SPECIALIZATION, EXCHANGE, AND COMPLEX SOCIETIES

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Chapter 1

Specialization, exchange, and complex societies: an introduction

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Most previous treatments of specialization, exchange and social complexity have followed one of three models: a commerical development model, an adaptationist model, or a political model. A review of these models, and some of the difficulties they encounter, will enable us to identify those issues concerning the relationship of specialization, exchange and complexity which need further clarification and research.

In the commercial development model, increases in specialization and exchange are seen as an integral part of the spontaneous process of economic growth. A growing economy encourages individuals to avail themselves of the efficiencies of specialization and exchange, and as the division of labor becomes more elaborate, social complexity increases. Engels (1972 [1884]) presented an early variant of this model. According to Engels, economic growth was rooted in technological improvements that made possible the production of surplus goods, their commercial exchange, and the taking of profits. Surplus production, exchange and profits generated a widening array of differentiated statuses: farmers and craftsmen, merchants and slaves, creditors and debtors, rich and poor. Finally, to maintain order in the face of burgeoning social heterogeneity, the state was born, adding its own specialized personnel to the already existing profusion of social types.

Jacobs (1969, 1984), Renfrew (1969, 1972, 1975), Parsons and Price (1971), Millon (1973), Evans (1978), and Zeitlin (1979) might also be regarded as following a commercial development model. They envision an economic system with three definitive characteristics: first, an elaborate division of labor in both utilitarian goods and luxuries, second, an exchange system that caters to a regional population of both commoner and elite consumers, and third, an economy that is relatively free of political administration. Although elite demand for exotic goods is sometimes seen as an initial stimulus to production and exchange in the regional economy (Parsons and Price 1971, 179; Zeitlin 1979, 174), little emphasis is placed upon political elites as organizers of the economy. The intensification of specialization and exchange is regarded as an autonomous process dictated by economic efficiency and the pursuit of individual advantage. Local rulers assume no special role as economic actors.

Commercial development often does stimulate social complexity, as documented by Jacobs (1984), but it may also reduce complexity on the peripheries of commercial systems (Stavenhagen 1968; Frank 1969; Wallerstein 1974; Wolf 1982). However, cases of social complexity *originating* through commercial development must be relatively few. Sustained commercial development requires that land and labor be treated as commodities, and this seems to occur only after an extended period of political centralization and inequality (Polanyi 1944, 56–76; Wheatley 1971, 281–89; Sahlins 1972, 92–93). Further, sustained commercial development requires that sizable profits accumulate in private hands, escaping political appropriation. This would have rarely happened (Eisenstadt 1963, 318; Wallerstein 1974, 15). These considerations have favored models of specialization, exchange and social complexity where development occurs under conditions of extensive economic intervention by political elites.

The multifaceted adaptationist model is one such effort. In this model, political elites are assumed to intervene in the economy; in fact, the ability of political leaders to organize a more effective subsistence economy is considered the *raison d'être* of powerful leaders. Powerful, centralized leadership is seen as developing in environmental and demographic contexts where effective economic management is either necessary or especially beneficial.

One version of the adaptationist model sees specialization and exchange developing as a part of an economy based upon redistribution (Polanyi 1944, 48–49; Sahlins 1958; Service 1958, 1962, 1975; Fried 1960). In regions of high resource diversity (i.e., where different locales are optimally suited to producing different things), specialization and redistributive exchange would confer substantial benefits. They would enhance productivity, diversify subsistence, and provide insurance against food failures in one sector or another (Fried 1960, 710; Peebles 1971; Gall and Saxe 1977; Isbell 1978; Price 1979; Halstead and O'Shea 1982). Goods accumulating under the leader's control might also be used to sponsor craft production and public works (Sahlins 1958, 7; Service 1962, 147–50). The prestige gained by the leader's effective management of specialization and exchange would be a major support of his leadership.

The initial version of the redistributive model as articulated by Service (1962, 1975) implied the central accumulation and distribution of large amounts of subsistence goods across microenvironmental borders: coastal products to inland populations and the reverse, highland products to lowland populations and the reverse, urban craft goods to rural food producers, rural food to urban craft specialists, and so on. Accumulating evidence suggests, however, that the redistribution of significant quantities of subsistence goods across microenvironments is not a typical feature of chiefly economies and early states (Earle 1977, 1978; Peebles and Kus 1977; Muller 1978a). Current proponents of the redistributive model now emphasize redistribution as a means of managing resource perturbation (Isbell 1978; Halstead and O'Shea 1982; Muller, Chapter 2).

The benefits of specialization and exchange might also be realized by petty market exchange (Sanders 1956). A second version of the adaptationist model proposes that centralized leadership develops in regions of high resource diversity to facilitate market exchange. The government maintains peace within the market region and mediates the diverse interests of various kinds of specialists (Sanders 1965, 6; Sanders and Price 1968, 188–93). This model is supported by evidence of intensified regional exchange in the Valley of Mexico during its unification under the Aztec state, although, urban growth rather than resource diversity may have triggered this intensification (Brumfiel 1980, n.d.).

