required for extracting resources from distant peripheries have not yet been developed (Chase-Dunn and Hall 1993). The Schortman and Urban findings about the Copan/La Sierra relationship support this hypothesis, but what if this relationship is atypical of the larger Mayan-centered whole? What if the Naco Valley was an atypical upwardly mobile semiperiphery similar to South Korea or Taiwan in the contemporary global system? Testing hypotheses about differences (or similarities) across systems requires that we study *whole* systems or at least explicitly discuss whether the particular relationship that is the focus of analysis is typical or atypical of the system. Should we conclude that the whole Mayan-centered system was without core/periphery exploitation? Even if most regions 100 km from Copan were not exploited or dominated by it, what about regions that were closer and so more subject to direct military influence? And what about the relationship between La Sierra and its neighbors? Schortman

1. Some have argued that the contemporary system is a continuation of a Eurasian world system that has been in existence for millennia (e.g., Frank 1993, Frank and Gills 1993).

and Urban provide some clues for understanding the spatial hierarchy within the Naco Valley, but what about relations between the valley and immediately adjacent regions?

The world-systems perspective encourages us to examine the interconnections between local structures, both short-distance and long-distance. It is not an *a priori* assumption that long-distance interactions are always determinant of local social change or reproduction. In fact, spatially bounding a world system means determining the spatial nature of systemic processes of structural reproduction and change. In some systems this *only* involves interactions over very short distances (and thus they are very small), while in others greater distances are involved. The fact that important influences linked Copan and La Sierra demonstrates that they were parts of the same system. The question of the spatial scale of a system is logically prior to the question of core/periphery relations. A core (or a periphery) to another region must be systematically connected with it. It is certainly difficult to study whole systems, but this goal needs to be acknowledged if world systems are to be compared.

GARY M. FEINMAN

Department of Anthropology, University of Wisconsin, Madison, Wis. 53706, U.S.A. 7 III 94

In archaeology, theoretical change is often cumulative and gradual rather than revolutionary or Kuhnian in nature (Trigger 1989:4–12). Consequently, it is not surprising that when the concepts “core” and “periphery” have been employed in connection with recent applications of world-systems or macroregional approaches to Mesoamerican archaeology (Blanton and Feinman 1984, Whitecotton and Pailes 1979), “real Mesoamerican archaeologists” often associate these terms more closely with broadly similar culture-center concepts and the age-area principle than with the writings of Wallerstein (1974) or Chase-Dunn and Hall (1991a; Chase-Dunn 1992). Thus, for many archaeologists, “cores” and “peripheries” are envisioned as rather static entities, with cores serving as cultural donors that uniformly transmitted the economic, political, and ideological trappings of development to their receptive, less developed peripheries. Given this simple and undynamic perception of intersocietal relations, it is little wonder that, as Hall and Chase-Dunn (1993) note, many archaeologists are doubtful of the utility for their research of world-systems frameworks.

Schortman and Urban show that, despite the aforementioned misconceptions in theoretical usage, a blanket rejection of current macroregional framework is premature. Through a careful examination of the southeastern periphery of Mesoamerica, they document that the long-term history of the Naco Valley cannot be understood without considering the interrelations between the people of that region and those of the Late Classic

Maya centers to the west. Yet, this point can be made more forcefully, since for much (if not all) of their pre-Columbian history the political boundaries of the Maya were markedly smaller than the domain that shared traditions of politics, religion, ritual, and writing (Culbert 1988, Marcus 1993, Yoffee 1991). By definition, broad questions concerning the pre-Hispanic Maya must be framed in terms that extend beyond single polities and regions.

At the same time, through empirical analysis, Schortman and Urban demonstrate that a meaningful macro-scale approach must rid itself of the terminological skeletons that have lingered in archaeology’s analytical closet since midcentury. The Late Classic interchanges between La Sierra and Copán were neither static nor unidirectional. The Maya “Great Tradition” did not radiate uniformly as blanketing waves of “culture” from a beacon in distant Petén to Copán and then eventually to the Naco Valley. The processes of interregional communication were far more selective and complex, and the authors make an important contribution by describing the particular ideological trappings and prestige-related behaviors that were adopted by the Classic-period lords of the Naco Valley.

Even more significant, this analysis goes beyond illustrating *how* the peoples of La Sierra and Copán were interconnected during the Late Classic to the difficult question of *why* those relations took the specific forms that they did. The impact on the Naco Valley was one of selective “spread” rather than intense exploitation or underdevelopment (Chase-Dunn and Hall 1991a:26–32). These consequences are not surprising considering the multicentered political landscape of southeastern Mesoamerica and the constraints on transportation and political power that were faced by local lords. Likewise, the apparent absence of the gross economic effects of underdevelopment should not be seen as a general refutation of macroregional approaches. In fact, explications of the diversity of intersocietal relations provide the grist for comparative world-systems perspectives (Chase-Dunn and Hall 1991a:26–30).

Although this paper offers many significant lessons, several avenues appear open for further consideration and investigation. In this largely synchronic treatment, one is left to wonder about interregional relations in Southeastern Mesoamerica before and after the Late Classic. How important were obsidian and shell to these networks, and how differently were these goods distributed and consumed in other phases? While I agree with Schortman and Urban that the relations between La Sierra and Copán did not engender underdevelopment, these links also may have constituted more than just cultural emulation by the La Sierra elite. In ancient Mesoamerica, shell ornament manufacture was a labor-intensive craft that involved a special inventory of stone implements as well as considerable time and labor to process the durable shell (e.g., Feinman and Nicholas 1993). If most of the shell fashioned by La Sierra craft workers (in Operation 19) was siphoned off to Copán

(through the emergent La Sierra elite) in return for less labor-intensive products, then the Copanec elite may have achieved a net gain. Such an advantage exemplifies the economic relationship that Gills and Frank (1991) have termed "interpenetrating accumulation."

It may also prove instructive to examine the specific behaviors that were borrowed (as well as those that were not) by the inhabitants of the Naco Valley. As Schortman and Urban argue, local elite emulation of the symbols of power seems to be key. But is it significant that the specific borrowings at La Sierra included turbaned headgear and an interest in marine shell but apparently few exotic serving bowls, ballcourts but not the Maya script, and an association with attached specialists but little clear emphasis on military power? Many of the transmitted trappings were not simply elite symbols but associated with individually focused rituals, elements of personal ornamentation, or related to the production/exchange of goods (e.g., shell ornaments) that were linked to those elite rituals or adornments. In sum, these elements seem to point to underpinnings for southern Maya Classic-period elite power that were enmeshed in the networks and the personal aura of specific ruling individuals rather than in more corporate or communal bases (see Drennan 1991). If this is borne out by future research, the implications of such differences in the bases of power for intersocietal relations will remain to be determined.

THOMAS D. HALL

*Department of Sociology and Anthropology,
DePauw University, Greencastle, Ind. 46135, U.S.A.*
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Concurring as I do with Chase-Dunn's comments above, rather than repeating them I will extend and elaborate upon them. Schortman and Urban's paper is a welcome contribution to the comparative study of world-systems or core/periphery relations (Hall and Chase-Dunn 1993), notwithstanding that they did not frame their analysis in those terms or study an entire system. I endorse the first two of their three conclusions: that political, ideological, and economic variables do not necessarily coincide in this system and that the conditions under which different types of core/periphery relations develop need further study. To the latter conclusion I would add that the conditions shaping the direction and degree of hierarchy in various types of core/periphery relations are also in need of examination. I demur, however, from their suggestion that the term "periphery" be jettisoned. Peripheralities should be conceptualized as a broad class of relationships of varying types and intensities. Thus, peripheralization, as defined by Wallerstein (1974, 1980), is one extreme of a range of core/periphery relations in the modern (post-A.D. 1500) world system (Hall 1986, 1989)—a range that represents only one of several possible types of peripheral relations. Decoupling the concept of a peripheral relation from its limited exemplars in the

modern world system makes the study of the factors that shape the type and degree of peripheralization more fruitful.

