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## 9

## Warfare and State Formation: Wars Make States and States Make Wars

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### Introduction

Although "war made the state, and the state made war" (Tilly 1975:42), sometimes war has not made states and these nonstates nevertheless have continued making war. What I wish to do in this chapter is to examine the place of war in state formation and to ask why warfare and statehood invariably are linked, albeit in a necessary rather than a sufficient manner.

One caveat before I begin. Most of the following material comes from anthropological research on preindustrial states that are very different from industrialized societies. However, the place of warfare in state systems in general is not so easily chopped up. Here I follow Aron (1958) who sees more continuity than discontinuity among the different forms of the state and warfare. The problem is complex and important (see Melman 1974) but outside the scope of the present work; therefore I make the assumption of continuity, leaving the job of defending this position to a later date.

Recent reviewers of the topic tend to document or assert the point but fail to explain it. Service (1962) has argued that warfare, although

different at different levels of complexity, always has been present and intense. Otterbein (1968:283) has demonstrated that the frequency of warfare is not related differently to differing levels of sociopolitical complexity. Warfare may be carried out differently for many reasons by more and by less complex societies, but it is carried out everywhere. Nonstate societies do not exist in a noble and peacefully sublime state of nature. Indeed, the anthropological record shows we are warlike and always have been. As Otterbein (1973:945) notes, this counters earlier ideas that primitive warfare was somehow less intense, less lethal, or less ferocious. Along with the capacity to do more killing, the older position on warfare postulated that with greater complexity, societies tend to make war more often, wars involve more casualties, and more intersocietal disputes occur. More casualties do occur, but not more wars or intergroup conflicts. Wars are more terrible now not because we are more warlike, or because the deaths affect more of the population, but because we are more efficient. However, as Harris (1980:213) notes, only 17% of male deaths in Europe and the U.S.A. are due to battlefield deaths in the twentieth century, whereas an estimated 28% of adult male Murngin (northern Australia) deaths were the result of warfare.

Definitions are difficult but necessary. In what follows, war refers to publicly legitimized and organized offensive and/or defensive deadly violence between polities. Parts of polities may engage in violent and organized actions for reasons of vengeance, inherited feuds, communal hunts, and raiding for material, social, or prestige rewards. This action is warlike and people who do more of it than most are warlike people.

But warlike and war are different. Warlike refers to activity that involves the organized use of violence. Thus a communal hunt is a warlike activity. Men get together, often from several communities, to bear arms, organize, and carry out a strategy for killing game. That the hostilities are interspecific does not reduce the violence nor the warlike quality of the activity. In Buraland, northern Nigerian villages united for communal hunts, but this always excluded villages that had a history of armed attacks on one another. To put such people in one place organized into village groups and armed to the teeth would be asking for trouble.

War, on the other hand, is an aspect of public policy concerning interpolity violence. This means there is no mandatory means by which mediation between the disputants can or must be submitted to arbitration unless both decide to do so independently. War is thus intergroup violence for which there is no easy solution, outside of victory for one side and defeat for the other.

As far as state origins and warfare are concerned, theoretically the field is blessed with a number of theories, all of which find some support in the data. I have defined states elsewhere (Cohen 1978a,b) as centralized governments ruling over a citizenry with a central bureaucracy and peripheral subunits that are not necessarily replicas of the center. Unlike nonstates, there are active antifissionary institutions present that counteract the normal prestate breakup of polities. States break up but the process is not a normal predictable pattern. Primary and secondary states do not go through significantly different processes of state building; therefore, I use all states and their formation as a potential source for both data and generalizations (Cherry 1978; Cohen 1978b). In what follows, I review the theories briefly and critically and suggest some ideas for coping with the negative evidence.

### The General Notion

For centuries, social theory, aside from a just-so story of an original contractual agreement, has contained the notion that states arise through some form of interpolity violence. As justification for and a functional explanation of state power, the social contract may be a sensitive interpretation. As an historical or evolutionary influence or cause, it is a just-so story, except for a few constitution writers (e.g., the Founding Fathers) who perform their services after the state itself has formed. Like all functional "explanations," the social contract is not an a priori cause but an ex post facto effect and interpretation. The warfare-to-state notion is and always has been more empirical. From Ibn Khaldun to Machiavelli, to Spencer (1896), Gumpowicz (1899), Oppenheimer (1914), and more recent writers like Carneiro (1970), Naroll and Divale (1976), and Otterbein (1970), there are observations clearly linking warfare and the founding of state. Generally, these writers notice the same thing: polities get into some kind of trouble with one another and the conflict leads to violence. Out of this violence comes the state. Ergo, war makes the state.

At this point, theory moves in two directions. Either war is a necessary, but not sufficient, cause, or war is both necessary and sufficient. Most writers on state foundation accept the first position (e.g., Carneiro 1975; Cohen 1978a; Flannery 1972; Service 1962; Webster 1975; Wright 1978). In one way or another, all these writers note the ubiquity of interpolity conflict, whether the state emerges or not. Constants (warfare) do not account for variation (state emergence). In a previous pub-

lication, I have introduced evidence to qualify the generalization and suggested that depending on other conditions, warfare may help states to form where none previously existed, or it may impede state formation, or it follows as a result of state formation. I have spelled this out in other publications (Cohen 1978a, 1981) that I summarize below.

One writer (Alexander 1980), carrying on a sociobiological tradition, argues that warfare is both necessary and sufficient to account for state emergence. The argument is odd, instructive, and flawed. Alexander (1980) redefines warfare to include intergroup competition and aggression, a fairly predictable sociobiological approach, and then adds increased group size, population growth, and "the maintenance of balances of power" to his definition, that is, the attempt to maintain peace and order between polities, or what others call interpolity relations. By including in the notion of intergroup aggressiveness (or warfare) all possible relations between polities, plus all demographic factors contributing to population increases that can be traced to aggressiveness, Alexander claims he has reduced the founding of states to a single ultimate cause: everything and anything related to hostile relations between them, or all possible reactions to interpolity hostility that keep peace and add to group size. Alexander (1980:232) dismisses intrapolity causation discussed by Flannery (1972) because this would, he says, utilize proximate causation (internal factors) to explain ultimate factors (the state).

Unquestionably, warfare is a correlate of state formation, and unquestionably particular reactions and conditions of nonstates in such conflicts produce statehood, as compared to other conditions and reactions among nonstates that do not produce statehood. Alexander resolves the problem by redefining warfare to include all possible conditions and correlates that lead to statehood. In other words, interpolity hostility leading to reactions (balance of power) that create states is the cause of statehood. Although this says nothing about what is and what is not a "balance of power reaction" (presumably including any and all correlates of hostility that lead to statehood), it is actually a restatement of older arguments that warfare plus something else, leads to statehood, but that warfare alone cannot account for the evolution of centralized governmental institutions. *Plus ça change . . .*

Alexander (1980:232) dismisses intrapolity causation because this would, he says, utilize proximate causation (internal factors) to explain ultimate ones (the emergence of the state). Other sociobiologists do not accept this narrow constraint on explanation (William Irons, personal communication, 1981). As we shall see, a more systemic view, in which each change within and outside the polity in an evolutionary

progression becomes itself both a causal force and a constraint on further developments, is a far more sophisticated and fine-tuned approach to social evolution.