A third version of the adaptationist model (following Wittfogel 1957) centers upon the centralized management of production rather than exchange. A complex local economy might benefit from centralized decision making, particularly in scheduling labor and land for alternative uses. It has been suggested that centrally managed economies would be especially advantageous in regions like Southern Mesopotamia where aridity forces people to devise particularly complex subsistence strategies (Hole 1966; Wright 1969; Athens 1977, 375; Redman 1978, 232–34; Galvin, Chapter 10). Johnson (1973; Wright and Johnson 1975) has suggested that economic management was needed to cope with the unpredictable stresses placed on an economy by periodic visits from pastoralists. This model is compatible with evidence of the reorganization of local production and exchange at the time of state emergence on the Susiana Plain in Southwest Iran (Johnson 1973). But it seems doubtful that such reorganization was necessitated by the appearance of full-time pastoralists in Susiana; in nearby Southern Mesopotamia, full-time pastoralism did not occur until 1500 years after the emergence of the state (Galvin, Chapter 10).

A fourth version of the adaptationist model suggests that centralized leadership develops to sponsor long-distance trade. Rathje (1971, 1972) proposed that political development among the Classic Maya resulted from their need to mount large trading expeditions and organize the production of ceremonial paraphernalia, the primary Maya export. In doing so, the Maya elite were able to provide commoners with products essential to their household economies: salt, grinding stones from igneous rock, and obsidian cutting tools. However, Marcus (1983a, 479) argues that commoners were not dependent upon elite sponsored long-distance trade; local sources of salt were available to the Classic Maya, and locally available limestone and chert could be used for grinding stones and cutting tools. Rice (Chapter 7) provides evidence that goods acquired through interregional exchange rarely circulated to commoner households outside the Classic Maya regional centers.

Flannery (1968) provides an alternative view of interregional exchange in early Mesoamerica. He proposes that long-distance trade, administered by political elites for the purpose of acquiring exotic goods to enhance their status, also enhanced the security of local populations. The exchange of 'wealth' items between elites could have created reciprocal obligations between groups so that in times of stress a more secure population would be willing to share with a less fortunate partner. Flannery distinguishes between the *purpose* of elite sponsored interregional exchange (to acquire status-enhancing symbols) and its *function* (to enhance the security of local populations). To many, Flannery's functional explanation has seemed superfluous, the purposes of elites being entirely sufficient to account for their participation in exchange. In fact, Flannary's article is transitional, presenting an adaptationist argument while opening the way for political approaches to specialization, exchange and social complexity.

Although many of the adaptationist arguments are contradicted by archaeological or ethnographic evidence, as a group, they have stimulated excellent studies of local production and resource procurement in situations of developing social complexity. Such studies indicate that increases in centralized leadership are often accompanied by significant changes in local subsistence patterns (the construction of irrigated fields, agricultural terraces, etc.) and the reorganization of local and regional exchange (Murra 1960; Johnson 1973; Palerm 1973; Matheny 1976; Earle 1978; Harrison and Turner 1978; Brumfiel 1980; Blanton *et al.* 1981, 43–109). However, in several documented cases, political intervention in the economy has had as its object financing governmental institutions and extending political power rather than enlarging or improving the resource base of local commoners (Murra 1960; Earle 1978; Brumfiel 1980). In other cases, the power of political elites has grown without any elite-sponsored improvements of the local resource base (Gilman 1981; Kristiansen, Chapter 4). Such cases contradict the premises of the adaptationist model, and they have led to the elaboration of political approaches to specialization, exchange, and social complexity, approaches that assign primary emphasis to the goals of political leaders and to the opportunities and constraints under which they labor.

In the political model, local rulers are again given an important role in organizing specialization and exchange, but they, rather than the populations they administer, are regarded as the primary beneficiaries. It is proposed that political elites consciously and strategically employ specialization and exchange to create and maintain social inequality, strengthen political coalitions, and fund new institutions of control, often in the face of substantial opposition from those whose well-being is reduced by such actions. Mobilization, the transfer of goods from producers to political elites, is seen as lying at the heart of political development, sustaining the elites and enabling them to fund new institutions and activities calculated to extend their power (Earle 1978; D'Altroy and Earle 1985). Mobilization is reflected in the changes in local production and exchange that as noted above often accompany political development; it is also reflected in changing patterns of specialization and interregional exchange, which become financed by political elites.