The utility of such an approach is illustrated in Schortman and Urban's observation on the lack of correspondence of political, ideological, and economic factors in the La Sierra core/periphery relation. Chase-Dunn and I have distinguished at least three networks of core/periphery relations, corresponding to trade in bulk goods, political/military interactions, and trade in luxury (high-value, low-weight) goods (1991, 1993). What seems to be unique about the modern world system is the coincidence of the three, which in the late 20th century have become truly global. The paucity of studies of pre-A.D. 1500 core/periphery systems makes it difficult to know whether the modern world system is truly unique in this respect or only unusual. Clearly, however, the system which contains Copan, Quirigua, and La Sierra is connected at the luxury-goods level. As Chase-Dunn has suggested, the evidence presented by Schortman and Urban does not rule out possible military/political or even bulk-goods connections, though only within a narrow range which does not include La Sierra.

This, in turn, suggests that this may be an inchoate system in which underdevelopment was just beginning. It could be that the system disintegrated before underdevelopment stabilized. If so, this would raise the question whether this was an accident or due to some aspects of the system itself. Schortman and Urban's discussion of the role of monopolization suggests ways in which this question might be pursued empirically. However, the study of this question will require comparisons with other systems in addition to further study of the Copan-La Sierra system.

One of the more intriguing contributions to the comparative study of core/periphery relations in this paper is the analysis of ideology. Could it be that in ancient core/periphery systems what Mann (1986) calls "technologies of power" (e.g., ideologies) must, or at least typically, precede the development of underdevelopment? Again, comparative studies of entire systems are needed to address this question, but an affirmative answer to it would suggest that the emergence of *capitalist* core/periphery relations transforms the process in which ideology facilitates trade which enables political control and may lead to underdevelopment into a process in which economic incorporation is often followed by political incorporation and subsequent ideological hegemony. One case study is far too flimsy a basis for such a claim, but it is suggestive of a need for further study. It also highlights other ways in which the modern world system differs from ancient core/periphery systems.

That one can even generate such speculations from Schortman and Urban's study underscores its value. By couching their analysis in general terms, they broaden a detailed case study into an important contribution to the comparative study of core/periphery relations. In doing so they achieve one of the loftiest of the aims of archaeology, using the past to understand the present. I

hope that other archaeologists will elaborate on their work and recognize that in doing so they not only contribute to the understanding of ancient core/periphery relations but also expand our understanding of the modern world system.

P. NICK KARDULIAS

*Program in Archaeology, The College of Wooster,
Wooster, Ohio 44691, U.S.A. 1 IV 94*

World-systems theory, in its various guises, has proved to be a remarkably flexible construct. As in their previous writings on this topic, Schortman and Urban demonstrate that, with some reworking, many of Wallerstein's concepts are useful. However, they also point out, quite correctly, that several concepts require a complete overhaul. The value of this article is twofold: (1) it demonstrates the weakness of the core/periphery dichotomy in the precapitalist world and (2) it exhibits a pattern of social dynamics that characterizes state polities in non-Western settings in the past. On the first point, Schortman and Urban have identified one key contribution that archaeology can make to the world-systems debate—that historic and prehistoric states lacked the mechanisms to dominate the distant (and in some cases, even nearby) societies with which they interacted in order to procure various resources. Hall (1986), among others, has pointed out the problem of depicting the effect of incorporation as unidirectional. He has stressed the need to discuss culture contact as a dialogue in which both parties have at least some say in events and attempt to implement their own agendas. This point bears repeating, especially in an archaeological context. The issue also becomes clearer in the role played by elites in the periphery. As Schortman and Urban note, such elites “can play one core off against another”; they display considerable flexibility through their ability to negotiate a better deal (what one can call negotiated peripherality, unlike the mandated conditions espoused by some dependency theorists). The peer-polity situation operative among the Maya in peripheral regions such as Honduras is similar to the conditions that many other city-state civilizations faced. In the Aegean, for example, the small Late Bronze Age states, while capable of substantial refinement and complexity, rarely dominated other societies at their margins. The geographic dispersal of various resources precluded domination of vital commodities. Even when certain resources were concentrated, the polities often lacked the ability, and perhaps the incentive, to regulate access to the material. For example, Torrence (1986) has argued that the town of Phylakopi did not control Melos's obsidian quarries, major sources for most of eastern Greece and the Aegean islands. Instead, she suggests that people made individual procurement trips to the island from throughout the region. Furthermore, the internecine warfare that led to the fall of Mycenaean civilization reflects the inability of the Late Bronze Age states to

maintain ascendancy for any extended period of time. The devastation visited on the entire eastern Mediterranean seaboard by the “Sea Peoples” also demonstrates the inability of Bronze Age societies to dominate their less sedentary neighbors on the peripheries of civilization.

Another key issue that Schortman and Urban raise is the multidimensionality of core/periphery distinctions. While it is true that the political and ideological components deserve greater attention, the economic dimension has not yet been fully explored. I find it encouraging that Schortman and Urban place significant stress on production, an element to which the original world-systems formulation gave insufficient consideration. They effectively demonstrate how their conceptual refinements articulate with the archaeological record of the Naco Valley, but there are a few points that require additional clarification: (1) How do the goods that elites obtain from their control of interregional exchange serve as “political capital”? What does this phrase mean in real terms? (2) If the mechanism for the exchange of certain preciosities (e.g., worked shell) was the successive transfer of material among elites (an elite down-the-line trade), would not some inequality have developed as those nearer the sources siphoned off more of the material? It might be interesting to examine the distribution of such goods in intermediate areas and sites. (3) If political fragmentation occurred widely in the Southeast only after A.D. 1000, the postulated “domino effect” seems rather attenuated, and the decline may be due to other, perhaps more local, factors.

In summary, Schortman and Urban offer a very thoughtful and useful reexamination of world-systems/interaction theory. Better still, they tie the concepts to an appropriate set of archaeological data to demonstrate how such a system worked on the ground.

PHILIP L. KOHL

*Department of Anthropology, Wellesley College,
Wellesley, Mass. 02181, U.S.A. 1 III 94*

Schortman and Urban have presented a thoughtful reconsideration of the concepts of “core” and “periphery” as applied to interregional processes affecting the development of early agrarian complex states. They insist that interregional interaction may occur for political, economic, or ideological reasons and that these processes must be distinguished and analyzed separately. Their model predicts when political and economic underdevelopment in peripheral areas will *not* occur and emphasizes the social effects of the adoption of ideological elements and practices from the core area by the emergent elite in the periphery. It displays a nice sense of historical contingency and is refreshingly open to empirical investigation. There clearly is much to praise here, but I want to focus on some of the implications of their initial theoretical discussion and then respond

briefly as a non-Mayan/Mesoamerican specialist to the evidence presented in their case study.

