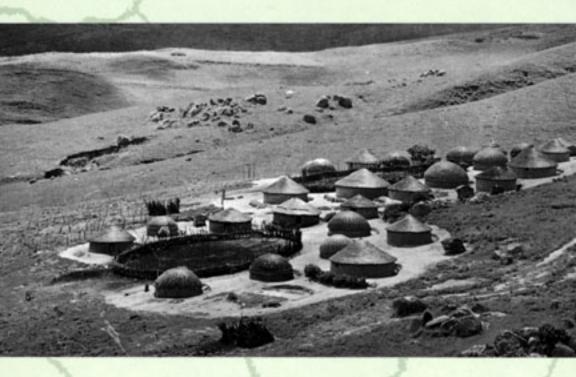
Contributions to Global Historical Archaeology

Landscape Transformations and the Archaeology of Impact Social Disruption and State Formation in Southern Africa



Warren R. Perry

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Landscape Transformations and the Archaeology of Impact

Social Disruption and State Formation in Southern Africa

Warren R. Perry

Central Connecticut State University New Britain, Connecticut

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Foreword

Landscape, settlement, spatial, and the material consequences of human behavior have posed challenges to many archaeologists, especially when it comes to explaining the means by which human societies have encountered different phenomena, as well as the various coping strategies they have developed as they face the reality of the environment. Human uses of the landscape reflect, in varying degrees, the interrelationship established among human factors such as history, social structure, and physical space. However, owing to changes in the size, composition, and needs of social groups, as well as the increased development of survival strategies, the patterns of behavior generated are eventually transformed. But clearly explaining the process of the transformations requires a reconstruction of the frequency with which material manifestations of related human behaviors are bonded together, by use and the testing of relevant and applicable models. Sorting out and aligning the complex data about the interconnections and associations make it more challenging and sometimes even exciting. Only a well-thought-out research approach, such as adopted in this book, can effectively stand up to the test that many archaeologists have to face. Aware of this basic problem, Warren Perry clears the way by outlining the basic assumptions of his study and dissociating himself from the erroneous assumptions often made. which create the impression that societies they identify had concepts of social and spatial patterns equivalent to those of the social scientist or of the ethnoarchaeologist. Areal variations of the relationships among cultural phenomena are so numerous that archaeologists have, over the centuries, looked for regularities or patterning of distribution of their manifestations, the basic assumption being that patterns consist of recurring modes of human activities or behavior. This book goes beyond mere pattern recognition and explores factors such as cosmology; traditional views of spatial organization and social networks; exploration of the landscape; concepts of boundaries, territoriality, land tenure; and perception of the natural environment in the folk traditions about ecology and attitudes toward natural

resources as the major factors that contribute to landscape transformations. An observed major achievement of the study is the demonstrated rejection of concepts and models that have continued to perpetuate colonial research mentality that shield away objective explanations in African history and culture. The doom of the "Settler Model," the most persistent in the history and culture of southern Africa having been now dispelled, will undoubtedly open a new chapter in methodological approaches toward the reconstruction of the history of small-scale groups such as this book examines. It will also confirm the call to historical archaeologists to challenge historiographic concepts and themes that have derailed our understanding of the actual processes of the formation and transformation of African societies.

One of the lessons that has come out of my own research on the early settlements and spatial behavior of societies in the Volta Basin of Ghana is the significance of the data on the patterns of social behavior to which individuals and groups conform in their dealings with one another. Like the findings of Perry's research, the data demonstrate that objects or artifacts of archaeological significance should be considered as behaving within certain local rules of the society, because they were the products of their past human social behavior. Therefore, the study of artifacts is the study of human behavior (social, economic, and the like) that produced them. At the same time, it has been recognized that the sociospatial consequences of human behavior vary according to the level of human settlement at the macro or micro level, as Perry ably demonstrates. This is illustrative of what I have referred to as the local rule (LR) model of spatial behavior and, like Perry's approach, examines a social system as the dynamic factor that creates its own repetitive patterns that accommodate transformations in the landscape while creating the bulk of the material evidence of human spatial behavior at archaeological sites. Some scholars have attempted to demonstrate this situation by use of summary mathematical rules that govern such social relations between individuals or groups and their landscapes. Perry's statistics and histograms on transformations in settlement size and hierarchy, population movements before and after the occupation of Mfecane/ Difagane sites in the various regions, confirm that such summary mathematical or statistical rules will continue to constitute effective ways of differentiating evidence of "local rules" of social differentiation specific to a society or societies and the landscape that played a role in their transformation. But because of the impossibility of ob-

Foreword

serving the social behavior of past societies, we have to rely on models drawn on modern social behavior patterns of behavior formulated in rules which, in modern societies, are recognized as rules of etiquette or moral rules. The rules must combine both spatial and social factors in one package.

All these lead to a single conclusion, which is clear from this book: that spatial behavior cannot be understood apart from its social context; that geographical space constitutes a reflection of social meanings about how the space is used. It is also obvious from Perry's analysis that the Settler Model does not take into consideration the fact that it was applied to traditional societies who do not consider landscape as a commodity that can be cut into pieces and sold as parcels. As the book demonstrates, for these groups, land is seen in terms of social relationships, and, although these relationships may change over time in any given situation, the structural and other cultural features such as houses, storage facilities, burial grounds, and other fixed structures become marks that remain in the archaeological record.

Another major achievement of this book is Perry's ability in creating the connection of the simultaneous cultural research into archaeology, ethnology, and ethnohistory in one package and in ways that lead him to new and refreshing interpretations and perspectives on the history and culture of southern African societies, consequently giving a final devastating blow to the Settler Model that is likely to disappear with the passing century that nurtured it. Happening through Perry's hands, one of the few African American Africanist archaeologists, one can forsee how the new dimension of this study will benefit archaeological research on both sides of the Atlantic. With very few exceptions, overall theoretical perspectives of interactive nature are few and far between in the historical archaeology of Southern Africa. In spite of the advisability of keeping the boundaries of the study of spatial behavior open-ended, there is a growing need for some type of theoretical and methodological integration and organized framework. Landscape Transformations provides an example in this direction and should lead the way into the historical archaeology of the region in the new millennium. The book challenges the historiographic concepts that relegate the achievements of South African societies to a secondary place in human history and also calls on researchers to redress the imbalance in contemporary scholarship about the period of colonization, drawing on certain dimensions that continue to remain concealed from human knowledge. It is difficult

for an archaeologist to escape the constraints of available sources or, indeed, can the pitfalls of preconceived ideas of the collective subconscious or the prevailing ideology of a particular culture or civilization be avoided. But one clear thing about this book is that it calls for research that goes beyond common approaches to the study of human societies as victims of slavery, deprivation, and degradation, and should certainly help explain the formation and transformation of those processes and how those societies defined their landscape, power relations, justice, and their local traditional values as well as individual and group achievements or contributions to human history.