In the following, I discuss two questions that are still paramount in our attempt to understand warfare and statehood: (1) Why and under what conditions does warfare give rise to states? (2) What effects does warfare have on state formation once the state emerges from a nonstate background? To answer these questions, I look at a series of factors whose varying conditions contribute to an understanding of both questions. As I have noted already (Cohen 1978b:49), statehood is related to the basic proposition that most polities compete for valued resources. Conditioning this conflict and competition is a series of internal and environmental factors, each of which constrains and directs further developments.

### Competition for Scarce Resources

The greater the competition for scarce resources (CSR), the greater the potential for and the probability of disputes; the greater the number of disputes, the higher the likelihood of warfare in any particular region. Most writers concentrate arguments about this generalization on material life-sustaining resources, either flora, fauna, land, labor, geographical location, or mineral resources. Pressure on any of these lead to disputes. Such data are still easily recordable. Thus Deborah Mack (personal communication, 1981) notes that as late as 1980, the greatest single reason for disputes between Beni Amer groups of the Sudan was the illegitimate use of land, animals, or trees by nonowners. Like all other living things, humans expand their numbers as they reproduce themselves, and as my Kanuri informants explained when rationalizing many crimes against property, "hunger pushes them" to take what they need—sometimes by force.

A breakthrough for the state formation issue was provided by Carneiro's (1970) circumscription notion, which proposed a necessary condition, namely, the inability of a population to expand spatially. When present, circumscription explains why CSR leads ultimately to statehood; when absent (even with CSR), it explains why states do not evolve. In effect, CSR plus circumscription allows population pressure to increase so that greater numbers must utilize the same resources in the same space. The result is greater organizational complexity as part

of an entire process of intensification that stimulates more productive economic activity and more efficient technology.

So far in my own research, two major trajectories have emerged in which this causal sequence operates to create states where none previously existed (Cohen 1976, 1978b, 1981; Salzman 1978). In one, pastoral nomads compete with sedentary agriculturalists, who own the land, for pasturage and/or water access. Increased numbers of pastoralists occasioned by immigration (due in turn to nomad population expansion and/or drought conditions elsewhere) bring on increased conflicts between nomads and agriculturalists. The superior mobilization capability of the nomads associated with ramifying kinship linkages produced unequal sides in the resulting warfare. Subsequently, the leaders of the nomads settle in an emergent citadel-capital as conquerors of an ethnically stratified state in which the victors rule under a leader who founds a dynasty.<sup>1</sup>

In the other trajectory, a nonstate group of sedentary agriculturalists is faced with continuous incursions for booty, slaves, and tributes from powerful neighbors, the most common of which is a nearby centralized state. In response, independent groups within the weaker society migrate to safer ground, set up alliances with the more powerful group leading to ultimate incorporation and assimilation, or—and this is crucial—they develop an effective defensive reaction. The latter variant leads to statehood. The group drastically reduces fissioning as a form of dispute settlement and/or as a means of maintaining access to farm plots within convenient distances to dwelling units. A walled or otherwise protected site develops and a significantly larger population lives in a more compacted settlement. Dispute settlement by local leaders increases in frequency, as does the coordinating and management functions of the leadership. They become a full time group of managers and decision makers under a leader whose previous supernatural features are magnified as he becomes a monarch rather than just a village chief. In effect warfare (resulting from CSR) plus circumscription produces statehood: “war makes states.” But not always.

Under conditions of circumscription and CSR and predation a population can live a highly warlike existence with little or no need for centralized government. Elsewhere (Cohen 1981) I have described such a situation among the Chibbok of northeastern Nigeria. This group, dwelling south of the Kanuri, was made up of runaways and exiles from surrounding ethnic groups driven into a hilly refuge by their own antisocial behavior, or that of their forbears. Many who came had been accused of theft, kidnapping for ransom, or sorcery in their place of origin. Some left because they were frightened of witchcraft or sorcery

activity in their previous homes, a few because of inheritance problems and land shortages, and others because of problems with local leaders. Often, several of these motives were mixed together and it was difficult to disentangle them. The local language is a variant of Bura, their immediate neighbor to the west, but includes many Kanuri terms from directly north as well as terms from groups to the south and east. This area is a hilly basaltic region with a number of natural springs and shallow wells, so that if food caches are put aside, the inhabitants can withstand long sieges. According to local accounts, this was done regularly throughout the nineteenth century. Even the British conquest of northeastern Nigeria required more time and extra effort in Chibbok until the British were able to find and control the major water sources in the hills.

Chibbok population density was higher than surrounding nonstate people (Cohen 1981). The data I have reconstructed put its density at a higher figure than that of the local state systems, although social organization was roughly similar, with a few significant exceptions. Patrilineal, patrilineal dispersed wards and compound areas ran in long strips up and down the hillsides, giving each settlement access to high ground so that each group could hide water and food if necessary. Compounds had at least two entrances, so that people could leave quickly if attacked. It also was explained that a member was generally sent out by a back entrance to scout and spy on any group approaching the compound. Trespassing on anyone else's farm plots or compound areas could be retaliated against by deadly force, with none of the customary vengeance taken by the trespassers' patrilineage. As long as the owners could show or convince the injured party and his or her group that the victim had not properly warned them of his approach, the victim's injury was considered to have been inflicted legitimately. Whether such distinctions were so clear in actual practice is not known.

Besides farming, Chibbok were caravan raiders. A major trade route from Borno southwards toward the Benue River valley and Yola (after 1850) as well as an east-west route ran close by their homeland. It was considered normal to raise a raiding party and plunder caravans, taking prisoners as slaves or for ransom.

In general, Chibbok people were not welcome as immigrants elsewhere. Their reputation as plunderers went before them. The hilly region of Chibbok and the lower areas around the hills were, however, sufficient for normal community fissioning to occur. Thus, at the end of the nineteenth century, the area was circumscribed, but fissioning could and did occur. What would have happened over the long run is

impossible to say. Either fissioning groups would have assimilated slowly into surrounding ethnic groups, or the area would have been conquered and pacified by one of the states in the region, or pressures within would have created a piratical, predatory Chibbok state, or, more likely, all these variants would have resulted. As it was, at the end of the nineteenth century, Chibbok was a set of villages devoted to violent raiding patterns, and a highly circumscribed locale had not led to statehood. Possibly population pressure was still below a threshold required for circumscription to become a selective factor. But it was higher than local state societies. Therefore, we can argue that warfare, including offensive raiding and defensive capabilities, along with circumscription, did not lead to statehood during the time this society flourished as a predator community among states in the region as a whole.