One great virtue of Schortman and Urban's discussion of the problematic concepts of "core" and "periphery" is their unwillingness to abandon them entirely even in the absence of convincing evidence for political and economic underdevelopment in peripheral areas. We do not find ourselves in a neoevolutionist world with each little valley evolving independently towards statehood, despite the fact that they deliberately eschew any reference to world systems—a decision that must reflect their unease with the overzealous application of world-systems theory to prehistoric times. In general, I share their skepticism, though I would argue that, if critically employed, the world-systems model (and even its cumbersome terminology!) may occasionally prove illuminating (see Edens and Kohl 1992:30–31).

Any attempt to understand the nature of interregional interaction runs up against serious methodological problems, such as estimating the scale of long-distance exchange in the absence of written information and documenting the movements of "invisible" perishable items (a problem not discussed in their review of the Naco Valley materials). Aside from these nearly insuperable difficulties, the theoretical question remains the degree of systemic articulation between core and peripheral areas under precapitalist conditions of the production, consumption, and distribution (i.e., transportation) of material goods. On the basis of evidence from western Asia during the Early Bronze Age, I would argue that conditions of real dependency à la the *modern* world-systems model are extremely rare for antiquity and probably short-lived; sustained underdevelopment is also rarely if ever achieved. The concept of the *interdependence* of core and peripheral areas is therefore more appropriate, though one need not assume a level playing field or despair of distinguishing the principal actors from the supporting cast. Continued recourse to the core/periphery distinction has the advantage of focusing discussion on the unequal power relations that must have characterized interregional interaction ever since states first arose.

Whether the form of this interaction may be most convincingly documented in the ideological arena, as Schortman and Urban suggest, depends, of course, on the evidence considered. Theoretically, there is nothing surprising about this, my point being that it is still preferable to conceive of such ideological interaction as occurring between unequal partners ("cores" and "peripheries") and probably linked to political and economic considerations as well, even if the latter are not well understood. In other words, I congratulate Schortman and Urban for not adopting earlier unsatisfactory concepts such as stimulus diffusion to explain their evidence, but I would also insist that there are limits to the disentangling of political, economic, and ideological components of activities within or between societies. If the substantivist anthropologists and primitivist historians are correct, separating these spheres cleanly for the

ancient world is much more difficult than for the modern. There may even have been an economic aspect to the adoption of the Mesoamerican ball game in the Naco Valley—though, admittedly, I am unable to articulate it.

The authors' review of their archaeological record generally supports their initial theoretical discussion. I am hopeful, however, that the critical reaction of someone not familiar with this primary evidence may be constructive. Despite their extensive investigations, Schortman and Urban rarely stress the limitations of their work and the problems associated with interpreting essentially negative evidence. Can one assume that marine shell artifacts were "fashioned solely by the Operation 19 residents," or does this center represent the only such production center yet documented? My own experience with ideologically charged artifacts such as the widely distributed carved stone vessels from western Asia (Kohl 1978) suggests that borrowing and emulation are not one-sided, with peripheries passively adopting the symbols and ritual paraphernalia of their social superiors. Ancient belief systems were notably syncretic, assimilating and refashioning symbols and tales adopted from exotic barbarian societies. The ball game seems indisputably lowland Mayan/Mesoamerican, but what of the *Spondylus* shells or other ritual-laden artifacts? Did they originally function in rites conducted by Mayan *ahaws*, or were they adopted from their neighbors to the southeast and transformed? Attribution of origin is often made solely on the basis of where the initial materials were found. Given the relatively short distances (ca. 100 km) involved, I find surprising the lack of recorded interaction between the Naco Valley and Copan/Quirigua areas. Perhaps this absence relates to the nature of the terrain and vegetation cover, but one would still expect more contact via the coast between the Motagua and the Chamelecón. Is this too a problem of research? One is, after all, working in a border area. Ideally, it would have been helpful to have a more explicit statement of the contrast between the interaction in Late Classic times and that documented for earlier periods. Without this comparative record, I do not see why the evidence presented cannot be interpreted to support the idea of political incorporation of the Lower Naco Valley into an expanding Mayan polity immediately to the northwest. Finally, a minor point: the presence of perlite nodules in the valley may suggest that obsidian also is present, since the latter under proper conditions can be transformed into the former; the perlite deposits probably deserve rigorous scrutiny.

JOYCE MARCUS

*Museum of Anthropology, University of Michigan,
Ann Arbor, Mich. 48109-1079, U.S.A. 7 III 94*

Schortman and Urban's work in the Naco Valley will make many archaeologists rethink the nature of "core" vs. "periphery." For a long time archaeologists found

these concepts very useful in dealing with complex societies. Now, with new data being collected in so-called peripheries, we are seeing problems with them. From my perspective, one of the biggest problems is that the core/periphery model is static; it implies that the core was always a core and the periphery always peripheral. Once such labels are imposed on specific geographic areas, all future analyses are influenced and constrained. It is very difficult to view an area we have labeled a "periphery" as independent or innovative or as a "core" in its own right.

If a "periphery" is actually independent—which I believe is the case with the "Southeast" of Mesoamerica—it is its own core and should not be understood as an impoverished or diluted version of the Classic Maya states. The Southeast is *only* on the edge if we view it from Copán's or Quirigua's perspective; however, if we view things from La Sierra's perspective, Copán is on the periphery of La Sierra's system of exchange partners.

According to Schortman and Urban, the Naco Valley (96 km²) during the Late Classic displays a five-tiered settlement hierarchy dominated by one site, La Sierra, a site that was ten times larger than settlements in the next tier. Furthermore, La Sierra served as a magnet, pulling in rural population around it. This packing of population around a new capital also occurred at Monte Albán shortly after it was founded as the regional capital for the Valley of Oaxaca. The two cases may, in fact, be responses to similar needs, such as defense or the control of labor, workshops, and tribute. The presence of a multitiered hierarchy of settlements in the Naco Valley, evidence of population nucleation around the primate capital, and the appearance of so many workshops at the capital and dispersed throughout the valley all suggest that La Sierra administered its own autonomous polity.

Most archaeologists had underestimated the political complexity in the area, partly because many persisted in calling it a *periphery*. Such complexity is not wholly unexpected, because many regions throughout Mesoamerica and Central America had high population densities between A.D. 600 and 800. What is unexpected, however, is the mounting evidence that the Southeast area was much more in charge of its own destiny than was formerly imagined.

All the data presented by Schortman and Urban suggest that La Sierra's administrators had great freedom in exchanging their goods and products with other areas and that they were not dominated or exploited by centers such as Copán. For part of the Classic it appears that, unlike La Sierra, Quirigua was dominated and politically controlled by Copán (Marcus 1992:409). Quirigua broke away from Copán after fighting a "battle of independence" in A.D. 738 (Marcus 1976:136–38; Sharer 1978*b*). After A.D. 738 we might be justified in calling it a kind of periphery, since it had once been incorporated into the Copán polity. At present, there is no evidence to suggest that La Sierra was ever part of the Copán polity, but there is a lot of evidence to suggest that it was a trading partner.

ROBERT J. SHARER

University Museum, 33rd and Spruce Sts.,
Philadelphia, Pa. 19104-6324, U.S.A. 29 III 94

"Core" and "periphery" refer to a typology with meanings that vary according to the investigator's perspective. For instance, they have spatial (geographical) and behavioral (cultural) meanings that overlap. The spatial meanings refer simply to center and edge of a given geographical area. The behavioral meanings, which Schortman and Urban emphasize here, refer to the donor and the recipient of particular sets of behaviors (and symbols). On the basis of their Naco Valley data, Schortman and Urban are able to demonstrate, within the usual limits of inference available from archaeological data, that there was no appreciable domination of the Southeastern Maya area from the Maya lowlands during the Late Classic period. Rather, the lowland Maya, represented by the polities of Copán and Quirigua, and the Southeastern area, as seen from the Naco Valley and its capital, La Sierra, were part of an interdependent network of diverse polities sustained by a web of political, economic, and ideological interaction. Because they have given us such an excellent and thoughtful analysis of the core/periphery issue as seen from the Southeastern area, it is possible to consider some factors that are beyond the scope of their contribution but relevant to continuing dialogue on this subject.