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Preface

One of the most exciting archaeologies on the planet is the archaeology of southern Africa. In part this is related to recent political developments as well as to the current development of historical archaeology in southern Africa. When European political economy came into contact with indigenous people, social relations changed both locally and globally. This is the central problem in the historiography and historical archaeology of the area. I got myself involved in this research by going to Swaziland, southern Africa, to do archaeological research on the emergence of the Swazi state in 1984. My research project concentrated on the unsanctioned realms of the recent history of present Swazi state formation-the Mfecane/Difagane period. My interest in the Mfecane/Difagane began to take shape while doing archival and historical research there. When I consulted the Swaziland archival materials, especially the testimony reproduced in the British Parliamentary Papers or "Blue Books," I found them incomplete. I began to wonder what the particulars were on white involvement in the international trade, especially whether slave trading had a significant impact on the Mfecane/Difagane. What became clear to me was that there remained a forgotten element in all this research: the role of white involvement in racial commodity slavery and its impact on the Mfecane/Difagane. Furthermore, perhaps for political and ideological reasons, it became glaringly apparent that there had been no archaeological investigation of the Mfecane/Difagane—and this became my task.

My Swaziland archaeological field research, itself shaped by the legacy of African-American struggles in my own historical experience, made me acutely aware of the complexities of life in apartheid southern Africa by revealing and illuminating the contemporary social forces that are in contention over the interpretation and ownership of Swazi history. My research involved both dialogue and practical activity with a myriad of people intricately divided into a variety of social positions, which emerge in a particular historical context. It enmeshed each participant in the power relations of contemporary Swaziland and their place in the global system of European-North American domination.

I quickly discovered that (1) all historic archaeological research is political, and extends beyond artifacts and settlements, and is linked to historical context and anthropological knowledge production; political activity involves coercion but also entails everyday forms of resistance and negotiation of how the past and the present are understood and categorized; and (2) a more inclusive understanding of power includes an ability to contest constraints and reject accounts imposed by others while creating alternative accounts that are meaningful is at the core of self-identity in social relations of domination and resistance.

Descriptions of the Mfecane/Difagane began to appear in early travelers' accounts and became embedded into Afrikaner and British folklore, and they have continued over the years in countless new books and articles recounting and reifying this tumultuous event. I therefore refer to this version of the Mfecane/Difagane as the Settler Model. The Settler Model argues that the military Zulu state emerged from the need to control the most productive agricultural and grazing lands in the area of what is today the Natal province. Explanations for Zulu state formation focused on increasing conflictual relations between traditional African rivalries arising from localized demographic stress and ecological deterioration. Others who recognized European involvement emphasized competitive trade relations between African polities for control of ivory and cattle exports at Delagoa Bay The idea of an internal, Zulucentric Mfecane/Difagane divorced from the trade in African captives remains unchallenged. Furthermore, the Zulu and (specifically) Shaka were portrayed as bloodthirsty antagonists—provocateurs who ruled over neighboring African people by terror and fear. Finally, the Settler Model alleges that it was the European colonists who brought peace and stability to southern African peoples by eventually defeating the Zulu during the late nineteenth and early twentieth centuries. My archaeological analyses have demonstrated that the Mfecane/Difagane as described in the Settler Model is incorrect and therefore must be rejected.

This book is an attempt to use archaeological materials to investigate the validity of the Settler Model and Mfecane/Difaqane theory. I also hope to show the usefulness of archaeology in bypassing the biases of the ethnohistorical and documentary records and thereby generating a more comprehensive understanding of history. Preface

This book is dedicated to the members of my doctoral dissertation committee: Gregory Johnson, James Moore, Robert Paynter, and Paul Welch. Their critical insights, comments, and painstaking efforts on my behalf are deeply appreciated. Special thanks to Carol Kramer whose early guidance and contributions as mentor will never be forgotten. Thanks also to Charles Orser and Eliot Werner at Plenum Press who felt my work worthy of publication. This book was written for all the people of southern Africa who have dedicated themselves, many with their lives, to the liberation of African people in Africa and throughout the diaspora. In Africa I owe my greatest debt to Musi Khumalo and Dumsani Sithebe, who befriended me and taught me about Africa and who shared their cultural expertise with me. Finally, many thanks to my family, especially my wife Carmen, my sons Ronald, Bruce, and especially my youngest son Warren Albizu, without whose love this book could never have been completed.

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Southern Africa and the Archaeology of Impact

1

INTRODUCTION: THE RESEARCH QUESTION

The formation of the Zulu state during the early nineteenth century in southeastern Africa was a moment of great political importance for the inhabitants of southern Africa. Explaining this momentous development figures prominently in the popular and professional histories of southern Africa. The period of social disruption, known as the Mfecane/Difaqane, figures in any explanation of Zulu state formation. Moreover, most understandings of the social disruption and the related state formation draw on an underlying model, which I refer to as the *Settler Model*. The Settler Model is based on and seeks to explain information from documentary records.

In the following, I submit the Settler Model to scrutiny based on considerations of the ideologies in which the Settler Model is embedded and on analyses of data from the archaeological record. My goal is to assess the adequacy of the Settler Model as a basis for the study of social disruption and state formation in southern Africa. Problems with the Settler Model arising from its theoretical and empirical assessment point toward alternative lines of analysis deserving greater attention in future research.

THE SETTLER MODEL AND ITS PROBLEMS

The Settler Model depicts Zulu state formation as an indigenous internal development that had cataclysmic results for southern Africans. The Zulu are said to have terrorized, pillaged, and plundered their neighbors to acquire cattle, political subordinates, and land to expand and consolidate their state. The explanatory events in this model are the so-called Mfecane ("the crushing") and Difaqane ("the scattering"). These are claimed to be a common Xhosa term and a Sotho-Tswana version of the Xhosa term, respectively. Mfecane/ Difaqane theorists present a teleological model of an internally generated African revolution involving intense, large-scale internecine warfare; tremendous loss oflife; incessant livestock raiding; famine; deprivations; forced extensive migrations; and conquests from 1818 to the 1830s. This period is characterized by the consolidation and expansion of the Zulu and Xhosa states and the emergence of many other centralized African military polities in southeast Africa. Some of these polities (e.g., the Zulu, Xhosa, and Pedi) are infamous in European history for their resistance to colonial expansion and their "warlike tendencies."