Chibbok seems atypical compared with its neighbors, all of whom to the east and west were responding defensively to Borno expansion by developing small statelets. Yet, it seems only reasonable to assume that throughout the evolution of society, small bands of runaways or people in remote areas around the world could and did set up circumscribed bandit societies that preyed on neighboring peoples and local trade routes. Under these conditions, they were able to survive handily through organized violence that did not lead necessarily, or in any easily observed fashion, to more complex organization.

Can warfare occur and develop with low levels of CSR? Even if we cede only partial validity to Koch's (1974) research, the answer has to be yes. Under the right conditions—lack of third-party mediation and solidary male groupings—intercommunity conflicts among autonomous communities leads to warfare as a customary activity. Although Koch's arguments are not fully convincing because territorial expansion is recorded among a number of New Guinea groups after victorious warfare, clearly much warfare did not lead to land acquisition. Thus, we must give some weight to the notion that third-party mediation is an important variable in the evolution of warfare. Where solidary male groups, generally based on descent relationships, have no institutionalized means of stopping a fight, settling disputes, or authority to enter as peacemakers, fighting between groups *ipso facto* must be more intensive, more frequent, and therefore more customary than where this is not the case. No state need result unless and until real shortages and circumscription impinge on the situation. Conversely, at the pre-state level, settlement patterns that produce cross-cutting ties suppress intercommunity violence (cf. Colson 1953; Murphy 1957; and the large body of literature on the American Southwest).

If warfare is an essential (but not sufficient) element in statehood foundation and third-party mediation cuts it back or controls it, why do we see more centralization develop where there is less uncontrolled warfare? The answer can be seen in the great variety of cases in West Africa in which third-party mediation is the consistent seedbed of statehood. In general, the prestate systems are composed of owners-of-the-place (those who first settled) and later arrivals (Cohen 1976; Horton 1971). Although these communities have very few status distinctions besides sex, age, and occupation, owners claim rights to the settlement headship. Sometimes they own rights to the local priesthood, or it is given to a later-arriving descent group. The important point is that leaders act as dispute settlers. In many areas, either the local settlement shrine or an independent oracle shrine also settle disputes. Each of these is a growing point for further elaboration, coordination, and control.

In summary, warfare by itself cannot make states. Control and the coordination of warfare, and defense and the capacity to settle disputes, are the more essential core features. In the American Southwest, where antiviolen cultural values emerged as part of the cross-cutting system of intercommunity relations, when centralization did begin to emerge (e.g., Anasazi or Dolores) it seems to have been from a defensive circumscription and resulting coordination of disputes-settlement within larger, denser population per community (R. Vierra: personal communication, 1980). This mirrors the African cases, suggesting that the process is a general evolutionary one.

It should be noticed that this discussion sidesteps the much-discussed protein hypothesis (see Harris 1980:219–222). My position on this controversy is systemic and inductive, which leads to a different point of view. I assume that conflicts between interacting polities increase with the power differences between them. In other words, as time goes on, scarcities in needs-gratifications (that which power is always directed towards) produce conflicts between groups. The greater the difference in the capacity to win, the greater the tendency for actual fights to occur. The source of conflict can be at the infrastructural, structural and/or the superstructural level. Whatever the source of conflict, these initiating events, if repeated, develop into patterns of intergroup conflict in a particular locale. Scarcity is a ubiquitous and variable condition at all levels of experience—prestige (superstructural), women (structural), or food-producing resources (infrastructural)—and therefore conflicts can be introduced from any level. Once such conflict is expressed in organized intergroup violence over any length of time, it becomes a pattern of local warfare. This activity then

produces its own rationale, values, and rewards in terms of prestige, booty, and access to leadership.

### The Origins of the Military

Warfare conditioned the rise of states where none existed previously. What about its consequences as an aspect of state policy? Political scientists are involved deeply in the causes of war; anthropologists mirror this interest, although they also look at effects—up to a point. That point seems to be the state itself. What warfare does to the centralized polity in the short and long term seems to have received less attention all around. Up to the time when states emerge warfare does not, it seems to me, result in large risks to human survival. After states are formed, although casualties are not higher proportionately, warfare starts humankind down the road towards the potentiality for species extinction, and towards enormous claims on resources. Even more importantly, warfare becomes an important influence on societal organization. Up to statehood, warfare is an expression of intergroup hostility resulting from CSR, general scarcity, and lack of third-party dispute mediation. Its form, its extent, and its outcomes are a function of the social organization, ecology, and symbolic values attached to publicly organized violence. After statehood, warfare is a “reasonable” alternative for the achievement of governmental ends, and warfare itself as a viable option starts to determine how state and society can be organized. War helps to make states, states make war, and therefore states are in part, and always must be, war machines.

The first question to ask about state warfare is another origins query. Out of what does the military develop? Where does it originate in the body politic? One writer suggests that this is the essential question in defining the nature of a state: “A key to the understanding of the level of development of a society is the social composition of its military . . . No state appears without the appearance of a state military along side it; the type-state can be fairly well-defined by the type of its military” (Rosenfeld 1965:252). Although Rosenfeld’s (1965) argument is valid at very early periods of state formation, it is less true as time goes on. Once statehood appears, it tends to constrain internal variation. Even though the social origins of its military may be quite different to start with, similar organizational requirements produce tendencies towards similar outcomes no matter how different such social forms are at the beginning.

Let me illustrate this point from field data. In northeastern Nigeria, a force of armed men could be enlisted in prestate societies for communal and intercommunal hunting, for vengeance and other forms of raiding, or for intercommunal warfare involving increased competition for resources. In all these instances, armed men could be organized with deadly weapons under a leadership that was given sufficient authority to carry out the task at hand.

The recruitment of such armed forces was based entirely on membership in a local settlement (or part of it, a ward), on descent, and on ethnicity (a form of descent). Hunting groups were organized under well-known hunt leaders who could adjudicate disputes over the ownership of a kill and who officiated (in the first instance) should anyone be injured. They also coordinated efforts and made sure that the entire hunt area was covered so that all game would be driven to the kill. In northern Buraland (Cohen 1976, 1977) after state formation, the hunt leaders became warleaders, their hunting horns for calling the hunt elongated and were made of brass instead of cow horn, and they were titled members of a royal court. Significantly, one village in the kingdom, that of the Queen Mother, whose followers represented the royal segment that lost out in a royal succession, were not allowed to have annual hunts. Thus, the group that was most likely to rebel was given a female monarch as part of the overall monarchy, but its men could not bear arms regularly under a local hunt leader. Informants explained this by saying that it was a woman’s place and therefore needed no hunts. It was also the only village in the kingdom without a defensive wall. This was explained as unnecessary, because they could come to the king’s village for protection. Again, the opposition was left defenseless, without a right to organize an annual armed force. Instead of fissioning off as an independent village (as was done in the prestate period) they were called the Queen’s town, under a female (subordinate and complementary) monarch who was a close relative of the defeated (and disorganized) segment of the royal lineage (Cohen 1977). Thus, hunting groups can evolve into a military organization that can either be developed or suppressed or both, depending on the benefits of such policies for the maintenance of state power.