On the one hand, mobilization enables rulers to create new institutions of political control. These are staffed by administrative specialists who carry out critical governmental operations: tax collection, military organization and leadership, judicial decision-making, and law enforcement (Berdan 1975, 120–30; D'Altroy and Earle 1985). On the other hand, mobilization enables rulers to become patrons of certain craft specialties and sponsors of long-distance trade. In doing so, rulers achieve monopoly control over certain classes of goods, often articles of social prestige, 'wealth,' as opposed to subsistence goods, which serve as useful tools in extending political power. Thus, this perspective includes within its analytical framework not only the subsistence economy, but also the production and exchange of wealth, a sphere of activity that commonly intensifies during periods of political development but which is often dismissed as non-essential and unimportant by those taking an adaptationist perspective (Tourtellot and Sabloff 1972; Price 1979; Sanders 1984; cf. Schneider's 1977 critique).

The political model comes in several versions, each presenting a different interpretation of how the ruler's control of certain products through the sponsorship of craft production or trade would translate into increased power. In one version, monopoly over foreign commerce is regarded primarily as a source of profit to the ruler, a source of income that can be invested in an array of mechanisms for augmenting the leader's power (Webb 1975; Kohl 1978, 472; Classen 1984; Santley 1984). In a second version, a ruler achieves coercive power over a population by monopolizing certain food crops, tools or weaponry. His ability to withhold these goods from those who oppose him establishes a base upon which to build other forms of control (Kottak 1972; Friedman and Rowlands 1978, 219; Ma 1980; Sanders 1984).

A third version of the political model suggests that the control and manipulation of wealth is a key factor in building political power. Wealth can come into play in the initial stages of social ranking. An individual may establish superior social rank by displaying the symbols associated with a foreign, already established elite (Flannery 1968, Wheatley 1975) or by monopolizing and manipulating the sacred symbols of his own population's cosmology, (Webb 1974; Friedman 1975; Drennan 1976; Earle 1978; Chang 1980; Rowlands 1980; Haselgrove 1982). Control over wealth can also be used to attract clients and allies to compete for political leadership and to cement horizontal alliances that enhance existing Power (Hicks 1981; n.d.b; Kristiansen 1981, 257; 1982, 265; Appel 1982, 31–33; Susan Shennan 1982, 31: Stephen Shennan 1982a, 38).

Wealth distribution can serve as a mechanism for integrating political power on the regional level. It can be used to maintain a nested hierarchy of political leaders exercising power at the local, district, and regional levels (Murra 1962; Ekholm 1972; Phillips and Brown 1975, 22; Schneider 1977; Earle 1978, 184–85; Frankenstein and Rowlands 1978; Friedman and Rowlands 1978, 219; Chang 1980; Hodges 1982; D'Altroy and Earle 1985). The allocation of prestige goods as a means of achieving vertical integration has received considerable attention from Mesoamericanists (Calnek 1978b; Rounds 1979; Blanton *et al.* 1981, 249; Berdan 1982, 101, 105–20; Spencer 1982, 42–62; Blanton and Feinman 1984, Brumfiel n.d.).

Finally, control over prestige goods or wealth when combined with a regional market system could provide a means of supporting administrative and craft specialists working for the state (Calnek 1978a, 101; Brumfiel 1980, 466; D'Altroy and Earle 1985). Once subsistence goods begin to circulate via market exchange, rulers can pay for specialists' services in valuables which can then be used by the specialists to purchase goods for their own maintenance. As D'Altroy and Earle (1985) point out, such systems of 'wealth finance' often replace systems of 'staple finance' in which specialists in the capital draw rations at the palace and provincial administrators are granted access to provincial land, labor, and/or tribute stores for their own support. When staple finance is replaced by wealth finance, centralized political control increases substantially.

Those who have emphasized the importance of elite-sponsored craft production and interregional exchange for political development must deal with the objection that specialized craft production, exchange, and social complexity do not always coincide. There are some instances in which social complexity has increased substantially with no corresponding increase in interregional exchange (Wright 1972; Drennan and Nowack 1984; Earle 1985a). Further investigation of these cases might yield evidence that political development was accompanied by an intensification of elite-sponsored craft production. If so, it would still be possible to argue that the ruler's control of certain products, locally produced or procured through interregional exchange, paves the way for political development. If no such evidence is found, then it will have to be recognized that mobilization through agricultural intensification alone can sometimes provide the basis for development.

There are also a number of cases in which interregional exchange occurs, sometimes on an impressive scale (e.g. Malinowski 1922), with no corresponding complexity of social structure (Sanders 1984, 278–79). These cases accentuate the need for a more refined approach to interregional exchange, sensitive to variation in its character and consequences.

Interregional exchange is not a unitary independent variable. Its character and consequences vary with context, i.e., differences in local ecology, demography, political structure, types of goods exchanged, and the organization of exchange. This has been commented upon several times in recent years (Meillassoux 1971, 86; Hammond 1973, 601; Kohl 1975, 47; Renfrew 1975, 4; Price 1977, 213; Hirth 1984, 146), but it bears repeating. Just as there is no single relationship between food production and social complexity there is no single relationship between specialization, exchange and social complexity. Meaningful statements about specialization, exchange and social complexity can only be made if the variation covered by these general terms is explicitly recognized and taken as the object of study.