The implication is that this series of cataclysmic, black-on-black violent chain reactions was self-inflicted, initiated by Shaka and the Zulu state whose attacks on neighboring African polities had neargenocidal effects. The consequences of this chaos were far-reaching, as migrations into the interior by attacking splinter groups from coastal communities resulted in countless refugees and the flight of various groups farther inland. This violence created dislocated African communities over large areas, along with vast depopulated "noman's lands" and thousands of refugees seeking "asylum" among European colonists. For their part, Europeans could only stand by helplessly and watch until they were obliged to restore order (Afigbo, Ayandele, Gaum, Omer-Cooper, and Palmer 1986; Bohannan and Curtin 1988; Denoon and Nyeko 1986; Omer-Cooper 1966, 1988, 1995; Shillington 1987; see Cobbing 1988, who challenges the received wisdom).

The dynamics of these momentous changes are attributed to the Zulu in the Settler Model. Only the proponents of external trade models imply any significance to European actions. For them, the ivory trade at Delagoa Bay is important but secondary to Zulu state formation. A recurring theme suggested, although not necessarily explicitly expressed, by the external trade studies is the importance of a south African political economy, imposed and maintained by force and resulting in the local and global transformation of social relations seen, for example, in the complex relations between European colonial penetration and the Mfecane/Difagane.

This latter position is more consistent with recent research on any colonial situation. Much of this work concludes that any analysis of sociocultural transformation under conditions of peripheralizationcolonialization must recognize that the social formations involved were and are not autonomous bounded entities, but rather interdependent segments of a larger system (Wolf 1982; Paynter 1982,43). This conclusion suggests that both European and African interaction was wide-ranging, affecting local, regional, and national levels. The interactions were of varying intensities and complexities and had profound effects on global transformations.

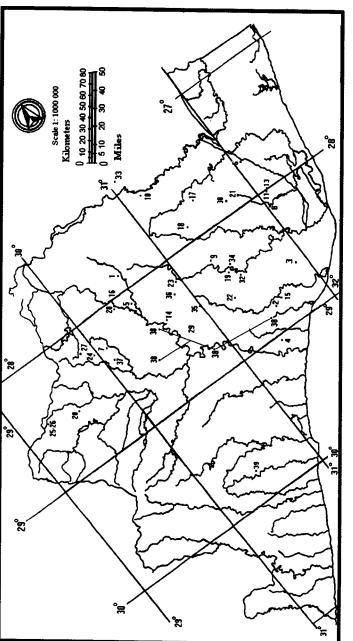
Given the regional scale of the Settler Model and the suggestions that alternative models would encompass much larger areas, my method needs to be geographically broad enough to consider whether the Zulucentric scale of the Settler Model is adequate. Zululand (Fig. 1.1) is a dynamic geographical and political space. The Zululand discussed herein includes the traditional area north of the Tugela and Mnzinyati Rivers, to the east of the upper catchment of the White and Black Mfolozi, Mnzinyati, and Phongola Rivers, and to the south of the Phongola River in the modern province of Natal (Hall 1981,25).

To evaluate the localness of the Settler Model, I study other areas of southeastern Africa as well. The South African provinces of the Transvaal, Natal, the Free State, and the eastern Cape east of the Orange–Vaal confluence and south to the Sundays River are included. Archaeological materials from Swaziland, Lesotho, and southern Mozambique are also included (Fig. 1.2).

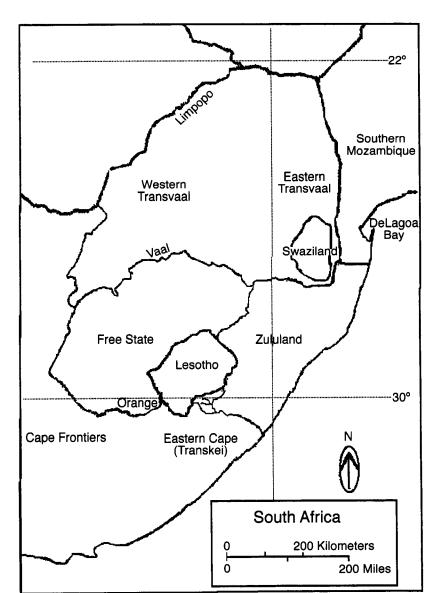
MIDDLE-RANGE THEORY: ARCHAEOLOGICAL DATA AND THE DOCUMENTARY RECORD

In confronting a model drawn from documentary records with archaeological data, I am dealing with a set of methodological issues familiar to the field of historical archaeology, usually glossed with the phrase Middle-Range theory. Leone and others (Leone and Crosby 1987; Leone and Potter 1988a, 1988b) have argued that for historical archaeology Middle-Range theory involves forging a more productive and meaningful relation between the documentary and archaeological records by generating a methodology sympathetic to the experiences of others.

These authors criticized archaeologists concerned with the later historical periods who link archaeological data and documentary materials as dependent data sets in which the written and/or oral record is generally checked against the "ground truth" of the archaeological record. Leone and Potter and Leone and Crosby argued that both types of "facts" are generated by different people, generally of different classes, races, times, and genders and often in a conflictual context rendering them necessarily "epistemologically distinct" (Leone







Southern Africa and the Archaeology of Impact

Figure 1.2. Zululand and other areas used in the analyses in the context of southern Africa.

and Potter 1988a, 14). Consequently a more broadly applicable method must assume the independence of each line of evidence. This approach allows a dialectical relation between archaeological and documentary materials with each data set extending our information about the other as well as our knowledge of the past (Hall 1992; Leone and Potter 1988a, 1988b).

Middle-Range theory involves the construction from the documentary record of models that specify relations between people's activities, objects, and cultural landscapes and arranges them against archaeological data to generate expectations and identify any disjunction (Leone and Crosby 1987, 398; Leone and Potter 1988b, 13). The "ambiguities" produced by the discrepancy between the archaeological and documentary records are the most critical elements in this method. They can be used to formulate hypotheses accounting for the particular documentary and material records. Furthermore, these unexpected deviations can be used to construct questions about the new contrastive case to direct future research strategies. In this way, the archaeological record can contribute to recovering the character of each particular historical case and to deriving a new understanding of cultural domination and resistance. These data can be used to enhance theoretical knowledge by facilitating the search for the conscious social agency of marginalized individuals and groups attempting to resist domination (Hall 1992; Leone and Crosby 1987,409).

