The Evolution of Complex Stratification in Eastern Micronesia

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Abstract—This paper distinguishes the functional and conflict (or coercive) approaches to stratification. The former claims that stratification develops out of societal-level needs for efficient production, trade, warfare, and other large-scale activities. The conflict approach holds that inequality is rooted in differential control over resources, technology, and personnel, which provide the means for some groups to coerce others and acquire a greater share of material and social rewards. Applying the conflict approach to eastern Micronesian islands, the paper suggests how variable geographic and ecological conditions influenced the development of stratification and the scale of political integration in Kosrae and Truk.

Introduction

Efforts to account for the development of social stratification fall into two general categories. The first is called the functional approach. Many functionalists assume that stratification evolves because some populations have a need for supralocal coordination of activities (Sahlins 1955, Service 1975). Political leaders emerge as means for organizing local communities for participation in redistributive networks, or as ways of instituting the provision of defense or public works (e.g., irrigation). Sahlins (1958), for instance, accounted for differences in the development of stratification in Polynesia by differences in ecological productivity and diversity (but see Earle 1977, 1978). Mason (1968) and Knudson (1970) related varying organizational features of Micronesian atoll societies to climatic and geographic diversity. Generally, functionalists analyze stratification in terms of benefits that accrue to whole societies, including those at the bottom of the hierarchy. The degree and form of inequality is explained by adaptive and/or organizational prerequisites.

The second approach is generally called the conflict or coercive approach. Coercive theorists assume that stratification is rooted in control over natural and human resources by individuals and groups who use this control mainly to benefit themselves. They argue that "rulers" or "elites," and not the population-at-large, benefit from inequality (Lenski 1966). In their view, we should explain stratification by analyzing how certain groups acquire and retain control over strategic resources. Thus Carneiro (1970) accounted for the origin of the state in circumscribed environments by arguing that the losers in warfare had no viable alternative to submitting to their militarily superior neighbors.

In Micronesia, the functionalist would argue that the services performed by chiefs and nobles were critical to the survival, security, and material well-being of all members of a society. For instance, it might be noted that the islands are small, with limited land resources; that fertility vagaries lead to demographic imbalances in people:land ratios; and that rulers periodically redistributed land by taking it from declining kin groups and granting it to expanding ones. This land redistribution was beneficial to the whole community. It might also be noted that most islands experience occasional natural catastrophes (typhoons, storm damages, droughts), making it useful to develop a chiefly social level to organize the provision of relief to stricken islands. Other advantages of stratification in an island environment could be offered, but these two examples illustrate the ecological conditions that lead us to expect some degree of stratification in the region, assuming we accept functionalist assumptions.

To account for the diversity of stratification in the region, functionalists would show that different island environments pose varying adaptive problems for their inhabitants. For example, low islands generally have high densities, so their inhabitants have a greater need for periodic land reallocation under the direction of chiefs. Due to the low diversity of natural resources on atolls, interisland trade and voyaging is to be expected, which also is organized by chiefs. Finally, low islands are more subject to natural disasters than high islands, so we would expect many atolls to be unified politically to facilitate disaster relief, as appears to be the case (Alkire 1965).

Occupants of high islands such as Pohnpei and Kosrae face a different set of problems. Here functionalists would argue that rulers and nobles provided the supralocal coordination of activities required to exploit these relatively lush environments successfully. For instance, local communities might be engaged in the production of different kinds of foods, which chiefly feasts and other activities would redistribute to other communities. Further, labor organized by chiefs facilitated the preservation of large quantities of seasonally abundant breadfruit, which were preserved for lean periods.

As Cordy (unpub.) has suggested, such symbiotic and trade control hypotheses offered by functionalists do not seem to apply to eastern Micronesian high islands—local communities appear to have been self-sufficient (see Earle 1977, 1978 for similar arguments about Polynesia). Here I call attention to another problem with the functionalist approach: the societal-level adaptive needs that stratification is supposed to fulfill could be met through a variety of alternative social mechanisms that do not involve so much inequality. Although commoners received some benefits from the organizational services of chiefs, it is probable that they could have done better for *themselves* by a more equitable social system.