Our own comprehension of specialization, exchange and social complexity has been facilitated by distinguishing between subsistence goods and wealth, independent and attached specialists, and staple and wealth finance. In the following pages, these distinctions are explained and then used to discuss the general implications of the individual studies presented in Chapters 2 through 10.

Subsistence goods and wealth

In considering specialization and exchange, it is useful to distinguish between two general classes of goods, subsistence goods and wealth. Although the classes can be seen as somewhat arbitrary divisions of what is essentially a continuum, the separation is at least heuristically valuable. *Subsistence goods* include food, drugs, and production–protection technology used to meet basic household needs. *Wealth* includes primitive valuables used in display, ritual, and exchange and special, rare and highly desired subsistence products.

In all but the simplest of complex societies, rulers must be concerned with the production and exchange of subsistence goods. After all, the basic needs of the ruler and his staff must be met. As discussed below, such needs are generally filled through systems of resource mobilization and state finance. The development of complex society, involving the elaboration of new institutions and growth in the numbers of governmental personnel, entails a corresponding elaboration of subsistence goods production and mobilization to support the growing state.

Governmental management of subsistence goods production, procurement, and distribution to the general population is, of course, a separate issue. The case studies presented in this book suggest that the extent and character of governmental management is highly variable. In a number of cases it seems non-existent; governmental intervention in the subsistence economy does not extend beyond the mobilization of resources for its own support. In at least one case, the Mesopotamian states discussed by Galvin (Chapter 10), state control of subsistence production was nearly all-encompassing.

Rulers frequently take a more active interest in the production/procurement/distribution of wealth. This is not easily explained from an adaptationist perspective, although Flannery (1968) and Sherratt (1976) have offered adaptationist accounts of it. Our own investigations have convinced us that the political importance of wealth derives from its essential role in validating social status, as suggested by Douglas' (1967) seminal essay. The production, display, and distribution of wealth are politically important activities because they are the means by which rulers define their own social statuses and the statuses of others, with all the rights and obligations adhering thereto. Because of this use value, wealth acquires an exchange value and can be used as a means of payment for services rendered the state. When wealth and subsistence goods are freely exchanged, wealth comes to serve as a true currency.

Distinguishing between subsistence goods and wealth seems nonproblematic for most of the contributors to this book. But Rice's (Chapter 7) summary of the indicators used by Maya archaeologists to establish that obsidian was an item of wealth during the Late Classic provides a very useful suggestion of how to distinguish wealth from subsistence goods in the prehistoric record. Obsidian is considered a wealth item because it is concentrated in civic–ceremonial centers as opposed to more 'rural' locales, it was manufactured into unusual, eccentric forms, and it is commonly found in special caches accompanying burials, under stelae, etc. The absence of these traits for obsidian dating to the Postclassic era suggests that obsidian was converted from an item of wealth to a utilitarian commodity by the end of the Late Classic period.

Independent and attached specialists

Specialization involves economic differentiation and interdependence: the existence of individuals who produce goods or services for a broader consumer population. Specialization is a continuum along which any economy can be gauged. At one end of this continuum is the ideal Domestic Mode of Production (Sahlins 1972) in which the division of labor (specialization) is limited to age and sex differences within the family. At the other end of the continuum is the modern industrial economy in which the division of labor is enormously complex (more than 35,000 different kinds of jobs, Lenski and Lenski 1978, 295) and outside specialists produce most of the goods and services used by domestic units. A number of anthropologists have examined specialization of whom Balfet (1965), Rowlands (1971), Trigger (1974), Van der Leeuw (1977), Evans (1978), Rice (1981), Muller (1984a), Tosi (1984), and Beaudry (1984) have provided useful insights for the present discussion.

Specialization is a complex notion that involves a number of dimensions of variation. These include: (1) the affiliation of the specialists (independent or attached); (2) the nature of the product (subsistence goods, wealth items or services); (3) the intensity of specialization (part-time or full-time); (4) the scale of the production unit (individual industry, household industry, workshop industry, village industry, or large scale industry, cf. Van der Leeuw 1977); (5) the volume of output per individual specialist.

The distinction between independent and attached specialists is central to our consideration of specialization and complex society. *Independent specialists* produce goods or services for an unspecified demand crowd that varies according to economic, social, and political conditions. In contrast, *attached specialists* produce goods or provide services to a patron, typically either a social elite or a governing institution. Attached specialists are contractually bound to the patrons for whom they work, and frequently, the patrons insure that all the specialists' basic needs are met. Because production by these two types of specialists is dictated by different principles, independent and attached specialists often differ in terms of their products, intensity, organization, and productivity even when both are members of a single society.