First, because of the limitations of data availability, the analysis pertains to one period of Mesoamerican development, the Late Classic. This provides researchers an excellent foundation for expanding the analysis to the preceding and subsequent eras and thus achieving a dynamic perspective on core/periphery interaction in the Southeastern area. Further investigation adopting a behavioral framework for core/periphery interaction would probably reveal a varied and complex situation in which other polities in both the Maya lowland area and the Southeastern Maya area manipulated political, economic, and ideological power in a variety of ways within a constantly shifting core/periphery environment. During certain intervals it is very likely that the very definitions of "core" and "periphery" shifted and networks of interaction were very different from those of the Late Classic. In the Preclassic and the Postclassic there were no nearby lowland Maya states such as Copán and Quirigua to serve as role models for the elites in the Southeastern area. The role models (or sources) at these times may have included the Gulf Coast and Chalcatzingo (Middle Preclassic), Kaminaljuyu and El Mirador (Late Preclassic), Teotihuacan, Kaminaljuyu, and Tikal (Early Classic), and Chichen Itza (Terminal Classic and Early Postclassic), but these polities were only the most conspicuous nodes within shifting core areas. Other polities surely participated, just as other powerful polities (such as Tikal and Calakmul) were part of the Late Classic core of the Maya lowlands but, being more distant from the Southeastern Maya area, probably played less conspicuous roles there than did Copán and Quirigua.

Schortman and Urban suggest that we abandon the label "Southeastern Maya periphery," concluding that it conjures up images of a core of "advanced" Maya states dominating a far less complex periphery. This image certainly has been implicit or explicit in the literature—in essence as a loaded variant of the behavioral (donor/recipient) meaning of the core/periphery typology. But a donor/recipient relationship need not mean domination/subordination. The area of origin of a set of behaviors (or symbols) does not necessarily dominate areas where those behaviors (or symbols) are emulated, as Schortman and Urban have shown. "The Southeastern Maya periphery" should refer only to a spatial concept—the southeastern edge of the area defined by ancient and modern occupation by Mayan-speaking peoples—but since the term "periphery" has several meanings and implications, perhaps we should use "Southeastern Maya area" instead. This would be comparable to similar neutral geographical labels such as "Maya highlands" or "Maya lowlands."

Finally, we still need to explore the behavioral meanings (such as donor/recipient) that can be applied to this and other areas—keeping in mind that the Southeastern Maya area may not be on or even near the "edge" of other spatial units defined by other criteria, as in Mesoamerican interaction with Central America (Sharer 1984). Thus, in some instances it is obvious that the Southeastern Maya area was the recipient of sets of behaviors (and symbols) from other areas, so it can be viewed as being peripheral to one or more core (or donor) areas. But it was just as clearly the donor of sets of behaviors (and symbols) that were accepted in other areas, so it can also be viewed as a core (donor) area for one or more peripheries (Demarest and Sharer 1986, Sharer 1989).

In sum, the important issue is not terminology per se but how best to pursue a better understanding of the prehistory of the Southeastern Maya area. The research designed by Schortman and Urban is a major step in this direction.

DAVID WEBSTER

Department of Anthropology, Pennsylvania State University, University Park, Pa. 16802, U.S.A.

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I strongly agree with the basic thrust of Schortman and Urban's arguments, both in general terms and in their specific observations concerning interactions on the southeastern frontier of Mesoamerica. My own opinion has long been that the most significant of the forces that stimulate the emergence of cultural complexity in preindustrial societies and thereafter maintain and reshape it are usually quite localized. This is especially true where the cultures or societies in question are "low-energy" ones (i.e., lacking in nonhuman sources of energy and technological innovations that render human energy expenditure more efficient, such as metal tools,

wheels, etc.), as they were throughout pre-Hispanic Mesoamerica.

My perspective is increasingly out of fashion, especially in view of the current vogue of "world-systems" models, with their core/periphery implications. The archaeological applications of such models that I have read generally strike me variously as (1) boring, in the sense that new labels are being attached to interaction processes that archaeologists have long been concerned with, (2) misguided, because attempts to extend models developed to explain the historical origins of capitalism to quite different prehistoric situations are labored and unconvincing, and (3) premature, because the archaeological record often does not jibe with the models (just where are all those Syrian/Anatolian imports that supposedly fueled the Uruk-period "core" in southern Sumer?).

Schortman and Urban have done a nice job of showing that on detailed examination specific purported core/periphery interactions often fail to fit our expectations. I particularly appreciate their effort because I have worked at Copan, the major "core" center in the southeastern Maya lowlands, since 1980 and find it increasingly difficult to argue from the available evidence that it exerted any strong political or economic influence over regions or polities outside its immediate domain in western Honduras. The question is why we ever believed it did. The answer lies, of course, in the impressive monumental art, architecture, calendrics, and epigraphy found at Copan and other Maya centers but largely lacking on the "peripheries." That these things may not be symptomatic of the projection of tangible political or economic influence over great distances (or even of strong internal political centralization) is a lesson we are just beginning to internalize. As Schortman and Urban point out, dissemination of culturological prestige and symbols may be another story.

What if we could ignore all the fancy royal trappings and just compare the rest of the archaeological records from Copan and Naco? I find it fascinating that, despite many years of work at Copan, including excavations in the largely elite urban core, much more evidence for specialized production and for the centralization of such production seems to be present at La Sierra than at Copan. Few sites show signs of specialized production, and the ones we know best are rural ones. During the Penn State excavations at Copan, which include sites of all social ranks in all parts of the valley, I have been struck by how scarce imported objects from *anywhere* seem to be, although they are certainly present in the form of, among other things, shell, ceramics, and exotic stone.

Imported obsidian is as obtrusive as at Naco and found in all households, but its apparent abundance is deceiving. Blade inventories of Ixtepeque obsidian recently recovered from superb contexts at Ceren, El Salvador, suggest that commoner household blade consumption was on the order of 5–15 blades per year (Payson Sheets, personal communication, 1994). Discard samples from Copan rural sites indicate similar levels of use. Copan's

peak population ranged between about 22,000 and 28,000 at A.D. 750–800; 20–30 annual porter loads of obsidian would easily have supplied it. Obsidian was not “expensive” enough or its procurement complex enough for elites to have made much political hay out of its control. I strongly doubt that Copan served as any significant “gateway” for the control of obsidian for export elsewhere.

Turning the economic argument around, what else did Copan export in large amounts? Apparently not the polychrome Copador pottery for which the Copan Valley is sometimes said to be a major center of production and distribution.

I disagree that military influence was a factor. Maya polities were probably militarily much too demographically and logistically feeble to project coercive force against polities as distant as Copan is from Naco.

The political decline of Copan was more gradual than Schortman and Urban suggest and less out of sync with the Naco sequence. Copan elites held on in some sense for about two centuries after the royal collapse at about A.D. 850. Hydration dates from a work-kit of obsidian blades recovered by Widmer at the 9N-8 shell workshop referred to by Schortman and Urban cluster beautifully in the mid-10th century. Obsidian continued to be imported in seemingly undiminished amounts after the demise of Copan’s kings and after A.D. 1000, by which time the elites were largely gone. One begins to wonder not only if “core” economies much affected those of “peripheries” but also if royalty or elites exerted much direct control over internal economic production and exchange in polities such as Copan.