Raiding and vengeance in this area, as elsewhere in Africa, was a kinship matter for nonstate communities. Grievances incurred (or inherited) lead to seesaw raids whose injury and kill scores were kept and passed down the generations. Peace could be negotiated, and/or those most involved could move away, leaving a peace-seeking group behind. Among the Bura, wife stealing, which was more often a prearranged elopement faked to look like an armed capture, could lead to

retaliation unless prescribed compensation was paid to the aggrieved husband and his patrilineage. Sometimes, people alone in the bush were spotted and picked up by armed men from another village and held for ransom, sold as slaves, or turned into pawn-slaves until redeemed.

In Borno, and to a lesser extent in the smaller states, royal family members or courtiers (who were heads of major subgroups who originally received hereditary titles) and royal slaves could raid, with royal permission, recalcitrant or rebellious towns, or towns over the borders of the state. They could take booty, supposedly up to certain proportions of local productivity within the state, and as much as they liked outside the borders. Raiding between villages within the state was discouraged and could be punished from the center. The older form of vengeance and raiding was discouraged, even though it never died out completely. The notion of raiding shifted to the central government as a source of revenue and punishments for peripheral areas, as well as a means of continual expansion. Those carrying out such state policies could enrich themselves, with a proper share always going to the royal treasury. In one of the small kingdoms (Pabir), the capture and ransom of nobles or members of their family was practiced by embittered rebels up to the early twentieth century.

Raiding and vengeance parties as local affairs were suppressed by state formation. But the institution of raiding itself was kept and adopted by central government as a means of using force to subdue rebellious elements and to produce a constant tendency for a rewarding militarized expansionism. In effect, the monarch utilized a raiding party not to settle a score, as was the case in prestate society, but to enforce or expand an obligatory subordination. To do so, the king gave the right of punishment to a junior royal, or to an allied group whose leader was a titled member of the royal council, that is, the court. Raiding and vengeance became a means of enforcing state power.

Finally, intercommunal warfare, although not common, did occur at prestate levels. In my field data on prestate Bura, whole villages rarely attacked others, although it did occur. More often, dispersed segments, wards, or subwards based on descent and/or allied descent groups would mount or receive an attack, again for vengeance or some other reason. Whole villages were more often in danger from raids by large armed bands from state-level societies looking for booty, slaves, and new tributaries.

At prestate levels of organization in northern Nigeria, the most common form of intercommunity warfare was interethnic between nomadic or seminomadic peoples and sedentary agriculturalists during

periods of drought. In the Lake Chad area, competition between immigrants and some of the earlier settlers drove the autochthonous peoples onto natural and man-made islands. The lake dwellers sent raiding parties from these islands to add to their stores, while using the lake itself for fish and as a natural productive moat against those who had taken their land.

The most widely commented-upon form is that of nomadic or ex-nomadic farmlands. Balances can be achieved, and up to a point shortages can be accommodated by sedentarizing nomads (Salzman 1978). But at some point, costs go up, nomads feel exploited and they aggregate, using segmentary kinship and often religion to mobilize large numbers of warriors who then conquer an area (cf. Cohen 1978c). Once the state forms, heads or representatives of localized and nomadic ethnic groups are made titled officers of the state.

This takes a number of forms. In small states just coming into existence, like that of Pabir, the king gives royal cattle to Fulani nomadic groups in the area, just like any household head or local leader of the prestate society. The nomads use the milk and eat the meat of any that are killed. But the loaned herd and its increase belong to the Fulani host-consigner. However, the King of Pabir could count on his consigner not to attack or molest the kingdom and its people, and to aid him militarily if called on to do so, at least against Kanuri raiders (but not Fulani ones, i.e., coethnics). Interethnic economic relations thus define and legitimize concomitant military obligations and a mutual nonaggression pact.

To the south of Pabir on the Benue, Fombina-Yola was founded in the early to midnineteenth century. The Fulani mobilized under a religious leader, Adamu, and conquered the surrounding region under the banner of a jihad linked to the earlier jihad of Sokoto. However, once the wars proved successful, clans and major segments retrenched, seeking their more usual peace-time independence. Adamu had then to reconquer his own supporters, or threaten them with force. They then joined the emerging kingdom, and descent-based segments of the ethnic group were represented by individual leaders of each segment.

Further north in Borno, with its many constituent groups, nomadic groups were represented by ethnic or subethnic clan leaders whose court title, *Shettima* (plus the name of group) *be* meant they were leaders "of" (*be*) "the such and such" (e.g., *Shettima Suqurtibe*, or leader of the *Suqurti*, a major clan-segment of the Kanembu). When military levies were set, such nomad groups raised an armed band of warriors, often horsed, who fought in the royal army as a unit under their own *Shettima*.



At prestate levels in this region, ethnic relations generally were defined economically and often were hostile. Productive specialization by ethnic groups was common, although not ubiquitous. This made trade mutually beneficial and distributed goods widely among and through interlocked weekly markets. Inter-marriage between such groups was low—it still is—and open hostility, as well as ethnic stereotypes about each other were—and are—common. The gap was bridged when necessary in market places and through person-to-person links using fictive kinship or joking relations or a combination of both.

The state, on the other hand, used ethnicity and subethnic descent groups as a basis for recruitment and organization into the military. In return, such groups were left alone and allowed access to pasturage and water, and were granted a right to settle on free or unused land if they wished. Cohen and Brenner (in press) describe how Kanembu and Shuwa nomads traded access to new areas for pasturage and settlement in return for military aid to the embattled Borno kingdom at the beginning of the nineteenth century. Significantly, the kingdom was endangered by uprisings of Fulani nomads who felt exploited and deprived by local authorities of the state. Thus, threatened by one group of nomads to the west (Fulani) they were offered aid by others from the northeast and southeast (Kanembu and Shuwa) under the leadership of a holy man who opposed the *jihadi* rationale used by the Fulani to legitimize their insurrection. In this instance, the kingdom refurbished and strengthened its military power by adding nomadic groups to its citizenry and giving them access to much-needed pasturage and water.

Interethnic relations in prestates were often interpersonal or interlineage in scale. This developed into alliances in poststate development, in which ethnic groups as larger units offered military aid to the state. But this was always a two-edged sword because such groups were unified armed polities who also could overthrow states, founding a new one in the ashes of their vanquished hosts.