The products, intensity, organization, and productivity of independent specialists are guided by the principles of *efficiency and security*. Independent specialists may produce either subsistence goods or wealth items, any product in which the gains in efficiency from specialization are relatively great. Specialization can be expected when natural resources are unevenly distributed or when the production process involves some gradually acquired skills or significant economies of scale. Pottery and obsidian blades are typical of the products manufactured by independent specialists.

The intensity of specialization is set by the size of consumer demand and by the stability of exchange institutions. Full-time specialization is practical only in the presence of a sufficiently large aggregate demand and exchange mechanisms sufficiently stable to provide reliable supplies of subsistence goods and raw materials to specialist producers. Even under conditions of a large aggregate demand, part-time specialization will persist if specialists need to be buffered against fluctuations in supply and demand (e.g., Brumfiel 1986). Aggregate demand and the intensity of specialization determine the scale of the production unit. The production unit expands until the optimal mix of efficiency and security is achieved, with less efficient units of production competitively excluded. The scale of the production unit determines the production process and consequently the volume of output per specialist.

For attached specialists, similar ties exist between demand, intensity, organizational efficiency and productivity. In the Inka empire, for example, an increase in the need for textiles used by state institutions resulted in a shift in organization from individual specialists producing for elite patrons to semi-industrial workshops producing for the military and state government (Earle, Chapter 6). Patron institutions and individuals are frequently able to insure the supply of subsistence goods and raw materials to their attached specialists, and thus full-time specialization among attached specialists is often sustained when market conditions are conductive to only part-time specialization among independent producers.

Although production by attached specialists responds to considerations of efficiency and security, it develops first and foremost in response to *needs for control* in the political economy. As described in the papers by Kristiansen (Chapter 4), Earle (Chapter 6), Barnes (Chapter 8) and Brumfiel (Chapter 9), attached specialists are involved in the manufacture of wealth items and weaponry and the provision of institutional services. Specialization arises from the explicit desire of the ruling elites to control the production and distribution of certain politically charged commodities and to direct activities of crucial political importance such as taxation, warfare, and public ritual. Simply stated, specialists develop in close association with ruling elites and institutions as a direct means of strengthening and maintaining control through economic leverage, coercive power, and legitimization.

Guided by different principles, production by independent and attached specialists follows different lines of development. As predicted by the adaptationist model, independent specialization develops in response to resource diversity and increasing population density; urbanization, market development, and stabilized levels of supply and demand are also important. Attached specialization develops largely as a function of elite coercive control and elite income, that is, according to the ability of elites to command specialist production and to attract and maintain specialist producers.

Staple and wealth finance

Political development requires new institutions of political control. These institutions have requirements for personnel, who are removed from subsistence activities, and for special paraphernalia. These requirements must be met through systems of finance that mobilize labor and goods from the general population and distribute them to state institutions and personnel. D'Altroy and Earle (1985) have discussed two major alternatives for accomplishing this, staple finance and wealth finance.

In *staple finance*, subsistence goods are collected by the state 'as a share of commoner produce, as a specified levy, or as produce from land worked with corvee labor' (D'Altroy and Earle 1985, 188). The goods are then paid out to state personnel who use them to meet basic household needs. In *wealth finance*, the state uses some form of wealth as currency; state personnel are alloted wealth which they exchange for subsistence goods, usually through some type of market transaction.

D'Altroy and Earle (1985) point out that staple finance systems are burdened with a major disadvantage; the bulk and weight of subsistence goods make their movement across distances difficult and costly. Despite this problem, staple finance systems prevail in a broad range of complex societies from fairly simple chiefdoms to early imperial states. These include the Mississippian chiefdoms (Muller, Chapter 2), the Hawaiian chiefdoms and the Inka empire (Earle, Chapter 6), the Yamato court of sixth-century Japan (Barnes, Chapter 8), the Aztec empire (Brumfiel, Chapter 9), and the early Mesopotamian states (Galvin, Chapter 10).

Staple finance systems are well suited to small, compact political units such as the Mississippian chiefdoms or the chiefdoms of Copper Age Spain discussed by Gilman (Chapter 3). When the territorial unit becomes more extensive, the collection of subsustence goods must be decentralized. Provincial administrators collect subsistence goods to support provincial government, passing only a fraction of the total on to the paramount ruler. The Hawaiian chiefdoms and Inka empire illustrate such decentralized staple finance systems. But these systems leave provincial administrators in control of an independent financial base that might fund rebellion. Earle (Chapter 6) suggests that the centralized manufacture of status-marking wealth and its distribution to provincial administrators play an important role in counter-acting the rebellious tendencies inherent in territorially extensive staple finance systems.