PETER S. WELLS

Department of Anthropology, University of Minnesota, Minneapolis, Minn. 55455, U.S.A. 31 III 94

This paper is a timely contribution to a growing body of information indicating that the centers that were foci of archaeological research in the 1950s, 1960s, and 1970s were often not as different from communities in their peripheries as was thought and did not exert as much political and economic control over those communities as the current models suggested. This change in thinking has come about largely because many archaeologists have turned from concentration on large sites to investigation of smaller sites and of whole cultural landscapes (see, e.g., Milner’s [1990] review of the system of which Cahokia was part and Kenoyer’s [1991] summary of research in the Indus Valley). For Iron Age temperate Europe recent investigations show that the trade centers of the Late Hallstatt period were not as different from other communities as earlier studies had suggested and that even the Late Iron Age *oppida* did not have the monopolies on large-scale ironsmithing, production of ornate bronze objects, or coin minting that had been assumed. Results from the past decade of research show that smaller, often unfortified communities were carrying on the same economic activities (Wells 1990).

These examples make it clear that the core/periphery dichotomy which once served the field well is too simplistic for current understanding. Communities thought to be peripheral often prove similar to the centers in significant ways. As Schortman and Urban argue, we need to move away from the core/periphery dichotomy to develop models that accommodate all interacting communities as interrelated parts of larger systems.

The authors’ treatment of the adoption of symbols and rituals by elites is particularly interesting. As they observe, this process is highly selective—elites choose those elements that they think will best suit their purposes. The adoption of the wine-drinking ritual from the Greek and Etruscan regions of the Mediterranean Basin by Early Iron Age elites north of the Alps in temperate Europe is a well-documented example. Because we know about the Greek and Etruscan wine ritual from textual and iconographic sources, we can judge from the archaeological evidence in temperate Europe which aspects of the ritual were adopted and which were not (Wells 1985, Dietler 1990). A number of questions arise from this much-studied case, and they apply to the issues raised by Schortman and Urban. Why do elites choose some elements to adopt and not others? What can we learn about the values and ideologies of those elites by addressing this question of selection? Under what circumstances did the borrowing elites become familiar with the behaviors and symbols—through visiting centers and observing or participating in the rituals or through some other mechanism?

Schortman and Urban’s stimulating article raises two other issues. First, we need to take into account change over time. In the manipulation of symbols by elites, change in fashion can take place quickly. It will be important to ascertain whether the elites in the peripheries were so closely linked with the core elites that they employed the borrowed rituals and symbols at the same time or whether there was some time lag. Second, we need to investigate the origins of the rituals and symbols in order to be certain about who was copying whom. We cannot assume that rituals and symbols that spread through interaction necessarily originated in the centers; there are many familiar examples of cores’ borrowing powerful symbols from peripheral contexts.

MICHAEL E. WHALEN

Department of Anthropology, University of Tulsa, Tulsa, Okla. 74104-3189, U.S.A. 1 IV 94

Schortman and Urban have already done valuable and stimulating work in interaction studies (see Schortman and Urban 1992). Their premise is that extraregional interactions are powerful forces which shape societies and important elements in culture change. The problem for archaeologists, then, is to develop general paradigms of the ways in which societies interact and of the significance of these interactions to sociopolitical evolution. This paper pursues the issue further by examining some of the traditional assumptions in one frequently encoun-

tered kind of intersocietal interaction: core/periphery relations, or interactions between developed areas and their simpler neighbors.

Schortman and Urban argue that our understandings of core/periphery interactions have long been shaped by imperial or hegemonistic perspectives, the core being viewed as the prime mover and principal consumer and the periphery as the passive and exploited recipient, and raise some cogent questions about the universal validity of this model. They rightly contend that, among hierarchical societies of different levels of complexity, autonomous neighbors are transformed into exploited peripheries only under specific circumstances, viz., when strong, direct control and coercive power can be exerted. Hegemonistic systems exist, but this is not the inevitable shape of core/periphery relations.

The article makes a useful distinction between what might be termed "attached" and "autonomous" peripheries. Attached peripheries follow the classical model, being closely bound to the core by a web of ideological, economic, and political ties. These areas suffer various forms of political and economic domination by the core polity, resulting in decentralization and underdevelopment of their own economic and political systems. In contrast, autonomous peripheries interact with cores in looser, less comprehensive ways without suffering either economic and political exploitation or diminished development. Schortman and Urban go on to argue that, despite the lack of political and economic domination, the periphery may use some of the ideology or symbolic systems of the more developed core, and we often see traces of this in the archaeological record in the form of symbols and ceremonial facilities. Finally, they assert that this can be a coevolutionary situation in which interactions are mutually beneficial. Mesoamerican archaeological data serve as an illustration of these thought-provoking concepts.

The Naco Valley would in traditional usage be considered a less-developed southern periphery of the Classic lowland Maya world. The picture presented here, however, is of an autonomous area marching much to its own tune. The authors use archaeological data to model a situation in which the elite of La Sierra engaged in only limited kinds of interactions with the developed polities of Copan and (perhaps) Quirigua. The exotica moving in these exchange networks were important to the political ambitions of the elites of both La Sierra and its more developed trading partners, and the aspects of Classic Maya ritual symbolism which the La Sierra elite adopted further served to distinguish them within their local context.

Instead of one large powerful polity draining a smaller, weaker one, then, we have two largely autonomous polities at different levels of development engaging in mutually beneficial interactions while pursuing their own ends. This seems to me to be a very believable form of interaction for early complex societies, which often do not have the ability to exert comprehensive political and economic control or to extend domination over long distances. Imperialism and classic core/periphery exploit-

ative interactions certainly existed in the ancient world, as in the Aztec case, for instance. Nevertheless, I believe that Schortman and Urban are illustrating a form of intersocietal contact and a motivation for that contact which were probably at least as common as hegemony. In my own area of interest, their model might very profitably be applied to Paquimé or Casas Grandes, located near the other end of Mesoamerica and long considered to have been a dependent periphery of a central Mexican core. Others are clearly thinking along the same lines, writing about prestige-goods economies (e.g., Frankenstein and Rowlands 1978), peer-polity interactions (e.g., Renfrew and Cherry 1986), and intrasocietal political motivations and factional competitions (e.g., Roscoe 1993, Brumfiel and Fox 1994) which can stimulate sociocultural evolution.

In sum, relations between cores and peripheries are of considerable interest in today's archaeology, but here, as with most of our other interpretive paradigms, we are finding that things are not really as simple as had been initially assumed. Moreover, while labels like "core" and "periphery" are sometimes handy things, we should bear in mind that every label covers, and thereby suppresses, a certain amount of potentially significant variability. This paper is an important reminder of what we may be missing by uncritical categorization of intersocietal contacts.

Reply

EDWARD M. SCHORTMAN AND
PATRICIA A. URBAN
Gambier, Ohio, U.S.A. 13 v 94

We thank all of the commentators for their thoughtful remarks. Their statements and questions regarding ideas expressed in the essay and the Naco research invariably advance discussion of core/periphery relations. We will try to respond in kind, identifying themes in the various comments and providing our own thoughts on the issues raised. The remarks which follow are part of a dialogue which we look forward to continuing with these and other scholars for many years to come.

Two motifs seem to underlie most of the comments, one dealing with the nature of the Naco data set and our interpretations of it, the other with broader issues of core/periphery relations and the manner in which they can be studied. We will begin with a consideration of the former.