In contrast, the conflict approach refocusses our attention. Functionalists generally ask how stratification helps a society as a whole cope with one or another social or adaptive problem. Coercive theorists ask how varying ecological and demographic conditions affect the possibilities for some individuals and groups to acquire and sustain control over critical resources, in spite of resistance from those (most of the population) who are denied free access to such resources as a consequence of stratification itself. In the conflict approach, it is the potential that various ecological and demographic settings offer for exercising control that give rise to differing degrees of stratification, rather than the societal-level benefits resulting from stratification.

On the other hand, functionalism contains an important insight. A narrow conflict approach would view Micronesian chiefs and nobles as parasitic exploiters. But it is unlikely that a high degree of inequality such as that found on Kosrae, Pohnpei, and the southern Marshalls could have persisted unless chiefs offered some kinds of services in return for the benefits they derived from commoner social submission, tribute, and labor. Religious sanctions or other ideologies could not have forever forestalled the violent breakdown of such systems due to commoner revolts as well as rivalries among chiefs themselves. The usefulness of the services offered by chiefs to their subordinates must therefore be a part of our explanation of inequality.

Thus modified, conflict theory predicts that social systems will evolve toward (always uneasy) relations of inequality that result from two opposing forces: how much behavioral submission, tribute, and labor chiefs could extract from commoners versus the resistance commoners would offer. I would expect the degree of inequality to be most influenced by two conditions. First, higher levels of stratification should evolve where chiefs were best able to extract resources without the repeated retaliation that would have disrupted their control, put them and their kin in intolerable physical danger, or have overthrown them entirely. Second, a greater degree of stratification would evolve on those islands where commoners desired or required the services that chiefs returned to them. We therefore need to ask (1) What influenced the probability that commoners violently resisted chiefly exactions? (2) What influenced the needs of commoners for chiefly services? Here there is space to address only the first question.

Part of the answer concerns the burden that chiefly exactions of labor and tribute put on commoners. All else equal, the harder commoners must work to support chiefs and their families (both to supply chiefs with food and to "finance" their political activities), the more intolerance commoners will have for chiefly demands, and the less stratification will evolve. Stated differently, *ceteris paribus*, the greater the productivity of labor (or "ease of subsistence") on an island, the greater the stratification that will evolve. Productivity is affected by the distribution and abundance of marine and terrestrial food resources, taking into account precipitation, the nature of the major crops and their labor requirements, size and productivity of reefs, lagoons, and surrounding oceans, susceptibility to droughts and typhoons, and so forth. Mason (1968) and Knudson (1970) have compared the productivity of low islands, using such characteristics.

Another part of the answer is the ability of commoners to organize themselves for resistance to chiefly demands. Resistance—especially violent revolt that puts one's life in danger—requires a high probability of success. The larger the number of people organized, the greater the probability of successful resistance. Greater impediments to such organization presumably existed on some islands than on others. We might be able to determine the geographic, ecological, demographic, and social forces that influenced the ability of commoners to organize large-scale resistance.

Here I confine discussion to the islands between Truk and the Marshalls, for linguistic evidence strongly suggests that these societies are historically related (Bender 1971, Jackson 1983). Although different in many ways, they shared certain characteristics, which I shall now summarize.

Organizational Features

Throughout eastern Micronesia, kinship was reckoned matrilineally. Named matriclans, each with a legendary history, were universal, and most were represented by branches on several widely scattered islands. These dispersed clans were divided into localized matrilineages, which were usually the group that maintained use-rights to specific plots of land. In Truk, the rights of higher level political authorities to the land held by matrilineages were few. But in Pohnpei, Kosrae, and the Marshalls, the rights of the paramount chief and other titled nobles sharply limited the freedom of commoner matrilineage heads to use land as they wished (Mason 1947, 1954, Peoples 1977, Riesenberg 1968).