Another disadvantage of staple finance is that the allocation of all the varied components of household subsistence to numerous household units rapidly becomes impossibly complex (Calnek 1978a, 101). The development of landed estates attached to specific noble families or public institutions may be one means of reducing the administrative complexities of staple finance. Estates existed in sixth-century Japan, the Aztec empire, and the early Mesopotamian states, all associated with an urban-based elite drawing its support from attached land and labor. These estates represent a potential source of monetary income as well as subsistence goods for their agricultural surpluses can be marketed. Hicks (n.d.b) argues that estate surpluses offer a much more reliable source of marketed food than peasant household surpluses; they make it possible to depend fully upon the market as a supplier of subsistence goods. Thus, the transition from staple to wealth finance is feasible.

Wealth finance systems confer stability and administrative simplicity upon territorially extensive states. The main advantage of wealth-currencies are their high value to weight ratios that permit movement across great distances. This permits a higher degree of centralization in the state economy. By moving wealth long distances and retaining it at the state's center, payment can be made to the peripheries as need arises. This greater control over the means of payment deprives peripheral areas of an independent financial base. The threat of rebellion decreases.

Specialization and exchange in subsistence goods

One of the most important conclusions to be drawn from the cases presented in this book is the lack of importance of subsistence goods specialization for political development. Either such specialization is absent, as among the Mississippian chiefdoms (Muller, Chapter 2), or it is present but carried out with little assistance or interference by political elites, as in Hawaii and the Inka empire (Earle, Chapter 6) and the Late Classic Maya (Rice, Chapter 7). A fairly efficient system of part-time specialization in subsistence goods production and exchange operated in the Valley of Mexico without its being unified under a regional state, and when such a state did develop, it did not alter the part-time character of specialization (although it did intensify exchange, Brumfiel, Chapter 9). These cases indicate that political elites often do not function as promoters of economic efficiency through redistribution or market management as has sometimes been suggested.

On the one hand, it is probably difficult for political elites to play an important role in redistribution. The difficulties of transporting, storing, and allocating bulky subsistence goods have been mentioned in our earlier discussion of staple finance. Attempts to extend redistribution to the general population would encounter monumental problems. Markets avoid many of the administrative complexities of redistribution, but they also defy regulatory efforts. Whenever the supply of subsistence goods (particularly food) decreases, producer households provision themselves first (Wolf 1966, 16–17; Sahlins 1972, 129), and even draconian efforts by central administrators can fail to pull adequate supplies into market circulation (Gibson 1964, 355; Tilly 1975). On the other hand, peasants seem to resist dependence upon economic institutions that are under the domination of political elites. Such institutions can be more costly as leaders divert some produce for support of the political establishment. They may also be unreliable; leaders will be tempted to withhold needed goods as a tool of political coercion.

In this context, we can begin to understand why the Hawaiians and the Late Classic Maya opted for direct reciprocal exchange: it avoided elite interference and could be stabilized by personalistic obligation. Direct reciprocal exchange is practiced by contemporary Andean villagers for just such reasons (Hopkins 1984). In the Valley of Mexico, the alternative was to engage in specialization and market exchange but only on a part-time basis. Outside the Aztec capital, households maintained a basic self-sufficiency, particularly with respect to food, while augmenting their incomes with market sales and purchases.

Only in Mesopotamia, in the context of large administered estates, was a truly complex division of labor achieved (Galvin, Chapter 10). Galvin's discussion suggests that the early inhabitants of Mesopotamia found their lack of household autonomy acceptable because small household units were simply not viable economic units in the riverine microenvironment. The environment required long-range planning and capital investment which households were not able to supply on their own. Larger estates, administered as large nonegalitarian households, supplied both the economic security and the sizable population needed to support full-time specialization.

Specialization and exchange in wealth

Because of its social status defining properties, wealth must be the object of some interest for political leaders. Wealth validates the leader's right to receive payments in produce and labor from his people and to employ sanctions against them. Wealth also enables a ruler to define the status of others and to finance other people's social ambitions. Wealth frequently serves as the currency of everyday political transactions, enabling the ruler to reward allies and supporters and to monitor and manipulate political ties.

The cases presented in this volume indicate that the procurement and distribution of wealth is as an important a part of the political economy of early complex societies as the mobilization and distribution of subsistence goods to the ruler and his staff. However, no single model adequately explains how wealth operates as a political resource; at least two models are necessary. In one, specialization in the production of wealth is absent; it is the universal production and use of wealth within the population that make it a strategic resource for maintaining nonegalitarian relationships. In the second model, the production of wealth is partly or entirely in the hands of attached specialists; wealth is specifically an elite good and its circulation is restricted.