Kohl raises an important question concerning the limitations of the Naco investigations. We take this to be an inquiry into the nature of our data sample, asking to what extent the results of the Naco survey and excavation are "representative" of material and behavioral patterns pertaining to any specific period. Given the temporal focus of the paper, we will restrict our answer primarily to sites and deposits dating to the Late Classic.

All but approximately 1.1 km² of the 96 km² Naco Valley has been covered by foot survey, the uninvestigated portions scattered in small, isolated segments over the study area. In addition, the narrow corridor cut by the Río Chamelecón as it exits the valley to the northeast has been examined over a distance of 8.5 km, and a 5-km² valley adjoining Naco on the east was thoroughly examined. Fully 374 sites pertaining to all known prehistoric intervals have been recorded, 313 from the Naco Valley and 61 from the immediate environs. Approximately 7,100 m² of Late Classic deposits have been excavated since 1979 at settlements within the Naco Valley, resulting in the testing of 259 Late Classic buildings (13% of all recorded structures dating to this span). Work has progressed in all portions of the La Sierra realm, with excavations distributed as follows: 89 buildings dug at La Sierra itself (roughly 19% of all surface-visible edifices at the capital, 2,729 m² cleared); 33 structures excavated in the La Sierra near periphery (13% of known Late Classic buildings in this area, 1,151 m² cleared); 137 Late Classic constructions excavated in rural portions of the La Sierra realm (areas outside a 1-km radius of the regional capital; ca. 11% of all edifices dated to this interval, 3,220 m² cleared).

Research has tended to concentrate at La Sierra, with less attention to rural settlements. We are currently working to reverse this trend with two planned field seasons largely devoted to expanded excavations in different segments of the rural zone. We are, however, keenly aware of the problems encountered in attempting to make statements concerning the organization of varied behaviors within a single polity, even one as small and relatively short-lived as that focused on La Sierra (Ashmore 1988, Marcus 1992, Webster 1980). New information unearthed each field season has required considerable reworking of previous understandings and forcibly reminded us of just how difficult it is to be sure that any sample, no matter how large, is truly representative of past material and behavior patterns (Kent 1987). All we can be sure of is that as data accumulate our interpretations are increasingly constrained by the new findings to a plausible set of views and egregious errors are easier to recognize. The more thoroughly a single polity is studied, the more confidence one can have in the conclusions drawn.

Related to the above question, Kohl asks whether residents of the Operation 19 workshop at La Sierra were the sole purveyors of marine shell artifacts within the Late Classic valley. Ongoing analyses of Naco materials now suggest that items of marine shell were fabricated at two patio-focused structure groups in addition to Operation 19 (all within La Sierra) during the Late Classic. Habitation at these other domestic units continued throughout the Classic, but the manufacture of conch artifacts had ceased in all areas save Operation 19 by the Terminal Classic (A.D. 950–1100). Production, in fact, may have intensified with Operation 19 as the fashioning of objects from conch was restricted to one location. The Terminal Classic was also the interval during which the apparent focus of paramount elite residence, the La

Sierra site core, was abandoned even as the rest of the center continued to support a sizable population. This suggests that craft production, even of fairly esoteric items, persisted after the decline of paramount fortunes. The significance of the above finding is uncertain, though there is an intriguing parallel, as Webster notes, in the continued fabrication at Copan of elite status markers from marine shell after the collapse of the Copan dynasty. Perhaps the fall of ruling houses in Naco and Copan during the waning years of the Late Classic signaled less overall political decline than the shifting fortunes of different factions whose members still required badges of office. We are clearly still a long way from unraveling the complex relations among political power, craft production, and intersocietal interaction in specific and general terms.

Kohl's suggestion that perlite may be associated with obsidian flow in the Naco Valley is a good one. Extensive geoarchaeological surveys over the entire study area, however, revealed no such flows, nor are they likely given the local geology (Anderson 1994).

Questions are also raised by Kohl concerning La Sierra's political independence from Copan during the Late Classic. We strongly feel that La Sierra was not incorporated within the Copan realm at any point, though proving the case is difficult given problems with recognizing conquest from archaeological data alone. Rebutting a Copanec capture of the Naco Valley would rely heavily on negative evidence the significance of which is debatable (e.g., the absence of conflagrations and fortifications at La Sierra, the paucity of humans hurried on their way to the grave by wounds inflicted with weapons, and so forth). More positive arguments for La Sierra's political independence stress two points. As is suggested by Marcus, the degree of political centralization seen at Late Classic La Sierra seems out of keeping with what would be expected in a province under direct Copanec control. Data available on Late Classic political organization within southeastern Mesoamerica also indicate that areally extensive states formed by conquest are rare and never stable in this zone. Research conducted at various points along the most likely routes connecting Copan and Naco, for example, reveals no clear evidence for the forcible incorporation of societies in these areas within the Late Classic Copan realm; polities as close as 50 km from the lowland Maya center in fact show few signs of Copanec influence in behavior and material culture (Nakamura, Aoyama, and Uratsuji 1991, Schortman and Nakamura 1992). The same case could be made for Quirigua, the other major Late Classic lowland Maya center in southeastern Mesoamerica. As we indicated, Quirigua shares the Lower Motagua Valley in eastern Guatemala with several polities the capitals of which evince explicit rejection of lowland Maya elite behavior patterns and material forms (Schortman 1993, Schortman and Nakamura 1992). Transportation and communication difficulties cannot account for these differences, as Quirigua and its neighbors are within an easy day's walk of each other, separated by no more than 25 km at their

closest points. The only clear case for political domination of one southeastern Mesoamerican Late Classic polity by another is that attested between the lowland Maya centers of Copan and Quirigua (Marcus 1976, Sharer 1990). Even here the relationship was unstable, with Quirigua successfully shedding its subordinate status vis-à-vis Copan in A.D. 737. If even the largest, most complexly organized Late Classic southeastern polity could not effectively control a center 50 km distant, it is doubtful that other, smaller political units in the area successfully employed coercion to fashion suprapolity realms. None of this evidence is definitive. It does imply, however, that it is harder to account for Late Classic developments in places like Naco with a conquest model than with the view of linked development among politically autonomous societies suggested here.

Kardulias asks for a better definition of "political capital" than we provide and wants us to be more specific concerning the ways in which imports figured in elite domination strategies. Once more, we confront the limitations of archaeological data. Political capital, as we use the phrase, refers to centrally controlled resources exploited to forge dependency relations which serve to advance the political agendas of the monopolists. Obsidian blades, for example, were used (and presumably needed) by all segments of the Late Classic Naco population but seem to have been fashioned solely at the regional capital. Exclusive control over the fabrication of these items would have made valley paramounts capable of extracting labor and surpluses from consumers in return for access to generally needed items. The same case can probably be made for centralized control over pottery vessel and *incensario* production, though we await the results of ongoing neutron activation analyses to help distinguish classes of containers made at La Sierra from those fashioned locally throughout the valley and both of these taxa from imports. In all cases, reconstructing which items functioned as political capital and how they were used depends on identifying production locales and determining consumption patterns. Achievement of these objectives requires extensive sampling from throughout a polity, excavating significant quantities of material dating to specific periods from sites pertaining to all hierarchical levels. The tighter the chronological control, the better able one is to specify rates of production and consumption and determine changes in these variables through time (e.g., Arnold 1991, Pool 1992). As noted above, problems with studying entire polities raise questions as to the representativeness of any sample and the accuracy of these crude measures. Better estimates of production and consumption rates for different commodities and more precise specification of chronological periods are clearly major goals for the archaeological study of ancient political economies.