All historical sources, oral texts and written documents alike, were created to communicate a special kind of understanding, filtered through various conscious and unconscious European and African categories. They are thus psychological accounts revealing useful insights into the social and intellectual history of the writer/speaker. They are also ideologically charged by the social positioning of the writer/speaker in terms of race, class, gender, and historical contexts and say as much about the writers and speakers and their time as they do about the past (Bonner 1983; Chanaiwa 1980a, 31; Hall 1990, 4). Consequently we need a much wider range of sources than historical documents written by Europeans for their own consumption and appeasement or oral traditions with similar motives of historically legitimizing a social group's primacy. Thus all sources must be read, listened to, and analyzed by "looking behind the documents and memory in order to learn with archaeological aid as much as we can about these earlier formations" (Wilmsen 1989, 64).

This is not to say, however, that archaeologists themselves are unbiased. In fact, all archaeological and historical research is politically situated, especially historical archaeology where the relation to ideology is more conspicuous. Historical archaeology can play an important role in both sanctioning and exposing the current social and power relations in contemporary society (Blakey 1983,1997; Hall 1984a, 1984b; LaRoche and Blakey 1997; Perry 1997b, 1998). For instance, in southern Africa, African history is portraved as white southern African history, while other groups are represented in separate contexts, disarticulated from the exploitative relations with whites. Yet, the work of Schrire (1988,1996) and Hall and colleagues (1990a; Hall 1992) has shown that historical archaeology does not necessarily or only disclose and distinguish African societies from white ones or working class social life from that of elites, but can contribute a "domestic texture" absent in written documents by focusing on the roles played by material objects in the lives of ordinary people asserting dominance and resistance (Hall 1992; Hall, Halkott, Klose, and Richie 1990a, 84). To pursue these goals, we need to be able to link the material objects, their archaeological contexts, and their spatial relations to theoretical investigations of colonialization processes by considering global-regional political and economic relations centered in a specific historical setting and guided by assumptions of conscious human agency. This approach allows historical archaeology to play a crucial and necessary role in historical interpretations by narrowing the possibilities and furnishing alternative models (Hall 1990, 126).

In Chapter 2, I address the problem of the Mfecane/Difaqane by exploring the historical literature for the various ways in which southern African historians have explained the Mfecane/Difaqane in the documentary record. This page intentionally left blank.

2

The Mfecane/Difaqane Problem from the Documentary Record

THE STANDARD STORY OF THE MFECANE/DIFAQANE

Much of the current historical research on southern Africa has focused on the pivotal role of the Mfecane/Difaqane and the consequent Zulu state formation as the most important events in later southern African history (Denoon and Nyeko 1986; Omer-Cooper 1966, 1988, 1995; Shillington 1987). Most explanations of these events have been posed in terms of African internal economic dynamics, emphasizing catastrophic population pressure, ecological conditions favoring soil erosion, naturally increasing cattle herds depleting resources, and overgrazing. Before moving to a consideration of each of these theoretical positions, I first present a sketch of the history of the Mfecane Difaqane period.

Mfecane/Difaqane theorists argue that late eighteenth-century political upheavals in local polities in the area that was to become the Zulu heartland (Fig. 2) were the result of various internal conditions focusing on anthropogenic environmental change. Thus, the earliest nineteenth-century "destructive waves" of the Mfecane/Difaqane should evidence themselves in the Mfolozi-Phongola region.

Conflict between different groups in the Mfolozi-Phongola region over the need for grazing land resulted in livestock raiding by the more powerful polities and extensive migrations by those less powerful. The confrontations also involved refugees attacking other polities in their path as they fled the Mfolozi-Phongola region. The scale of this devastation is said to have been heretofore unknown in southern Africa. The perpetual state of contention among the groups in this region culminated in the emergence of a hierarchy of centralized military polities, at the apex of which stood the Zulu state (Omer-Cooper1966,157). The emergence, proliferation, and dispersion of military polities drastically altered regional power relations and had significant consequences for the political economy of nineteenth-century southern Africa far beyond the margins of the Zulu state. The violent dislocation of and incursions by African polities like the Zulu against other agropastoral communities prompted further political and economic transformations in outlying peripheral communities.

This model posits conflict between different "ethnic" groups and allows comparison between documentary differentiation of these communities and the archaeological record. Historical accounts also provide a chronological framework for tracing the earliest reverberations from a chronological framework for tracing the earliest reverberations from the Zulu kingdom under Shaka (ca. 1815) through the various migrations out of the heartland onto the borders and ending with Zulu raids on the eastern Cape frontier (ca. 1828). The chronological ordering proposed in this version, however, refers only to the times when fissioning militarized polities from the Zulu heartland, or from regions devastated by them, invaded a specific area.

Omer-Cooper argued that these chaotic conditions invited European intervention. European missionaries, traders, and others living beyond the encroaching European frontiers were simply caught up in the turmoil, He (1988, 66) explained that:

The previously thriving population of Natal was particularly disrupted. Many fled south. Others hid themselves in extensive areas of dense bush leaving most of the land apparently deserted apart from the vicinity of Port Natal where a community of about five thousand lived under the protection of the English traders. (Emphasis added)

Omer-Cooper implied that the African presence at Port Natal is a consequence of the Mfecane/Difaqane and that only after 1838 when the Boers defeated the Zulu of Digaane did the African populations of Natal, who had fled the Mthetwa-Zulu under Shaka, return.

DEMOGRAPHIC EMPHASIS

Demographic arguments have emphasized varying population stresses(e.g., Gluckman1960; Omer-Cooper1966, 1988; Service 1975; Shillington 1987; Stevenson 1968). Gluckman (1960) was the first to suggest that population pressure led to increased competition for land, generating conflict that culminated in intra-African warfare.

The Mfecane/Difaqane Problem from the Documentary Record

Omer-Cooper's (1966) classic The Zulu Aftermath had the most effect on later African historiography; it popularized the concept of Mfecane as a unique historical event that brought a violent, dramatic, and sudden end to centuries of southern African social stagnation (Hall 1990; Webster 1991). His model was the first to give primary attention to internal African dynamics. Like the colonialist historians who preceded him, he upheld the "great man" theme, focusing on the character and innovations of Shaka as Mfecane/ Difagane initiator (Eldredge 1995; Etherington 1991b). His original formulation offered a detailed explanation of Zulu state emergence based on catastrophic population pressure and a lack of grazing land. Although Europeans' encroachment from the Cape was mentioned, their role was seen as secondary. By interpreting the warfare and population dislocation as associated with independent African state formation, he debunked the myth of impotent African polities. Omer-Cooper (1988,53) has since amended his original formulation and has allowed for the effects of the ivory trade at Delagoa Bay.