The first model is proposed to account for the wide dispersion of craft debris in the Mississippian chiefdoms (Muller, Chapter 2) and the chiefdoms of Copper Age Iberia (Gilman, Chapter 3). The dispersion of craft debris suggests the participation of many households in the production of wealth. How can wealth generate nonegalitarian relationships in the absence of elite control over its production? Douglas (1963, 1967) has described an ethnographic situation in which just such relationships prevailed. The production and exchange of raffia cloth among the Lele resulted in the formation of patron–client relationships between older and younger men. Although raffia cloth, the major item of Lele wealth, was woven by all men of the tribe:

> the demand for raffia cloths at every turn in his career and every step in status so overwhelmed a young Lele man that he could not expect to produce raffia for all his own needs. He turned for contributions to the men who were on the receiving end of the system. These old men had themselves passed through all the stages of payment and could now reckon levies of raffia cloth in large amounts. These senior men . . . did not fail to take full advantage of the patron–client opportunities of their situation [Douglas 1967, 132].

Further inequality results when the domestic system of wealth production and exchange is tied to interregional trade (Ekholm 1972; Rowlands 1979). Interacting regional elites can agree to exchange their stores of domestic wealth, each supplying the other with what becomes a stock of exotic wealth. Exotic wealth then supplements or supplants domestic wealth as the customary means of social payment (since elders control the statuses to which young men aspire, they can define the qualifying criteria as best suits them). Clients come to depend upon patrons to supply wealth which they no longer manufacture for themselves.

Among the Lele and the Kongo, hierarchy was created and maintained by the flow of wealth downward from elder to junior, patron to client, in return for deference (and labor? tribute?). Having reached the most junior level of society, the wealth flowed back upward as juniors claimed more senior statuses from their elders. As Ekholm (1972, 133–34) observes, 'the whole thing was to [the junior males'] disadvantage: it secured the position of the group in power – not only the central power, but all the chiefs all the way down the ladder.' Ekholm also points to the voluntaristic character of the hierarchy: each man subordinated himself to his senior to gain dominance over his junior.

Archaeologically, the maintenance of hierarchy through the circulation of wealth should be characterized by the widespread production of wealth items, as observed in the Mississippian chiefdoms and the chiefdoms of Copper Age Iberia. It should result in the widespread deposition of wealth in domestic refuse and in burials. Such is the case with the Mississippian burials described by Muller.

The early Bronze Age cultures of Northern Europe (Kristiansen, Chapter 4) seem to represent a fundamentally different system of translating wealth into prestige and power. Certain classes of wealth (bronze swords and daggers, bronze ornaments and drinking cups) were monopolized by a small segment of the population. These items were truly elite goods, serving to distinguish their bearers from the mass of the population and to exclude the masses from qualifying for positions of economic and political authority. Within the elite stratum, wealth, power and prestige were concentrated in a few key positions as opposed to being corporately shared among all socially qualified individuals. As a result, the key positions were the subject of intense elite rivalry.

It seems likely that successful competition required the formation of coalitions and alliances between elites and that elite wealth mediated many of these relationships. Kristiansen has described the system in the following way:

> The political system of the Nordic Bronze Age was extremely competitive and expansive in nature. The competition for rank was dependent on success in creating alliances and partnership . . . Central to the creation of alliances was, apparently, ritual and feasting, as evidenced by ritual gear, rock carvings, imported bronze vessels, golden drinking cups, etc. What circulated within such alliance systems was basically women and bronze . . . The extremely competitive nature of the system is reflected in the changing exchange networks and, more concretely, by the dominant role played by weapons in male equipment [Kristiansen 1981, 257].

Rowlands (1980) provides additional insights as to how the aristocratic, competitive wealth systems of the European Bronze Age may have operated.

Kristiansen's description of the Nordic Bronze Age would apply equally well to the pre-Aztec elites of the Valley of Mexico, the fourth- to fifth-century elites of pre-Yamato Japan (Barnes n.d.), and, perhaps, the Late Classic Maya elites as well. In these systems, inequality was not constituted by the exchange of wealth (as it was among the Lele). Inequality rested upon claims of dominion over land or over people, backed by force if necessary. But the application of coercion required personnel, and to gather and hold a warrior force, a ruler had to offer suitable rewards. The rewards consisted of exalted social position symbolized by similarly exalted items of wealth or wealth items alone by means of which a warrior might independently negotiate the advancement of his social standing.

A tendency exists among those who emphasize the coercive character of these regimes to regard wealth as an index of inequality but not as a causal factor (Gilman 1981, 5; Gamble 1982, 104; Bintliff 1982, 109). We would argue, however, that within these systems there is no priority of force over subsistence goods production, no priority of subsistence goods production over wealth and no priority of wealth over coercion. Following Rowlands' (1979) discussion of production and long-distance trade in Africa, we would argue that coercion, subsistence goods, and wealth were bound together systemically so that each was a necessary condition for the others.

Wealth was acquired through long-distance trade and patronage of skilled craft specialists. The foreign origins and high production costs of wealth maintained its scarcity and its value (Earle 1982). Exotic and highly crafted objects lent themselves well to social, as well as religious, exaltation (cf. Drennan 1976, 357). The excitement of the exotic, the pleasure of the beautiful, and the significance of the symbolic combined to make wealth items powerful statements of social status.