Turning to the second set of themes, most commentators remark on the need to study entire interaction systems at specific intervals and to trace changes within such entities through time. This issue is particularly important because (1) it may be quite misleading to assume that relations among segments of a network (e.g., the

links between La Sierra and Copan) typify all network ties; (2) focusing on a specific time span such as the Late Classic gives a false impression of stasis, projecting structural relations among polities which may accurately describe one period onto other intervals; and (3) it is only by studying the entire network that interpolity relations can be reconstructed and the movement of goods which underwrote and created those ties determined. We would dispel any impression that our formulation, based primarily on Late Classic Naco data, is anything but a trial effort to model intersocietal ties in prehistoric southeastern Mesoamerica. Concentration on Late Classic La Sierra/Copan connections was determined in part by the relative wealth of material available for the period and areas in question. Examining these relations would, we hoped, provide testable hypotheses which might be applied to other portions of the network and time spans as well as a spur to rethinking of the nature of ancient core/periphery ties generally. The study of entire interaction networks through time must overcome significant logistical obstacles, however. Identifying the boundaries of intersocietal systems, defining cores and peripheries in economic, political, and ideological terms, and describing changes in interpolity relations through time require extensive investigations in a number of areas plausibly linked by communication routes. Given the problems encountered in trying to study a single polity, such interareal investigations will be well beyond the means of any single individual or project. Accomplishment of the aforementioned goals will therefore require close collaboration among numerous researchers all attempting total-polity analyses within their respective zones and reporting results using similar conventions and terms.

Kardulias's question concerning what happened to preciousness as they moved through the Late Classic southeastern Mesoamerican exchange network points up the importance of such broad-scale inquiries and the difficulties they are likely to encounter. Kardulias reasonably asks whether goods might have been siphoned off by intermediaries at each stop in their exchange histories, resulting in inequalities as people closer to a source amassed considerable quantities of esteemed items. The answer to this query is probably yes and no, depending on the value of the item to the people in question. Marine shell, for example, seems to have had great significance for Copanec magnates, who associated objects made from this material with rulership (Baudez 1989). Such items may have been held in lower esteem, however, in societies where shell artifacts were not closely linked with high office. The utilitarian significance of prismatic obsidian blades generally within southeastern Mesoamerica may, however, have invested these items with high value throughout the network. In this case, there may very well have been a strong temptation to hold back some supplies for local consumption at each stop in the exchange system. It is simplistic to equate value—a complex, culturally defined attribute—with utility (Appadurai 1986). This example does suggest, however, that the political, economic, and

ideological significance of varied materials will have to be evaluated individually at different points in a network. It also reinforces the call, voiced by the commentators, for the study of production and consumption patterns of diverse goods within societies spread throughout ancient interaction systems.

Along the same lines, several commentators note that the temporal gap separating the fragmentation of different southeastern Mesoamerican polities at the end of the Classic may suggest that these events were due more to local than to intersocietal processes. Reactions experienced by factions within specific polities to changes in the fortunes of their interaction partners in any network are undoubtedly complex, related to the local circumstances of the polity and faction in question, and largely inexplicable in the absence of detailed studies conducted in societies throughout the interaction network. An example of the complexity likely to be encountered in such analyses is provided by the events surrounding political fragmentation within two southeastern Mesoamerican polities at the end of the Late Classic. Cessation of what had been close ties between the rulers of Copan and the Gualjoquito polity in the middle Río Ulúa drainage, ca. 40 km south of Naco, corresponds with a period of political decentralization at the former center (Fash and Stuart 1991, Webster 1992). There is no evidence of diminution in the vitality of the Gualjoquito polity after this break. In fact, construction within both monumental and other centers continued within the middle Ulúa drainage over the next one to two centuries, followed only later by gradual population decline and political decentralization (Ashmore et al. 1987, Schortman et al. 1986). The elite cult practiced at La Sierra and derived in part from Copan was abandoned sometime between A.D. 800 and 950, roughly contemporary with the collapse of the Copan dynasty. This abandonment of paramount religious rites was dramatically marked by the systematic dismantling of some of the cult's most impressive physical symbols, the ball court and site core temples. The capital nevertheless remained a center of residence and craft activity at least through A.D. 1100. The Naco and middle Ulúa cases may represent contrasting responses to the same event, the fall from power of Copan's ruling house. Gualjoquito's rulers seem to have maintained, for a time, their local dominance despite the loss of what must have been an important interaction partner. The Naco paramounts were not so fortunate, abandonment of the La Sierra site core and destruction of paramount elite religious symbols suggesting that this faction lost out in competition with other power blocs who continued to reside in and underwrite some craft production at the regional capital. Sociopolitical changes experienced by some interaction partners within the Late Classic southeastern Mesoamerican interaction network could therefore have had different repercussions throughout the system. In some instances, at least, such shifts created opportunities for the advancement of particular factions at the expense of others. Political blocs whose members were closely associated with a specific interaction partner, as La Si-

erra's rulers were apparently linked to Copan's lords, may have found their preeminence weakened when their allies suffered reversals (see also Renfrew 1982). Such reversals may have afforded local competitors the opportunity to overthrow vulnerable opponents. The gains employed by victorious factions at the end of the Classic in southeastern Mesoamerica seem to have been short-lived, however. All known societies in the zone were experiencing marked political fragmentation and some degree of demographic decline after A.D. 1000. Whatever the fate of these interpretations, it is clear that sociopolitical events occurring within any one segment of the southeastern Mesoamerican interaction system were complexly related to circumstances obtaining in other portions of the network. Understanding these indirect connections will require considerable work conducted among polities throughout the putative intersocietal system. No matter how great the obstacles, there is no substitute for collaborative research; but collaborative investigations must begin with hypotheses to test, and that is what we attempted to offer here.

Several commentators remark on the significance of the ideological ties linking different sets of elite interactors within Late Classic southeastern Mesoamerica. Wells and Feinman, for example, raise the important question why only some elements of foreign ideologies are adopted by interacting elites. This query has important implications for the study of ancient interaction systems, because answering it forces us to consider how exotic ideas figured in the political strategies of recipient and donor and the circumstances under which the former became familiar with the latter's innovations. One complicating factor in any attempt to address the political significance of foreign ideologies is our reliance on the mute material symbols through which ideas were expressed and created in prehistoric societies. It is one thing to recognize similarities in cult paraphernalia between two locales and identify one as the source of inspiration for the other. Such interpretations are based on chronological sequences by means of which the temporal precedence of an innovation in one area may be specified and on the different degrees of elaboration that cultic equipment and structures exhibit in various societies. It is quite another matter to specify the meanings these exotic material tokens held for those who experienced them. Interpretations of ancient symbols may well have differed among people divided by class and/or ethnicity within a polity. Similarly, foreign symbols and practices were likely subject to reinterpretation as they crossed political boundaries. These difficulties are not insurmountable. From what is known about the meaning of objects and behavior patterns in the originating society (helped along in the lowland Maya case by recent advances in the decipherment of hieroglyphic inscriptions) and contexts in which material symbols are recovered in the recipient community, we should be able to move towards a more detailed understanding of the behavioral implications of foreign ideologies and their material manifestations at various points in an interaction network.