ECOLOGICAL EMPHASIS

Some explanations for Zulu state formation rest on internal ecological processes rooted in transformations in the productive forces that gave rise to conditions of environmental deterioration provoking expansion and conquest. It has been suggested that a lack of grazing land produced by extensive overgrazing and a decline in land productivity resulting from soil erosion, drought, disease, and increasing human and stock densities were major causes of the Zulu state's rise (Guy 1980,1982; Marks 1967a).

Bonner (1983) looked at the rise and functioning of the nineteenthcentury Swazi state with an emphasis on the interrelations of local and external forces but rejected ideas that whites were a unifying factor. He argued that access to European trade challenged the power and authority of the elders and facilitated political transformation. These changes were intensified by the Mdlatule famine and drought.

The ethnohistorical and ethnographic documents suggest that from the 1790s to the beginning of the nineteenth century in Swaziland and southern Mozambique a severe drought resulted in famine. This drought occurred at Delagoa Bay in 1791–1792 and reduced African populations' access to foodstuffs (rice and vegetables) from the interior (Delius 1983,18; Hedges 1978,145–46).Other droughts ensued around the Bay in 1800, 1803, 1812 and 1816–18. In the absence of any paleoecological evidence for supporting or rejecting the drought hypothesis, no positive determination can be reached. I suggest that we should not neglect the role of political events in promoting famine.

First, Bonner stated that "regional ecological complementarities" promoted earlier intraregional trade and altered social relations in and between lineages and homesteads. Some lineages with access to particular resources exchangeable for cattle, such as iron, could accumulate cattle and subsequently could lend surplus cattle, allowing penetration of the reproductive cycle of other lineages and resulting in the expansion and dominance of such kinship units. Thus, the increased demand for rare prestige goods like ivory and cattle broke the established social order (Bonner 1983,13–14). This allowed some groups to circumvent the power of the lineage elders, generate a following, and dominate and extract tribute over a wide area.

Second, labor could not be effectively organized in the prevailing hierarchical lineage organization. Large-scale hunting and burning enhanced agropastoral production and required the coordination of larger groups than before. This political reorganization also provided a framework for military parties.

These two factors combined to raise dominant lineages into positions of authority in larger scale, more diverse political structures. The resulting new polities were incorporated by an ideology in which kinship was dichotomized into aristocratic and commoner poles. Thus external trade and its exotic products subtly changed the interand intralineage relations. The elders' authority at the homesteads was dependent on their control over access to cattle for bride-wealth payments. Elders also controlled the marriage ofjuniors by granting permission prenuptially only in exchange for labor services and surplus labor products until cattle were repaid. Trade threatened these homestead–lineage relations by enabling juniors' access to cattle, marriage, and the like. Consequently the elders of elite lineages sought to secure a monopoly of all intraregional trade to maintain their privileged position and control over social reproduction and material production itself (Bonner 1983, 13).

Daniel (1973) proposed a geographical model of the environment as "perceived" by pre-Mfecane/Difaqane early nineteenth-century southeast African societies in southern Swaziland and northern Zululand, a region of the lower Mfolozi valley that spawned the growing Mthetwa–Zulu power. This useful regional investigation revealed some actual locations of royal capitals and discovered general spatial and ecological relations between the sites as well. Daniel illustrated that the powerful, emergent late nineteenth-century polities were based on similar configurations of natural resources. This suggested to Daniel that these polities were seeking to control the most productive combination of grazing lands and agricultural soils in zones with a low incidence of drought. He concluded that competition for control of these pasture lands was the cause of the rise of the Zulu state.

As pointed out by Hall and Mack (1983,182), one major problem with Daniel's study was the use of Acocks's (1953) generalized vegetation maps. These static maps are based on twentieth-century vegetation patterns and allow for neither local variation nor specific past land-use practices. Marker, a geographer, and Evers, an archaeologist, examined soil erosion in the Lydenburg Valley of the eastern Transvaal(1976,163–4)and found an association between some later historical settlements and localized soil erosion. This association was attributed to overpopulation and changing land-use patterns. The authors noted that during earlier periods of soil erosion, populations had simply moved nearby, but during 1826–27 these areas were completely abandoned.

Guy (1980,1982) argued for a population explosion in what was to become the Zulu heartland, which caused increased cattle herding and led to extensive overgrazing and environmental degradation. Such "unscientific farming practices" combined with drought-engendered famines further intensified conflict and gave rise to the Zulu state. Following Daniel, he reasoned that southern African agropastoral societies in the core area required access to a wide range ofveld types. This need for greater environmental variety dictated settlement location and forced these polities to expand their territorial dominion.

Eldredge (1995) pointed out that Guy's environmental degradation model neglects cultivation in his analysis of the agropastoral production process. Guy did mention the trade at Delagoa Bay but argued for its insignificance, because he saw no change in processes of production or distribution (Guy 1980, 102–19). In fact, Guy argued that despite capitalist penetration the Zulu kingdom endured until the end of the Anglo-Boer War (Etherington 1991a, 10).

VINDICATIONIST ARGUMENTS

In the United States, some early African-American scholars challenged the prevailing views of colonialist historiography, and explained the Zulu revolution as a struggle to consolidate southern Africans and to resist European penetration (Diop 1974,169; DuBois 1969, 31; Clarke 1970, 35; Rodney 1981, 128-32). This explanation was generally ignored by South African and European scholars until recently,

Chanaiwa (1980b) presented an African vindicationist argument that the Zulu state developed from an elaboration of conditions already extant among precontact Africans. He argued that the Zulu state formation was the result of embryonic, institutionalized class development and wealth concentration exacerbated by aristocratic– commoner antagonisms. Furthermore, he suggested that the Zulu adopted through active conscious human agency a secular subjective outlook on their own destiny by choosing military resistance to maintain autonomy over migration or refugeeism. This outlook freed them from ethnic and territorial boundaries, despair, and inaction. Finally, the Zulu revolution offered every able-bodied man an opportunity to acquire cattle, despite earlier disadvantages of birth, rank, class, and political power.