Rulers probably tried to monopolize all long-distance trade and elite craft production within their dominions. For example, Hawaiian chiefs controlled all steps in the production and distribution of feathered cloaks, acquiring the feathers by means of tribute payments, supporting the feather weaving specialists who manufactured the cloaks, and distributing them to subchiefs and potential allies (Earle, Chapter 6). The Bronze Age rulers of Northern Europe seem to have had similar success in monopolizing the production and distribution of bronze weapons and ornaments (Kristiansen, Chapter 4). But monopolies were not always achieved. In pre-Aztec central Mexico, efforts to establish monopolies over exotic and highly crafted goods were frustrated by highly commercialized markets and trading (Brumfiel, Chapter 9). But even in Mexico, advantages in tribute receipts and power probably enabled prudent local rulers to maintain a degree of superiority in acquiring wealth for distribution.

These aristocratic competitive societies seem to have considerable potential for political development. They appear to have contained within themselves an expansionary dynamic (Galvin, Chapter 10), and given a suitable ecological base, they were capable of generating territorially extensive, highly centralized states. In the three cases of state formation dealt with in this volume (the Inka state, the Yamato state, and the Aztec state), wealth distribution continued to play an important role in maintaining power. Not surprising, the newly formed states reorganized the production of wealth to increase the scale of production and bring wealth under tighter state control. According to Earle (Chapter 6), the Inka state removed weavers from their native communities and brought them to Cuzco and other administrative centers where they produced fine cloth for the state on a full-time basis. Earle also presents archaeological evidence of the Inka state assuming control of the manufacture and distribution of metal artifacts. The Yamato state organized the *be*, groups of attached specialists who supplied craft goods and services to the court. Barnes (Chapter 8) suggests that the *be* did not enable the Yamato state to monopolize all wealth production, but they did insure that the state would have a large supply of wealth at its disposal.

The production of wealth flourished under the Aztec state, although much of the production was undertaken by independent specialists who manufactured wealth for market sale. Nevertheless, wealth distribution served the state as an effective tool of political control. Certain wealth items were reserved for use by the ruler alone (Sahagún 1950–69 [1577], Bk. 9, p. 91). In addition, the ruler claimed a monopoly over the right to qualify individuals to display certain wealth items (although Anawalt 1980 claims this monopoly was not enforced). Moreover, the production of goods of the very highest quality under royal patronage, their distribution in public, heavily ritualized contexts, and the distribution of wealth items at no apparent cost to the recipients made wealth distribution an effective political tool even in the absence of a royal monopoly over most forms of wealth production.

Symbols, ideology and political development

The obvious importance of the production and distribution of wealth in early complex societies underscores the integral role played by symbols and ideology in processes of political change. Rowlands' (Chapter 5) discussion of native conceptual systems and political development in the pre-colonial Cameroon chiefdoms focuses upon this issue; it is also touched upon in Brumfiel's (Chapter 9) review of Aztec craft production.

Rowlands stresses that native conceptual systems are needed to understand the political consequences of specialization and exchange. The conceptual systems determine how basic resources and responsibilities are allocated; therefore, they also determine who can produce what, who needs what, who can supply what, and how different segments of society will be affected by changes in production and exchange. For example, the Cameroon chiefdoms were transformed by the new opportunities for wealth introduced by the slave trade. But the fact that the chief's men rather than the lineage elders profited most from the slave trade was a consequence of two facts: those guilty of certain social transgressions could be sold into slavery, and if they were sold, it was the chief's men who did the selling. In Cameroon culture, the chief's men were charged with exercising power in defense of the moral order; this provided a partial legitimation for participating in the slave trade. Lineage elders represented the pure moral order unsullied by coercive force; this effectively excluded their participation.

Rowlands also demonstrates that political change is accompanied by ideological transformations that acknowledge the change and evaluate it. However, innumerable transformations can be made upon any given set of symbolic components, each supplying a different commentary upon actual political behavior. For example, the slave trading that the chief's men counted as defending the moral order was construed as sorcery, a violation of the moral order, by the villagers who were preyed upon. Rowlands argues that elite appeals to moral authority to reproduce the conditions of exploitation will inevitably generate ambiguity and contradiction.

Elites can attempt to resolve ambiguity and smoothe over contradiction. One means of doing so is to employ skilled craftsmen to encode artistic products with symbolic messages that convey the elite point of view. However, it is doubtful that peasants will ever be convinced over long periods of time to accept the necessity of their own exploitation. In contrast, regional elites might be persuaded to exchange one structure of dominance for another. Ideological transformations that offer them promotions in status might be readily accepted; highly crafted items of wealth that express the new ideology would be highly appreciated. The introduction of new art styles and the reorganization of wealth-producing craft specialists are probably good indicators of change in the relationships of regional elites. As the discussions by Barnes, Brumfiel and Earle all suggest, the reorganization of elite relationships is a key task in building centralized regional states.