Paying attention to the kinds of material symbols disseminated among interacting polities may also, as Wells suggests, provide insights into the circumstances under which ideas are borrowed. For example, complex architectural arrangements such as the layout of ball courts may have required firsthand observation of the original model to reproduce effectively. Other innovations, especially those expressed on and through portable objects (such as stylistic elements of modeled censers), could be successfully replicated without the recipient's having traveled to their source. Several processes, each with its own set of behavioral implications, may underlie the spread of different ideological innovations. For example, interelite visiting implies much closer relations among paramounts, with some mechanism(s) to ensure the safe movement of potentates between polities, than does the exchange of objects from which ideological information can be gleaned. Once more, we are reminded of the variable ways in which interpolity ties might be structured and the importance of specifying the behavioral implications of material goods and patterns at different places within a presumed interaction network.

We have argued, without much elaboration, that the primary source of ideological inspiration for Late Classic Naco potentates was a lowland Maya ritual system. Comments on the article have led us to reconsider this point. Specifically, we are reminded that it is all too easy to attribute certain behavior patterns and material symbols to the lowland Maya when in fact they have a pan-Mesoamerican distribution. Ball courts could qualify as a component of a pan-Mesoamerican cultural pattern, though in the case cited here detailed similarities in orientation and arrangement, as well as temporal precedence, strongly argue for derivation of this aspect of the ritual system from Copan. Stylistic similarities in elite headdress and *incensario* decorations also point to connections between Naco and Copan. Ritual use of *Spondylus* shells, however, may be an expression of pan-Mesoamerican religious practices, albeit those with an elite cast, rather than clear-cut evidence of lowland Maya stimulation. We come back to the realization that the study of intersocietal ties requires careful specification of the nature, sources, and sociopolitical implications of the material used to reconstruct linkages.

There also seems to be general consensus concerning the advisability of keeping "core" and "periphery" in the archaeological lexicon. We agree with this view, if only because continued use of such terms aids the comparative study of interaction networks, including capitalist world systems, past and present. As long as "core" and "periphery" are defined precisely and there is a willingness to employ the terms flexibly, shearing them of the specific connotations they have in common parlance or in Wallerstein's world-systems theory, they can play significant roles in encouraging the examination of diverse interaction networks and the inequalities which may develop within such systems. We agree with Sharer that the area covered in this article might best be renamed, though the phrase "Southeast Maya area" still places lowland Maya "culture" at the center of its defi-

nition. Copan and Quirigua may be "Maya," but what of societies in other areas, such as the Naco Valley? "Southeast Mesoamerica" is, we suggest, a more neutral way to refer to the adjoining portions of Guatemala, Honduras, and El Salvador. By thus rechristening the area we could remove the stigma often associated with the word "periphery," a stigma which, as Marcus notes, has tended to constrain research. Even without the negative associations conjured up by the word "periphery," relabeling the zone would serve as a reminder that Southeastern societies were part of dynamic interaction systems in which their structural positions changed through time. We cannot assume that, however the term is defined, Southeastern Mesoamerican polities were always peripheries. Some, such as Chalchuapa in eastern El Salvador, may very well have been cores during certain intervals (the Middle and Late Preclassic in this particular case [Sharer 1978a]). Even if we carefully define our terms, we should probably not label an area "core" or "periphery," thereby consigning it to a particular role throughout prehistory.

With respect to defining core/periphery ties, Kohl warns of the difficulties likely to be encountered in any attempt to separate political, economic, and ideological components of intersocietal contacts. This point is well taken. Distinctions outlined in the paper are intended to advance analysis by sensitizing us to the different ways in which core/periphery relations may be structured and the types of interchanges that may occur among parties to contact. As long as the artificiality of this division is recognized, the approach may prove useful. Dangers arise when analytical tools are mistaken for reality—when we convince ourselves that behaviors or material items served purely ideological, economic, or political functions (Bell 1992). For example, the La Sierra ball court undoubtedly played a central role in paramount religious devotions, devotions which were strategically used to advance a faction's political agenda. Participation in the ideological system of which the ball game was a central element may well have encouraged contacts among elites in different polities, thereby facilitating the exchange of commodities, such as obsidian and shell, important in the functioning of local political economies. We must try, in short, to understand the varied, interlinked components which contributed to the meaning and use of any object or behavior in and among ancient societies rather than pigeonholing these behaviors and artifacts in discrete functional categories.

The most general remarks stimulated by the essay are those, again voiced by most of the commentators, concerning the need for a comparative study of world systems from all geographic areas and time periods (see also Hall and Chase-Dunn 1993 and papers in Chase-Dunn and Hall 1991b). It is only through such wide-ranging investigations that regularities in the structural relations linking polities and the conditions under which those regularities develop can be understood. The capitalist world system analyzed by Wallerstein, as Hall notes, might then be seen as but one example of what is actually a diverse array of interaction types character-

ized by different degrees of inequality, dependency relations, and coincidence of ideological, political, and economic ties (among other dimensions which could serve as the basis for comparison). Inspired by the comments of Chase-Dunn, Hall, Kardulias, Marcus, Sharer, and Whalen, we would elaborate our original formulation a bit more to contribute to this effort. The Late Classic Southeastern Mesoamerican interaction system is, we hypothesize, an example of an unstable multipolity network characterized by a large number of coexisting cores (e.g., La Sierra, Copan, and Quirigua at various points in time). Each core depended on the exploitation of a small periphery in its immediate hinterland to sustain interlinked processes of economic, political, and demographic expansion. The failure of any one core to establish hegemony over the others meant that no polity enjoyed predictable, reliable access to sufficient resources from its periphery to support such growth for long periods. Core elites therefore had to rely for the resources needed to maintain local hierarchies on equal exchanges with peers. Such relations were less certain to yield needed inputs than direct (through conquest) or indirect (through intersocietal monopolies over production or transportation technologies) exploitation of neighboring polities (e.g., Spencer 1982). Squabbles among interactors could adversely affect the flow of needed goods and ideas (Gilman 1987). As populations and hierarchical complexity increased throughout the network, the need for exotic items and concepts grew, and the whole system of voluntary exchanges was increasingly vulnerable to collapse. This may have been what happened gradually and indirectly throughout the Southeastern Mesoamerican network from A.D. 800 to 1100. The above description might be profitably phrased in the felicitous terms suggested by Whalen—autonomous (the case described above) vs. attached peripheries—and in terms of Kardulias's concept of "negotiated peripherality." In any event, hypotheses such as those proposed here require further evaluation both by probing their intellectual soundness and through field research. The latter, as noted earlier, must eventually encompass the study of entire interaction systems.

Whatever the fate of specific interpretations of particular or general scope, it is imperative that we recognize the significance of interpolity ties. Even in situations where cores may appear weak, at least when compared to modern First/Third World distinctions, we cannot discount the developmental impact of intersocietal linkages. It is clear to us that events in Late Classic Naco would have been significantly different if the polity had been estranged from all external contacts. Levels of specialized production, especially in industries employing marine shell and obsidian, would never have existed in the absence of extrapolity markets and suppliers. Local processes of political centralization, reliant in part on foreign symbols and goods to underwrite paramount domination strategies, might very well have never reached the levels recorded in the Late Classic Naco Valley without interpolity ties. As noted above, the Late Classic Southeastern Mesoamerican interaction system

was not effectively dominated by a single core, and therefore the network lacked many of the features characteristic of the highly centralized world systems associated with empires and modern capitalism. This does not mean that interpolity connections were insignificant. Instead, situations such as the one discussed here challenge us to understand processes of interregional interaction operating on different principles and having different political, ideological, and economic implications than those which obtain in the modern world. In the responses to this paper and in current archaeological and anthropological research, the challenge is being engaged in a lively and very productive manner.

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