EXTERNAL TRADE

Several Africanist historians have carefully tried to relate extracontinental factors to internal ones by focusing on the historical conditions underlying the transitions. Wilson (Wilson and Thompson 1969-1971) was the first to suggest this idea, but models focusing on trade in southern Africa were pioneered by Alan Smith (1969) and subsequently refined by others, most of whom related the ivory trade at Delagoa Bay to the rise of the Zulu state (e.g., Carlson 1984; Hedges 1978: Slater 1976). Still others examined the contraction of this trade in the context of the rise of later states like that of the nineteenth-century Pedi (Delius 1983), the Swazi (Bonner 1980, 1983), and the Sotho (Legassick 1969, 1980). Essentially, the trade proponents argued that inter-European and intra-African political and economic conflicts over control of trade resulted in indigenous transitions in African sociocultural institutions. Specifically, trade intensified class conflict and maneuvering and became an exclusive prerogative of the elite for distribution of rare items to other elites, favorite retainers, and other members in the prestige systems to generate aristocratic wealth accumulation and power.

Alan Smith (1969) examined the role of the ivory trade in class formation and wealth accumulation from a European perspective. He hypothesized that the principal factor in the rise of the Zulu state was the commercial competition to monopolize the ivory trade with European and Indian merchants at Delagoa Bay, which caused rivalries among several southeast African polities in the Zulu core area. He used published sources on European commercial activity to demonstrate that the main export at Delagoa Bay was ivory and that as this trade increased the Ndwandwe, Ngwane, and Mthetwa-Zulu ruling groups and later the Zulu used imported exotic items to accumulate wealth and power.

Slater (1976) recognized the significant role of the *amabutho¹* or age-regiment system in transforming African society. He argued that the Zulu state resulted from structural changes precipitated by its reorganization through the institutionalization of the amabutho. This militarization was no longerjust defensive; it became a means to recruit and support armies and to generate state wealth through captive raiding and cattle raiding and accumulation. The contradiction lay in the fact that sustained raiding induced counterattacks, making defense a priority. The need for defense led to nucleated populations and political concentration (Eldredge 1995). Slater proposed that the expansion of the ivory trade in the Delagoa Bay region led to an increase in commodity production in those African polities involved in trade and inevitably led to internal political conflicts as elites attempted to broaden their control over local production and commercial relations.

Hedges (1978) looked at the ivory trade from an African perspective in terms of the development and transformation of African political and economic institutional structures that translated trade items into power. Hedges assumed suitable economic conditions and sufficient political power to initially control trade routes and maintained the view of bounded political units. Nonetheless, he recognized the political functions of kinship institutions, which permitted him to identify the potential for incorporated groups to manipulate, create, and rearrange their dominant lineages' traditions of origin so as to claim a common origin justifying new political relations.

¹This term refers to age grades, which were initially local institutions crosscutting kin organization and initiating men and women into adulthood through circumcision. Because male age grades served to provide hunters for royal hunting parties, they had the potential to function politically as coercive institutions by which the aristocracy could obtain war captives, animal skins, and ivory (Hedges 1978). Hedges proposed a two-period expansion oftrade at Delagoa Bay. During the 1750s-80s, ivory imported from south of the Bay accompanied geographical expansion of centralized polities in the Delagoa Bay–Thukelaregion. During the 1780- OS, the ivory trade collapsed and cattle, destined for United States whalers at the Bay, also coming from the south, replaced ivory as the major trade item. Although both products were important for southern African polities, ivory was a "prestige" item, acquired at least initially as a byproduct of hunting, whose circulation was dominated and controlled by elites. In contrast, cattle expropriation had devastating economic and social effects on both elites and commoners and hence on southern African polities and culture in general.

The transition from ivory to cattle export would have produced lower transport costs, because unlike ivory, which had to be carried overland by human labor power (Thorbahn 1984), cattle could transport themselves. Problems still existed, however, such as piracy, disease, and storage, all of which led to the need for guarding and protection. Restrictions in access to cattle had detrimental effects on all African households, especially those of commoners. Hence, cattle exports caused a severe drain on local economies and resulted in African military institutions that functioned as cattle-raiding vehicles and wars for the acquisition and protection of cattle and control of grazing lands, further necessitating effective sociopolitical organization. Thus Hedges concluded that this competition between African polities was the crucial factor in the emergence of the Zulu state.

Eldredge (1995) presented a synthetic explanation of the Mfecane/ Difaqane, which involved factors governed both by the physical environment and by Delagoa Bay trade. She argued that an environmental crisis, presumably a drought, initiated a scarcity of food resources, which resulted in famine and increased competition for productive resources. Groups with locational advantage had greater access to food resources and were differentially empowered.

Furthermore, as local and regional ivory trade grew, elephant herds declined, reducing ivory exports. Because the ivory trade had not promoted a surplus based on agricultural intensification, local and regional production could no longer sustain continual surplus extraction. The need to increase cultivation demanded more labor; women were especially valued as they provided essential agricultural labor as well as offspring for social reproduction. This situation provoked conflict and competition over access to productive land and people. Sharper elite competition for these diminishing resources led to violent struggles for dominance and survival (Eldredge 1995). The elite of those polities able to secure agropastoral productive lands could now have better access to and control of high-status imported commodities, surplus labor, and food resources. This combination of elements promoted the political consolidation of elite power and the economic growth at the expense of those groups less well situated. Peripheral communities were differentially incorporated into the lower hierarchical levels of the dominant polities, accelerating social inequality in and between local polities. It is in this sociopolitical and ecological setting that "strong leaders" like Shaka, "who ruled with terror," acquired a following, and incorporated neighboring polities (Eldredge 1995).

Of the trade proponents considered so far, most of which present materialist explanations of state formation in southeastern Africa, all emphasize African-European interaction, and all venture beyond explanations of African-induced internal warfare. Most authors see trade as facilitating the restructuring of the productive relationships and the transformation of sociopolitical institutions in and between the polities of the Delagoa Bay–Thukelaregion. One result of this reorganization was an increase in elite power and authority, which according to some authors differentially subjugated conquered people rather than fully incorporating them. Finally, all explanations are couched in a historical rather than strictly ecological, demographic, or evolutionary context while seeking to address the question of why internal and external political relations were ripe for change at this particular time and place.