Although differences in the degree of stratification existed, nowhere was society egalitarian. In Truk and the surrounding low islands, distinctions of rank generally occurred within a single local community. Such distinctions were based on cultural ideas about the genealogical seniority of matrilineages and/or the temporal priority of settlement (Goodenough 1951, Marshall 1972, Nason 1970, Severance 1976). In Pohnpei, Kosrae, and the Marshalls, clans were ranked relative to one another, with only certain clans having the right to hold privilege-bearing titles (Mason 1947, Peoples 1977, Riesenberg 1968).

Everywhere, named territorial units existed, referred to as districts or sections. Districts contained one or more settlements, generally where localized matrilineages had land rights. The political significance of districts varies. In Pohnpei and Kosrae, several districts were under the control of some chief. A commoner overseer was appointed by the district chief to look after the chief's interest in the land and its people and to see that tribute was rendered. In the Marshalls, the lineage head (*alab*) performed a similar function. In Truk and the surrounding islands, however, the level of political integration did not go much beyond the district—or, at least, such higher level political integration did not persist into the contact period (Goodenough 1951, Marshall 1972).

Most of the remainder of this paper discusses Kosrae, the island I know best from fieldwork in 1975–6 and from documentary research. However, first I shall outline the aboriginal sociopolitical system of Truk, as its relatively low degree of inequality and limited scale of political organization provide us with an (admittedly hypothetical) baseline from which some island societies evolved more complex social systems.

TRUK

In aboriginal times, Truk had a low level of stratification and political integration (Goodenough 1951). In striking contrast to the high islands further east, the autonomous political unit (generally coterminous with the district) was tiny, averaging about 0.3 square miles and 100 inhabitants. Within Truk lagoon, the larger islands had many districts: Wene (Moen) included about 14 districts in its 7.3 square miles, Dublon had about 18 districts in its 3.4 square miles. Smaller islands such as Romonum (0.3 square miles) had only one or two districts. This low (district) level of political integration has been commented upon by numerous researchers (see King & Parker 1984: 457–460 for an analytical comparison).

There were distinctions of rank within a Trukese district. Generally, one matrilineage in each district was considered high ranking, with other lineages ranked below it on the ideological basis of genealogical seniority. On Truk, little complexity developed beyond this: there was no proliferation of chiefly offices and differentiation of chiefs by ranked titles, nor did chiefs seem to have such authority beyond the level of the district.

The highest ranking lineage in a district was determined by temporal priority of oc-

cupation or right of conquest: the lineage that initially settled or conquered an area acquired full title to it. But under Trukese custom, the men of a lineage could give provisional title to land parcels to their children (who belonged to different lineages). As they matured, these children formed new lineages, whose men gave provisional title to their children, and so on. Over many generations, each lineage thus became ranked on the basis of its genealogical distance from the founding lineage. The senior male of the lineage, popularly recognized as the founder, was the chief of the district and was entitled to receive periodic food gifts produced from the land used by other lineages. On some islands, the chief had the right to confiscate and reassign lands of junior lineages who did not meet their obligation to him (Goodenough 1951).

This low degree of stratification and small-scale political unification that persisted into historic times on Truk may have characterized all the eastern islands in the prehistoric past. *If so*, our models of subsequent political evolution might usefully begin with a Truklike ancestral polity. We can then generate subsequent variability from this hypothetical prehistoric baseline.