In sum, prestate deadly violence serves as a means from which the state, once it emerges, develops different types of early military forces. But does this make for a different kind of state for each source of military aid, as Rosenfeld (1965) suggests?

In the prestate systems armed men from different communities could and did on occasion come together for defensive and offensive warfare. Kinship links across communities, common use of religious shrines, markets, and traditional hunts that brought armed men from an entire cluster of local autonomous villages served as precedent. Thus, in Buraland, which was made up of autonomous small polities, the British found that armed parties of several hundred warriors represent-

ing a number of villages often aggregated to confront them at the time of the colonial conquest (Mbaya 1972:45–50).

In north Buraland, the small Pabir state centered eventually at the town of Biu (formed possibly in the seventeenth or eighteenth century) still was developing when first contacted by the British. Military technology and organization were of central importance to the founding of the state and to its expansion. Pabir villages developed protective high walls against Kanuri raiders from the north. Scouts were placed on hilltops during the dry season. When the alarm went out from a deep, large drum in the royal compound, people gathered behind the town walls to meet the attack. As time went on, a more clear-cut upper class adopted the cavalry technology of warfare practiced by earlier states in the region. This allowed them the capacity to attack foot soldiers with devastating results and it emphasized the emergent class structure.

Secondly, after the entry into the area of a conquering Fulani group from the west in the midnineteenth century, the town of Biu began to serve as a dominant coordinating center for all the northern villages threatened by surrounding kingdoms. Peripheral town heads came to be called *Thlerima* (subordinate chief) under a *Kuthli* (central monarch) at Biu. The monarch thenceforth could call on *Thlerima* to send soldiers for a central army defense or offense—primarily the former. Concomitantly, older forms of reciprocal gift-giving between town heads shifted significantly. Instead of reciprocal gift exchanges between leaders that represented products of a chief's own area, lower-level town heads sent foodstuffs and craft goods to the capital and the king sent horses, arms, and luxury clothing to the peripheral villages.

Further north, the older, larger, and more powerful Kanuri state of Borno had annual military levies in which peripheral towns were ordered to supply soldiers for almost continual military campaigns. Place and date for joining with the army were set beforehand and every settlement, every nomad group, had to supply men and weapons. Unmarried and divorced women in all Borno villages were organized under a head-woman to supply food to an army on the move. The army men themselves sometimes brought female slaves to help. Such armies reached into the tens of thousands by report, although 5000–10,000 probably was much more common. Still, for an army of this size to attack a small village of only a few thousand people, more likely several hundreds, was terrifying. Detailed memories of such raids are still a vivid part of local traditions in northeastern Nigeria. Battles between equally well-organized early states often were decided in a single battle. Size of army, morale, and degree of surprise tactics were often



decisive, and morale could be heightened by the presumed or demonstrated aid of supernatural powers claimed as aids by each side.

In all these features, any and all means of organizing deadly violence delivered by groups of men to animals or other humans either offensively or defensively utilized a set of sociocultural resources. As the scale of violence increased, political communities used whatever resources they had to forge the armed forces of an emergent state. But the outcome is the same, or rapidly becomes so. Pabir armies started without cavalry. Attacked by forces with cavalry, by states whose upper classes rode on horses, they too obtained horses. And they too used them in war. The Muslim emirates had used firearms since the seventeenth century. The new states to the south of them did not use such weapons, but it would have been only a matter of time before they acquired them, had colonial conquest not interfered.

### The Military as Determinant

Although older theories (e.g., Spencer 1896) do not stand up to the complexity of state formation now on record, those notions are more applicable once the state comes into being. Early states were fragile. Center-periphery relations were in constant danger of atrophying, communications were difficult, and large bodies of troops could not be transported easily or quickly from one corner of a kingdom to another to put down rebellion or expel invaders. Under such conditions the survival of an early state, or a particular regime within it, cannot be separated from its warmaking capability.

Once the early state forms, the relationship between state organization and the military goes through two major structural phases involving an increase in differentiation.<sup>2</sup> At first, as with the prestate systems, the military is embedded in the formal organization of the polity. As the state develops, continuous dependence on military capacity ultimately produces a differentiated armed force linked to the ruling regime as an arm of government.

As we have seen, at the earliest phases of state building, prestate forms of organized violence are utilized to create military capability for an emerging centralized government. Once the state emerges, however, Rosenfeld's (1965) thesis is less predictive. The early state must link a series of local settlements and/or nomadic peoples into a centralized political order. As I have pointed out elsewhere (Cohen and Brenner, in press), linkages vary with the historical relations between center and

periphery; except for recently conquered or specially exempted groups, every locality, every unit in a polity must supply some form of military aid to those above them in the system.

Among recently conquered groups, those who succeeded in taking control are in effect new rulers and must rely on their own military capability. Over time, they are joined by locals and immigrants, and the several populations begin to fuse so that a more typical early state structure of center-periphery relations emerges. Fombina (Cohen 1978c), Baluchistan (Salzman 1978), and early post-Norman England are examples of such systems. Special exemptions from central government exactions were practiced in Borno towards communities of holy men, or settlements that suffered economic and social disasters. Their lives and property were declared *haram* (to be like the pig, i.e., taboo) and therefore safe from exaction by the authorities under pain of supernatural sanction. Although renegotiated or abrogated from time to time, such royal exemptions, often written in documents, became part of the patrimony of descent groups. In several cases, towns on the borders facing desert raiders were granted such decrees to keep a defensive force at the perimeter of the state.

The degree to which military organization determined state structure is first and foremost a function of the state structure itself. This varies primarily in terms of how unified or dispersed the peripheral segments were in relation to the central government. In the case of compacted or unified holdings—the typical European model—military and political power was a function of the size of territory and population under the control of a lord. If we add local residence in a fortified castle and patrimonial control of the holdings within the descent group of the lord, then each peripheral segment of an early European feudal polity was a potential rebel or rival of the central government. Classic feudalism was thus a weakened centralized state. As time went on it either broke up or a strong central government emerged that could dominate the peripheries. To unify, consolidate, and give independent military capability to the peripheral parts on which the center depends is to create a weak centralized state. To counteract such centrifugal forces central governments could and did move the capital from place to place among the nobles, bring the nobles to a central court, develop concepts of divine kingship and/or ethnic loyalty, play the nobles off against each other, and maintain a strong military force at the center. The divided and solidary segments, each with its own military force, meant that ultimately a central government army loyal to no one but the king was one of the few lasting solutions available. In Europe it made early states unstable and dynamic.