COBBING'S REANALYSIS

Threads of an alternative analysis that undermines the geographic localism and European passivity of the Settler Model can be found in the work pioneered by Macmillian and his student Diewiet during the late 1920s and early 1930s but dismissed in the academy and political institutions of South Africa (Saunders 1995). This work has most recently been resurrected and elaborated on by Cobbing (1988), his students (Webster, 1991,1995), and others (John Wright 1990,1995a,1995b,1995c,1997).

Cobbing's (1988) inspiring initial reformulation of the Mfecane/ Difaqane with its powerful new insights precipitated the destruction of the Zulucentric Mfecane/Difaqane myth, transcending the old paradigm and igniting a serious rethinking of early-nineteenthcentury southern African history. He presented a provocative and enlightening argument that debunks many of the assumptions of the Mfecane/Difaqane theorists. It raises a host of questions and issues extending from the origin and identity of established southern African terminology to the magnitude and role of imperial European agency in the form of surrogates like missionaries, colonial officials, traders, early colonialist historians, and the Griqua and their relations to the slave trade at Delagoa Bay and the Cape. His rigorous inquiry is supplemented by an expansive, meticulous analysis of the fundamental conflicts and contradictions inherent in colonial struggles among all members of the capitalist social formation in nineteenth-century southern Africa.

Cobbing's expansive scope submits that Zulu military conquests were but one manifestation of an emergent capitalist global political economy impinging on southern Africa long before the emergence of the Zulu state. He seeks to illuminate African-European settler interactions by implicating African and European polities involved in slaving. Slaving supplied labor for external plantations and even more desperately needed local labor for internal colonization by means of trading and raiding campaigns representative of mercantile capitalism that radiated far beyond the highveld or Zululand. Therefore the notion of an internal revolution solely in terms of Zulu agency is both myopic and inaccurate because organized military regiments and innovations as well as continual exchange relations between southeast African polities and Europeans preceded and persisted throughout the reign of Shaka and Zulu state emergence (Cobbing 1988,485).

Cobbing contends that the Mfecane/Difaqane is linked to disruptive, destabilizing European forces emanating from the Cape, southern Mozambique, and other European colonies in southern Africa, which were in turn inextricably bound to the developing global capitalist social formation (Etherington 1991a, 3 and 12). The scope and scale of these forces have heretofore been purposely ignored by a settler version of South African history that considered the simultaneous events of the Great Trek and the alleged African selfdestruction of the Mfecane/Difaqane as isolated occurrences.

Cobbing focuses on the role of slave raiding in precipitating internal conflicts and asserts that slaving was the most consequential determinant disrupting African societies in the Delagoa Bay and Cape areas. Slaving altered demographics and social relations, incited political instability, converted social reproduction, and thus forced a restructuring of African polities in the region. Furthermore, he insists that European farmers, traders, and missionaries were in collusion and that their agents the Griqua and Korana were the principal sources of violence in the interior (see Eldredge 1995, Hamilton 1995, Hartly 1995, and Wright 1995c, who challenge Cobbing's views on the role of European collusion).

The work of Harries (1981) and Lovejoy (1983,1989), although not attempting to describe the connection between the Mfecane/Difaqane and the slave trade, clearly demonstrates that during the sixteenth century the external slave trade heavily affected southeast Africa. By the late seventeenth century, the European colonial frontier and the slave trade simultaneously expanded; by the eighteenth century, a vibrant slave trade dominated commerce between Europeans and Africans (Cobbing 1988,496), and internal factors intensified slavery as the external trade contracted during the nineteenth century (Lovejoy1989,390).

Cobbing concludes that the Mfecane/Difagane fable is "a tenacious and still-evolving multiple historical creation of the white supremacist version of history" and a critical linchpin of apartheid propaganda legitimized in scholarship, media, and cinema (see Hamilton 1989). It also serves as a multiple "alibi" removing any need for an explanation of the African past by ignoring and/or concealing massive external imperial agency to authenticate white occupation of the land and the ideology of separate development. Cobbing's explanations of the spatial distributions of white population movements augmented by the dearth of evidence for Zulu agency make very compelling grounds to repudiate the Mfecane/Difagane myth as an explanation for the depopulation and destruction of the interior African societies (Hamilton 1995). The concept of Mfecane/Difagane is Zulucentric, ideologically "loaded," and historically erroneous, and its ponderous apartheid baggage renders it untenable as a neutral descriptive historical category, because it is devoid of any analytical utility, it cannot be revived and must be abandoned (Cobbing 1988, 487 and 519).

Not surprisingly, such a strong critique has engendered considerable controversy. Much of it centers on the lack of records supporting an extensive slaving economy centered on Delagoa Bay (e.g., Du Bruyn 1991; Eldredge 1995; Etherington 1991b; Hamilton 1995; Meintjes 1991). We must be aware that slaving was illegal and therefore required the development and use of various euphemisms to cloak slaving activity. In addition, slaving was an extremely profitable enterprise that could generate power and finances to maintain missions and increase converts while keeping the overseeing agencies at "home" ignorant, or at least apathetic and happy. In the final analysis, this seems to be precisely the kind of case where an independent source of data, such as archaeological evidence, might help resolve the matter.

SUMMARY

The historical discourse about the forces underlying the Mfecane/ Difaqane has focused on the standard story, a Zulucentric version of African internal dynamics. Explanations have emphasized various anthropogenic environmental "causes" like ecological and demographic change. Vindicationist arguments from scholars of the African diaspora differed from their European counterparts in accentuating pride in Shaka's military accomplishments and some recognition of European agency. Trade advocates, with the exception of Cobbing, maintainedZulucentricexplanationsthatrecognizedAfrican-European interactionbutemphasizedAfrican conflictual relationsoverEuropeancontrolled commodities imported from Delagoa Bay.

Despite the variance in the range of debate over the Settler Model, the major shape of the arguments remains clear. The Mfecane/ Difaqane was precipitated by Zulu state formation and was the result of African internal dynamics. Even those who consider external interaction keep the variation minimal by not looking beyond Delagoa Bay. I have tried to show that there is only minor variation among explanations for the Mfecane/Difaqane and all the variance is rooted in the standard Settler Model. In Chapter 3, I describe the key issues in the standard story to generate the archaeological implications.

Archaeological Correlates of the Settler Model

This chapter addresses the problem of generating archaeological expectations for the standard story accounts by looking at ethnographic and ethnohistorical descriptions of the various African communities inhabiting the area affected by the Mfecane/Difaqane Matching documentary and archaeological records is often difficult because historians have an interest in social relations and tend to treat material culture as background, only rarely describing it in the detail needed for analysis. Therefore, to move to a comparison of these data sources, I have to translate, if you will, the historical accounts into archaeological expectations.