For instance, on the more stratified islands of Pohnpei, Kosrae, and the Marshalls, we could use Trukese principles for establishing rank differences at the district level as the initial state from which more complex systems evolved. A possible process for subsequent evolution is demographic increase and geographical spread of the members of one or more districts, themselves subdivided into ranked kin groups that cooperated in wars or threats. As conquering district(s) extended control over surrounding districts, the latter lost their political autonomy and their residents became incorporated as low-ranking—eventually to become "commoner"-kin groups. Thus, in the Marshalls, the paramount chief who resided in Ailinglablab extended his domain over Bikini atoll, and Bikini residents became incorporated as commoners into his chiefdom (Mason 1954). The senior member of the high-ranking—eventually to become "noble"—kin group became paramount chief of many districts, with his matrikin becoming lesser chiefs. Thus in the five Pohnpeian and one Kosraen chiefdoms, the paramount and lower-ranking chiefs were members of certain clans considered to be noble. Supporters in warfare and other political activities were rewarded with titles or control over subordinant districts, as they are in Arno (Rynkiewich 1972). Pre-existing matrilineage heads of the subordinate districts became middlemen or overseers, like the Marshallese alab (Mason 1947; Rynkiewich 1972, Tobin 1967), who looked after the lands to which their lineage had usufruct and saw that their obligations to chiefs were fulfilled.

With this model of (pre)historical process in mind, we turn to an island in which the process was carried to its maximal extent.

KOSRAE

At the time of Western contact in 1824, Kosrae was the most centralized of Micronesian islands (Alkire 1977, Sarfert 1919–20). The entire island of 42 square miles and roughly 5000 people was ruled by a paramount chief. The paramount was supposed to be the senior member of the highest ranking clan. There were other chiefs, about 17 in number, who held ranked titles. The paramount, the other chiefs, and their close matrilineal relatives comprised the noble class. Members of the nobility along with their numerous commoner retainers lived on tiny Lelu island, on the eastern side of the main island, within courtyards enclosed by high walls constructed of basalt. Commoners lived in widely scattered, small settlements on the mainland, mostly of less than 50 individuals. In turn, settlements were politically aggregated into approximately 57 districts. Each district was a "slice" of the main island, from the coast to the interior, thus allowing the population of most districts access to land of all ecological zones. The composition of the settlements cannot be determined, but most likely most consisted of core members of a matrilineage together with their spouses and unmarried children (Peoples 1977, Ritter 1978, Sarfert 1919–20).

Unlike Truk, Kosraen districts were not politically autonomous. Nominally at least, the paramount had ultimate rights to all the land and resources on the island. When a new paramount took control, he appointed members of the noble class to titles and allocated political control over the land and people of the districts among these title-holders. Through competitive feasting and service to the paramount, title-holders competed among themselves to earn control over the most and choicest districts. The major material benefit gained from such control was tribute, which had to be paid to the chief every few days from each district. The chief kept a portion of the tribute for himself and his family and retainers, and rendered the rest to the paramount. To look after his interest in the districts under his control, and most especially to see that tribute was rendered regularly, the chief appointed a commoner resident of the district as overseer. Whether this status was normally hereditary cannot be determined on present evidence.

Based on evidence such as this, Cordy (1982, unpub.) proposes that Kosrae had four "strata": the paramount, other chiefs, overseers, and commoners. Graves (1986) believes that Cordy misunderstands the nature of the Kosraen class system and argues instead for only two classes: nobility and commoner. I concur that Cordy confuses "stratum" or "class" with "status level." Within the noble class there were recognized and marked distinctions of rank between title-holders, and not all men of the nobility acquired titles. Likewise the commoner class featured status distinctions, since the overseer had certain privileges denied to other commoners (Peoples 1977, 1985). Both classes were therefore internally differentiated into what is perhaps best considered administrative or management levels.

Graves (1986: 481) also argues, against Cordy, that the paramount was "the chief among chiefs." He believes that, although the paramount received deference from other nobles, he actually had little more power than the other titled nobility. Sarfert (1919-20)also claimed that the "king" was really "first among equals." It appears from ethnohistoric and ethnographic sources (including statements from my own elderly informants) that the paramount had privileges denied to other chiefs. These included the right to appoint nobility to titles, to promote a noble to a higher title, to strip a title from or demote a noble, to allocate control over districts among the other chiefs, to have more servants, to demand special behavioral and linguistic obeisance from lower ranking titleholders (summarized by Cordy unpub.), and to receive a portion of the tribute chiefs received from the commoner districts under their control. In addition, the office of paramount was the object of great rivalry among other title-holders when it became vacant, which took the form of competitive feasting and military threats (Peoples 1977). All this suggests that the office of paramount carried special privileges over and beyond those enjoyed by other chiefs.