In the case of dispersed holdings—the Sudanic model—peripheral holdings included widely dispersed settlements and nomadic groups. Nobles and nomad representatives resided in the capital and administered their holdings through subordinates and local chiefs. Each noble might have a small group of armed followers, but armies were raised by levies on the fiefs. The administration had to be strong enough to enforce the levies or else state power within and beyond the state quickly atrophied. Weak control over any one segment meant that it might chance a rejection of center demands or link up with an ambitious rival of the center hoping for protection when and if a punitive sanction was imposed. Each particular segment was, however, weak and small compared to the center, and even weaker if an army from many other segments was raised to squelch its rebelliousness. This structure then contributed to a dominant center and a stable system. African states were more stable militarily and less dynamic than their European contemporaries.

Military power is in this sense not so much a determinant of the state as a function of its structural (center-periphery) arrangements. On the other hand, administrative control over the social and economic life of society at large is interpreted or theorized to be associated with warfare. In nineteenth-century northern Nigeria, warfare was the major means by which political control by the center was maintained over the peripheries of the early state. Large numbers of men had to be organized into fighting forces that were very frequently utilized. This meant a constant demand for military equipment, which led in turn to virtual state control over a number of crafts, at least in the capital city. The existence of the army and its needs in weaponry and manpower served as a constant stimulus for greater coordination and control by the central government over relevant requisites and functions of the society. (Smaldone 1970:184). This same author (Smaldone 1970:185–187) goes on to show that during the dry season when crops were not grown, levies of men were raised for *corvée* labor on walls after damage by the rains. They also were conscripted for military duty while noncombatants produced war-related materials. Through craft leaders (often titled), emirs (monarchs) ordered large quantities of supplies for war campaigns, such as saddles, shields, swords and sheaths, arrow quivers and horse trappings, tents, flintlocks and shot, spears, arrows, and chain armor, as well as provisions. The monarch controlled production, ordered war materials, and had to pay for such things from the state treasury. Nadel (1942:294) noted the same thing for nearby Nupe, in which craftsmen, especially those in the capital, are in effect the king's craftsmen, controlled by an official royal agent and the head of

the craft for purposes of producing war materials and luxury goods for the monarch and his court. In Bornu, I was told that in the new small Pabir state of Biu, special emphasis on craft relations to the throne, especially iron smiths, was beginning but not as well developed as that of nearby Muslim emirates.

But this is only one effect of the multiplying and ramifying chain reactions that war produces for state societies. No state history is without some warfare activity as centrally organized action. In the western Sudan (Hausa–Fulani, Kanuri–Bornu), warfare was generally an annual event. Armies in the thousands are described as early as the early seventeenth century (Ibn Fartua 1926), as well specialized military tactics and differentiated ranks, types of attack forces, reserve forces, armaments, and so on.

The early states responded first and foremost with fortified towns. Walls often with parapets, platforms for shooting down at the enemy, and single or double moats, all were needed, invented, diffused, and adapted to local conditions wherever the early state emerged. This enhanced the managerial and coordinating capabilities of the emerging leadership. It automatically compacted a larger population into a smaller space, producing new problems in dispute settlements, the need for greater productivity and trade, and a capacity to control the surrounding countryside or to threaten rival towns who also were stimulated to cluster and aggregate their own population behind fortifications. In other words, the warfare capability of the early states helped spread statehood itself to surrounding nonstate societies who were either absorbed, ran away, or built their own fortifications in response.

Just as warmaking requires men and equipment and leads to some control over craft production, it also serves to create cross-cutting allegiances among the various classes, ethnic groups, and settlements whose inhabitants must provide the manpower. As early states expand, the army becomes an integrative mechanism into which diverse elements are recruited to serve the overall and unifying policies of the state. Combat units within such armies could and often did reflect local and ethnic differences. Thus, Sudanic armies were organized into camp units that reflected their territorial and ethnic divisions (Meek 1925/II:119); although armies were organized into larger units, these subunits were significant.

Smaldone (1970:208–210) notes that military service and the results of war served to unite disparate groups into one state-coordinated organization in which the army and the craft organizations incorporated ethnic minorities whose usefulness to the state ensured a welcome that helped overcome interethnic hostility and stratification. The basic

rewards were booty and the fulfillment of politicoreligious obligations. Loyalty to leaders and the state, or its warfare objectives, was central to proper moral behavior and the injunction and support of religion. In the Sudan, governments went to great lengths to justify war as a jihad even when they were waged against neighboring Islamic states (Palmer 1936:258–267). Monarchs issued orders describing military duty in clear terms: “all men are to go to war . . . when I give the order to fight, all must fight . . . There must be no excuse for this one or that one remaining behind in his compound. All are to obey these orders; all must dash forward to attack those making war on me” (cited in Smaldone 1970:174). In the early state whatever else one is, one is a citizen; this privilege, this new-found security, means one has the obligation to fight in war when government deems it necessary. But the costs are accompanied by benefits.<sup>3</sup> As one nineteenth-century Nigerian poet succinctly noted (Abdullah 1961:95), in war

He who dies goes to Paradise,  
He who comes back enjoys the booty.

Goody (1971:39–56) has demonstrated that the most impressive differences between state and nonstate lie not so much in the means of production as in the means of destruction. The point is well taken. Once the state form of organization emerges, warfare becomes an integrative and essential aspect of central government activity. Once this occurs, military technology, strategy, and supply become a matter for concern and specialized attention. Comparing the military of a Sudanic state to that of one of its nonstate neighbors in terms of manpower and weapons is instructive (Table 9.1). No wonder older Bura recall to this day attacks from Borno over 80 years ago with horror and a deep sense of grievance from stories told by parents and grandparents!

Given all the above forces, the military itself, especially its leadership, becomes an expanding political and cultural influence in the

TABLE 9.1

State and Nonstate Armies Compared

| Nonstate (Bura)  | State (Borno)   |
|--|---|
| The adult men of one to three villages (50–200)                                  | An army of 500–1000, up to 10,000+  |
| Spears, poison arrows, hidden pits, beehives, shields, scouts, no reserve forces | Cavalry, bowmen, musketeers, spear-men, armored horses and men, siege and attack strategies, reserves |

state. The horse as an item of war technology proved successful and became as well a symbol of status (Goody 1971:57ff) and military skill, and military experience became a criterion for recruitment to high political office. In northern Nigeria military prowess was an important criterion for recruitment to high office. Office holders were expected to demonstrate this proficiency continuously by waging war—the more frequently and more successfully, the better (Smaldone 1970:190–191).

Militarism and statehood therefore are bound together like warp and woof. Nevertheless, it is clear that the degree of enthusiasm for war varied in the early state. At the high point, there was fanatic, even suicidal zeal in which men have been observed leaping enthusiastically into certain death. In other instances, or at the same time, there are problems of low morale and desertions associated with long, hard campaigns (Ibn Fartua 1926). And in still others, observers have noted armies confronting one another from early states in which soldiers from the weaker side joined the stronger force the night before battle—the hope of booty was more rewarding than the promise of Paradise (Wingate 1891:321).