Archaeological research suggests that stratification and the level of political integration in Kosrae once resembled that of contact-era Truk. The complex class and status rankings and island-level political unification found at contact had evolved on Kosrae by A.D. 1400, presumably from an original social system that featured the common elements described earlier (Cordy 1981, Ueki 1984). Cordy & Ueki (unpub.) propose a conquest model to account for this evolution. Initially, a low degree of stratification existed, and the maximal extent of political unification was the district level. Differential population growth between districts resulted in numerical (and hence military) imbalances, leading eventually to conquest and a more inclusive level of political integration. After several districts had been integrated under a single chief, he found it administratively convenient to appoint lesser chiefs to look after his interests in subject communities, thus adding a new status level. Some evidence suggests that at one time there were several of these independent chiefdoms on the island. Later one chiefdom, headquartered in the small island of Lelu, conquered the others and the whole island became politically unified. Lesser chiefs were allocated districts by the paramount. To administer the mainland communities, lesser chiefs appointed commoners as overseers, producing the system with four status levels that existed at contact (Cordy & Ueki unpub.).

Provisionally, I accept the notion that conquest warfare was instrumental in achieving political unification and instituting the high degree of stratification that existed at contact. Here I wish to elaborate on Cordy & Ueki's scenario, concentrating on the probable political dynamics of the small, independent, warring chiefdom "phase."

Once one chiefdom began to expand, neighboring chiefdoms had to mobilize for defense. If competing chiefdoms successfully mobilize, a situation of warring chiefdoms results, in the short term. But this situation is unstable, if one chiefdom desires or needs to expand further because of population pressure or political ambitions of its chief or chiefs. Chiefdoms would form military alliances with one another, for any chiefdom that did not would be absorbed. Under some conditions, the alliances will be fragile and shifting, in which case no chiefdom will acquire the upper hand militarily and be able to expand to some geographical limit. Something like these fragile alliances seem to characterize Truk. But in Kosrae, one chiefdom succeeded in absorbing the others, instituting political integration at the island level.

We should like to know what conditions on Kosrae allowed conquest warfare to continue until one chiefdom had absorbed the others, when the same result did not occur on Truk. We also should like to know how the Kosraen nobility remained in control for several hundred years, until the mid-nineteenth century when depopulation and missionization eroded chiefly authority.

To briefly consider the first question, both Kosrae and Truk are high islands, but Truk is an archipelago. Although the Trukese lagoon posed no "barrier" to peaceful intercourse between the islands, it might well have hindered the ability of one island to conquer another in the lagoon, because would-be conquering war parties would have had to approach in canoes on the water, where they were relatively east to spot and defend against. In case of night attack, aboriginal settlements were located on the mountain slopes, away from the shore (Goodenough 1951). So political unification of the entire Truk lagoon would have been more difficult to achieve (and, probably, to sustain) than it was on Kosrae.

If this is accepted, I wish to call attention to the possible implications of the absence of interisland unification in Truk to the probabilities of one group achieving control over a single island. What makes Kosrae different from Truk is that conquered mini-chiefdoms in Kosrae would have had no place to flee, and thus no way to escape political absorption by stronger neighbors and integration into the social system in a subordinate capacity (following the argument of Carneiro 1970). In Truk, however, other, nearly equally inviting high islands were within easy sailing distance, and subclanmates on other islands were traditionally obliged to offer hospitality and ordinarily would not fight against one another (Goodenough 1951). Thus, losers in Truk had the option to escape, which was much less possible in Kosrae. Add to this the possibility that groups who fled one island to escape subordination there would reorganize with the help of clanmates elsewhere and later seek recovery of lands and retribution, as is recounted in a traditional tale (Goodenough 1951: 141, note 10). Together, these two factors tended to lower the probability that conquerors could fully subdue those they conquered. The warring "mini-chiefdom" stage persisted on Truk because no chiefdom was in a position to permanently incorporate and subordinate its neighbors. Losing groups had other choices as well as a chance to acquire allies on other islands for a reconquest.

To consider the second question—what forces allowed the Kosraen nobility to retain control for several hundred years?—the conflict approach suggests that we look for conditions that affected the *motivation* and *opportunity* for commoners to resist chiefly control successfully.

Motivation to resist chiefly exactions ought to depend partly on how onerous such exactions were to commoners. Kosrae is famous for its ease of subsistence, at least during the breadfruit season. As I have shown elsewhere (Peoples 1985) breadfruit, taro, and bananas, three main staples of aboriginal times, take remarkably little labor; yams, another important food, require somewhat more. Even if we accept the largest estimates for precontact population (around 7000—see Ritter 1978), density was still relatively low compared to low islands and most high islands. Unpredictable fluctuations in the availability of foods caused by typhoons were relatively rare. Seasonal fluctuations occurred in the supply of breadfuit, but these were predictable and planned for by breadfruit preservation, at least some of which was large-scale and organized by chiefs (Sarfert 1919–20). Unfortunately, it is impossible to quantify how long and hard Kosraen commoners had to work to support themselves plus provide subsistence and support for political intrigues among their chiefly overlords, who are said to have done no agricultural labor.

Chiefs took active measures to reduce commoners' motivations to oppose them, in the form of rewards and punishments. Documented rewards for commoner conformity and service to chiefs included: gaining the position of overseer (which carried certain privileges), entering chiefly service as a retainer, priest, or specialized craftsmen (which partially freed one from agricultural labor), earning shell money for extra services rendered, and acquiring the most prized foods. There presumably were other rewards that are less well documented. Chiefs organized the collection of breadfruit and other labor in-

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volved in breadfruit preservation, so they may have been able to withhold or grant breadfruit to commoners under their control. Chiefs had exclusive rights to all coconuts and kava produced in the districts under their control, and it seems likely that they granted or withheld these luxuries to commoners on the basis of the latter's behavior.

Other than chiefly rights to determine commoner access to land, specific sanctions a chief could have imposed on disloyal commoners are uncertain. But ethnohistoric and ethnographic sources agree that chiefs had great power over the lives of commoners, so many kinds of negative sanctions must have been available. Physical punishment and even execution are reported by nineteenth century observers.

Opportunity refers to the ability of disaffected commoners to organize opposition to chiefly control on a large enough scale to have a good probability of success. All else equal, such ability would be lower in a dispersed than in a concentrated settlement pattern. In the early historic period, most commoners lived dispersed on the mainland in settlements that averaged under 100 and rarely if ever exceeded 200. (This settlement pattern is also prevalant on Pohnpei and Truk.) One explanation for it is efficiency of exploitation: dispersal lowered travel times to gardens and reefs. However, another possibility for Kosrae is that chiefs commanded commoners under their control to live in certain areas, and it would have been to their political advantage to disperse settlements to help fragment potential opposition.

IMPLICATIONS FOR FUTURE RESEARCH

One question of eastern Micronesian ethnology and archaeology is the apparent anomaly of Truk's essentially two-level political hierarchy, in spite of the fact that it shares many ecological features of the four-level systems of Pohnpei and Kosrae. I suggest that we have been asking the wrong kinds of questions. The number of administrative levels is not due directly to the productivity of an island's land and sea resources, although this is certainly one influence. Rather, multilevel political structures evolved as a consequence of the geographic expansion of the power of some local groups led by chiefs. We need to ask what conditions—ecological, geographic, demographic, ideological—facilitated or allowed the expansion of chiefly powers on Kosrae, Pohnpei, and the southern Marshalls, and made such expansion more difficult on Truk. We need to consider the conflicts that would have resulted from political expansion and from chiefly exactions, and ask how the outcome of such conflicts would have been influenced by varying local conditions. Such questions are difficult but—regardless of the merits of my particular answers—new insights will be forthcoming if we try to answer them.

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