The enthusiasm for war also varied among governments over time. In early states, warfare was associated with early periods of state inception; then it slowed down as each successive ruler of that particular dynastic regime took the throne. In Sokoto, the second ruler, Bello, averaged 2.3 military campaigns per year (1817–1837), whereas the last two rulers before colonial conquest (1881–1902) averaged 0.4 annually (Smaldone 1970:223). The slowdown was progressive throughout the century.

To explain this, I theorize that early state warfare weakens in intensity through time and it becomes progressively more difficult to enlist annual military levies as part of administration. People send slaves or bribe officials, and local autonomy of peripheral communities develops as they increase in power and size. Whatever the means, the capacity of the regime to enlist enthusiastic armies declines. But the need for expansionist war, defense, and large-scale military capability remains. Under such circumstances, the pressure from central government officials, external enemies, and internal rebelliousness, the central authority must begin to move towards the establishment of a differentiated military organization—a standing army—or else decline.

As long as regimes remain in power, usually as dynasties of royal and associated noble lineages, then the declining pattern of military campaigns discovered by Smaldone (1970:223) has a tendency to appear. Indeed, this is far from a new idea. Ibn Khaldun's fourteenth century theory of history suggested that early states tend to lose their

vitality over time as the ruling class became urbanized and prone to luxury. In my own work, the peripheries never are subdued or incorporated fully; tributary states are always ready to assert autonomy or protection from a rival great power, and mobilization of the militia can become increasingly difficult as nobles prefer court to the battlefield. This can be countered ideologically and culturally by making war glorious and warriors into heroes. Nevertheless, *ceteris paribus*, early state regimes decrease militarism over time. Where this is not so, internal peripheries and/or rising neighbor states threaten the state to such a degree that it must either maintain military activity or decline, possibly to the point of extinction.

If the early state survives as an entity, a second phase of military organization evolves to counter the decline of mobilization capacity and problems of state power. This second phase is that of a standing army, in which central government includes a military force directly responsible to and organized by the center. This counteracts the ubiquitous rivalries among sections of the state and strengthens the center's capacity to act independently of the state hierarchy. Vansina (1979) has traced this development in central Africa, and Roberts (1974) describes in detail how Shaka centralized Zulu appointments and changed local rituals into annual war ceremonies. These were practiced by the army at his capital, so that his control over the army went hand in hand with increased center control in general. Roberts (1974) has described a similar set of developments among the policies of Shaka in his attempt to exert control over the army, the royal council, and appointments to district chiefships. In Borno at the beginning of the nineteenth century the founder of the second dynasty created a semiseparate standing army under an old title in which slave military leaders, each with standing armed followers, could protect his rising power (Cohen and Brenner, in press). Later in the century Borno was conquered by an adventurer who had pillaged his way across Africa from the eastern Sudan with a standing army. In effect, then, statehood leads ultimately either to internal crises and conflict or to greater centralized power in which the trend invariably includes a semidifferentiated and standing armed force under center control.

Whatever the specific set of reasons, a centralized army reflects a new and differently organized state, one in which warfare and the state are significantly more contained within central government policy. Once warfare capacity and centralized government coalesce, the state can use warfare as policy with much less internal fuss. Mobilization still occurs, and the citizenry are still expected to contribute men and resources, but the center can move on its own if necessary either

against an outside enemy or an internal rebel. Now states can make war swiftly and decisively. The older patterns still obtain and are important for state development, but a new entity—the military establishment—has emerged, and this emergent factor produces enhanced effects for the cybernetic relations between war and the state.

### The Consequences of Warfare<sup>4</sup>

Territorial size, warfare capability, and declining numbers of states are locked together inextricably. Carneiro (1978) documents the rapidly decreasing numbers of autonomous polities from neolithic times. However, with the enhanced power given by standing armies, states change rapidly. In Europe there were about 1000 independent state systems in the fourteenth century. These decreased to fewer than 30 by World War I. Most disappeared as a result of wars. Increased warmaking capacity, as measured by technology and the numbers of ready soldiers to be poured into combat, are related to the changing production function of defense (Bean 1973:220). This means that as interstate warfare occurs in a region through time, minimum state size must increase as well. This is due to the fact that the greater the offensive power of one state, the less likely smaller ones in the region can survive without becoming bigger and/or more efficient war machines themselves. State warfare is therefore associated with growth in size and development among states (Stein and Russett 1980:17).

How all these factors are related to one another, and to other parameters, is not understood fully. On historical grounds, it is clear that during and after wars states change their shape, people change from being citizens of one state to membership in another, and states change or maintain their power relations with one another. Thus in our own times, four powerful states (Hungary in 1918, Italy in 1948, and Germany and Japan in 1945) have lost significant influence after wars (Modelski 1972:144). The inclusion of Germany and Japan stimulates Stein and Russett (1980) to accept the idea of a *Phoenix Factor* in which economic recovery allows a defeated state to bounce back. Some writers (Organski and Kugler 1977:1347–1366) go even further to suggest that in the long run wars make very little difference in power relations, which soon return to levels and relations already established before a war. I conclude from this that wars sometimes do and sometimes do not trigger decisive change in territoriality and power. When such changes occur, war often is involved, but factors other than war determine

whether or not warfare is a momentary wiggle in the overall trend (Japan) or the culmination of a long-term trend (United Kingdom). In the case of Japan, industrialization geared to a receptive sociopolitical system produced a trend to greater productivity. Defeat in war interrupted the trend and constrained it to the economic sector, but did nothing to stop it. With the United Kingdom the same war triggered an already well-established decline in its relative power. The consequent loss of its colonial empire completed the trend.

For the most part these other factors involve the coordinating and economic capability of the polity. If these are expanding or in decline, war enhances the trend—a loss in war accelerates decline, a win stimulates growth. If war has an outcome opposite to the underlying trend, then we can predict a Phoenix Factor for states on the rise that lose wars. States in economic and organizational decline that win a war still continue in that overall direction, such as Rome in the first centuries B.C. and A.D. In other words, warfare enhances but cannot cause growth and/or decline in state systems. In this sense, the term correlation is more accurate.

To understand the dynamics of war-related effects more concretely, we can ask questions about specific relationships. Displacement effects are now well enough documented to be accepted. This refers to the finding by Peacock and Wiseman (1961) that postwar central government revenues and expenditures tend over time to exceed prewar ones. Detailed analyses of such data show that these differences are not explained fully as war-related costs spilling over into postwar periods. Wars therefore are correlated with increased share of and control over the polity's productive capacity by the central government. No matter what kind of state we are talking about, war invariably means higher central government exactions and often (not always) a greater popular tolerance for such exactions. In an analysis of 10 centuries of European state histories, Crowley (1971:49) found that greater degrees of central government control correlate with high ratios of warfare, whereas more laissez faire periods of less central control are associated with significantly less warfare. Therefore, state warfare is part of a package of increased and increasing central government control over its peoples and resources.

Warfare's effects on the economic life of states are less obvious than one would presume at first. As with many other factors, there are both costs and benefits. When warfare means access to new resources, or control of new trade routes, markets, and productive capacities, then winning at war clearly is advantageous. Such hoped-for effects, or the defense of such benefits, are widespread correlates as well as outcomes

of warfare. War brings more social effort, an increased use and search for unused resources, more demand for products and labor, increased efforts to create and obtain more efficient technology (both productive and destructive), and greater redistribution of wealth throughout the state (Stein and Russett 1980:22–23). On the other hand, war brings destruction of land, people, and rapid depletion of resources for destructive ends. Labor and capital are destroyed at increased rates. If this means overcoming or getting rid of rivals for scarce resources, then possibly the destruction is adaptive, for the winner. But even the winner loses in manpower, material, and productivity that could have been more directly related to survival. War uses up, destroys, harms, and hurts everyone related to it. Unfortunately, it also enhances, as well as retards, growth, development, and quality of life.

Given economic scarcities as facts of life, it then follows that conflicts leading to warfare are less likely among equals, more likely among unequals. Why fight unless you can win? Ferris (1973) has studied this problem among contemporary states (1850–1965). He shows that the probability of intense conflict (involving a threat or use of force, or the use of international mediating bodies to adjudicate unsettled conflicts) is more likely among states with greater power differences between them. Unfortunately for social theory, warfare itself is not more predictable on these grounds, just conflict; nor is its duration or the number of battle losses incurred by each country. Both Ferris (1973) and Cochman (1976) explain it by arguing that factors affecting the onset of wars are different from those that determine size, outcome, and effects of the conflict. Theories of warfare must therefore develop at least three differing and related models of political process: (1) a model of conditions leading to war, (2) a model explaining the conduct of war and its relation to society, and (3) an explanation and predictive set of statements about the consequences of wars.

Finally, there is the problem of war and social cohesion. Generally speaking, most writers agree that a recognized threat of war tends to enhance unity and a sense of identity among the citizenry of combatants or would-be combatants (Stein 1976, 1980). But mobilization for warfare and the increased need for coercive control by central government already referred to is associated with increased antagonism to government. For contemporary states, the greatest probability for revolution occurs at times of preparation and termination of wars, when coercive control is increased or relaxed (Tilly 1975). In other words, once interpolity conflict occurs, outside threats are responded to by greater unity within contending polities. However, and somewhat paradoxically, the increased mobilization associated with warfare also can

produce decreased amounts of unity and identification with national goals.

War, therefore, has effects that feed back on the growth and development of states. All states have military establishments that lay claim to scarce resources. Where center-periphery relations are more tedious, as with early states, and the center government must quell rebellious tributaries and pacify border areas, military campaigns are constant or annual affairs. This frequency, as we have seen, declines over time within any one regime starting with a founder and going on through his heirs to the throne. Military organization uses levies on the populace to raise armies, so that military organization reflects the administrative structure of the state.

In more organized states with standing armies, warfare generally is less frequent than among early states. Warfare and the development of a differentiated military establishment enhance centralizing forces in state formation. As we have seen, warfare produces the displacement effect in which central government's control over resources is increased. It both enhances and inhibits economic life and social cohesion, depending upon other factors in the situation. Warfare, or at least conflict, is more likely between unequal powerful states, and over time states become larger and fewer, with warfare being the efficient cause of much of this trend.

This leads to one last comment or question whose resolution I must leave to another essay. Is it sensible to accept the argument that states using competition, conflict, and warfare must continue to reduce their numbers until there is only one state, or possibly two, (depending on one's beliefs about statehood needing or not needing interstate relations) left on the planet? My own response is methodological and empirical. First, extrapolation is always dangerously easy. There are, in fact, too many unknowns: extrapolation requires outlandish simplification, and long-range sociocultural prediction is impossible (Cohen 1981). These directional generalizations omit observed trends in the opposite direction. As states expand, conquer, incorporate, and absorb others into their sphere of control and influence, decentralizing forces increase within the expanding state. As the contributors in Sharpe (1979:20) note on both theoretical and empirical grounds, the attention of social scientists to integration and state formation has obscured the rising tide of counterforces that are "paradoxically also a product of the centralization of society."

The decentralizing trend can be seen at the neighborhood, the local government, and most importantly at the regional or ethnic nationalist levels (Sharpe 1979:21). This is not the place to analyze this trend, but

its presence and its accelerated visibility are clear already and commented on by both journalists and social scientists.<sup>5</sup> All this means that we are aware of the limits of our conclusions. States make wars and states consequently increase in scale. But in the long run, this very bigness will make interstate warfare infrequent and obsolete. At the same time, local and regional governments and growing ethnic autonomy (cultural and regional nationalism) within large state regulation may be the postwarfare domain of intergroup competition and conflict. Warfare has promoted accelerating centralization and bigness. Smallness and peace may be the result.

## Notes

<sup>1</sup>This same point was made some years ago by Latimore (1962) for the Mongol state. Cf. Smaldone (1970), who sees three phases: (1) a time when there is a "people's" army (I would amend this to refer to a reliance on organized forms of prestate violence), (2) an embedded "feudal" phase, and (3) a differentiated standing army.

<sup>2</sup>Cf. Service (1978). Service is most often associated with a "benefit" approach to state formation, but he is certainly aware of both costs and benefits for the process, with the balance in favor of positive rather than the negative when a social form evolves and is accepted widely.

<sup>3</sup>The brief review to follow is much indebted to Stein and Russett (1980).

<sup>4</sup>One simple determinant in contemporary states is home ownership. This is increasing rapidly from very low percentages at the end of World War II to a majority of householders in most Western countries, in which pressures for more local control has increased concomitantly. Greater citizen participation in ownership produces awareness that a rise or decline in this capital asset often is due to community forces beyond the householder's own control. This produces pressures for more local government control and individual participation (Sharpe 1979:27). Therefore, decentralizing trends are more in evidence in Western capitalist systems in which housing is private and individual ownership is widespread.

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## 10

## *A Quantitative Analysis of Roman Military Operations in Britain, circa A.D. 43 to 238*

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### Introduction

Although social scientists have shown an increasing interest in the study of warfare, relatively little effort has been directed toward making use of archaeological data (Roper 1975:299-300). Given the virtually limitless availability of archaeological data directly relevant to the analysis of warfare, we feel that the social science community has been guilty of ignoring one of its most important resources. It is our contention that models suitable for testing using archaeological data can make a substantive contribution to the understanding of war. The primary focus of this chapter is to demonstrate this point through the development of a model capable of either predicting or retrodicting those processes that act to promote or inhibit the physical expansion of polities.

In order to facilitate the demonstration of the utility of archaeological data in the study of war, the model presented here was tested using