The goals of this chapter are (1) to show that each of the different "explanations" of the Mfecane/Difaqane shares a common set of assumptions about the nature of ethnic groups, their geography, and their history—in the words, the standard Settler Model of the Mfecane/Difaqane; (2) to present some archaeological correlates of the Settler Model as a means to assess its adequacy against the archaeological data. The chapter concludes with a listing of the specific types of sites predicted by the model for pre- and post-Mfecane/Difaqane, their architectural and artifactual contents, and their locations.

ETHNOGRAPHIC AND ETHNOHISTORICAL DESCRIPTIONS

The standard Settler Model of southern African history espoused by Omer-Cooper and others is anchored in three assumptions about pre-European–contact southern African people. The first anchor is the idea that southern African society was composed of a series of relatively discrete ethnic groups that had their origin in the past and that persisted into relatively recent times. The second assumption of the settler version of southern African history is that these ethnic groups were poorly articulated one to the other — thatittle systemic interaction between the groups can be used to understand cultural transformation. The third is the Zulucentric focus discussed in the previous section, namely, that these social relations were disrupted in the early nineteenth century by the Mfecane/Difaqane when local conditions led the pre-Zulu ethnic group to become a predatory state.

It is in the context of the settler paradigm that the Mfecane/ Difaqane proponents interpreted southern African history. A particularly key element is the so-called Bantu migration theory, This theory posits the relatively recent and rapid occupation of southern Africa by the migratory Bantu ancestors of the modern African people now inhabiting southern Africa (Huffman 1970; Phillipson 1993; see Diamond 1994, for a recent example of the uncritical acceptance of the Bantu migrations theory). This theory assumes that a new "race" of "Bantu" people, characterized by a common physical type, language, and set of cultural traits including metallurgy, agriculture, distinctive pottery, and animal husbandry, arrived in southern Africa and replaced or absorbed the earlier Ju/'hoansi (Khoisan) "race" (see David 1980 and Hall 1990 for attempts to debunk this theory). For instance, Omer-Cooper notes:

In South Africa the Bantu were relatively recent immigrants.... [I]t is unlikely that they were south of the Limpopo in any considerable numbers before the twelfth century AD at the earliest. (Omer-Cooper 1966,12).

Some evidence for this theory comes from the archaeological record. For example, because ceramics were part of the cultural traits associated with migrating Bantu, the apparent ceramic stasis of postfifteenth-century, pre-Mfecane/Difaqane southern Africa disclosed the spatial location of these ethnic groups.

As these later [pottery] forms have remained virtually unaltered until recent times, it seems almost certain that immigrants who brought them were ancestors of the present-day branches of the Bantu speaking peoples of South Africa. (Omer-Cooper 1988, 8)

Other evidence comes from the documentary record. For example, Omer-Cooper states:

Accounts of Portuguese sailors shipwrecked on the east coast, together with oral tradition,... [suggest that] the Xhosa, vanguard of the Nguni group, were settled near the upper Umzimvuba by 1300 and possibly considerably earlier and that by 1593 they had reached as far south as the Umtata River.... By the eighteenth century they had reached the Fish River and were beginning intensive settlement still further west when

Archaeological Correlates of the Settler Model

they encountered the first Boer farmers moving up the coast in search of grazing land. (Omer-Cooper 1966,13)

Hence, Mfecane/Difaqane theorists postulated certain pre-Mfecane/Difaqane ethnic group distributions, and settlement and architectural types farther into the past. Consequently, ethnographic and ethnohistorical descriptions of the various African communities inhabiting the area affected by the Mfecane/Difaqane can be abstracted and presented to examine the hypothesized locations and the archaeological correlates of these ethnic communities.

Many Africanist scholars have provided maps for different pre-Mfecane/Difaqane time periods (sixteenth through nineteenth centuries) indicating the distribution of the different ethnic groups in southern Africa (Bryant 1929 in Hall and Mack 1983, 167-68; Harinck 1980, 170; Hedges 1978, 10, 118, 136, 166, 171, 179; Legassick 1969,123-25; Omer-Cooper 1966,11,26; Shillington 1987,13 and 27). Almost all these authors have, at least implicitly, followed the Bantu migrations and Mfecane/Difaqane paradigms.

The consensus is that there were three major groups of people in southern Africa during the last five hundred years, two of whom, the "Nguni" and the Sotho-Tswana (Sotho and Tswana), belong to the southern "Bantu." The third major group, the Ju/'hoansi (Khoi-Khoi and San or Khoisan), are thought to be the original inhabitants of southern Africa before the Bantu migrations. The traditional wisdom is that Nguni and Sotho-Tswana agropastoralism allowed a much more rapid population growth and relatively high population densities and encouraged a more complex sociopolitical organization than the pastroforaging Ju/'hoansi (Khoisan) groups they encountered. Culture change, as discussed in the previous chapter, came about in Zululand with the resultant development of an expansionist state that disrupted the social relations among these various ethnic groups.

Evaluating the Settler Model involves developing archaeological correlates for various presumed actions. I begin by discussing the characteristics of each of the presumed initial major ethnic groups before the changes wrought by the Mfecane/Difaqane Then I consider features of southeastern polities expected under the Settler Model following the onset of Zulu state formation. This allows us to assess by means of archaeological material whether isolated ethnic groups of the character presented in the standard model precede the Mfecane/Difaqane and whether Zulu state formation precedes the disruptions of the Mfecane/Difaqane.

PRE-MFECANE/DIFAQANE GROUPS OF EASTERN SOUTHERN AFRICA

Nguni

Omer-Cooper (1988, 8) suggests that at contact the southern Nguni occupied the coastal lands between the Drakensberg and the Indian Ocean in and around the areas where the Mfecane/Difaqane was alleged to have originated. The Zululand area and its pre-Mfecane/ Difaqane inhabitants are described by Omer-Cooper:

Before ... the emergence of the Zulu kingdom under Shaka, Zululand and Natal were the home of a large number of relatively small Nguni tribes. (Omer-Cooper 1969, 208)

These populations were ... virtually hemmed in between the mountains and the sea and had no outlet to the as yet unoccupied or sparsely inhabited lands to the south except by forcing a way through the numerous tribes of Natal. (Omer-Cooper 1969, 213)

[They] ... had been in occupation of most of the coastal corridor ... for several centuries and the population in parts of the northern end of this corridor had been relatively dense from at least as early the seventeenth century. (Omer-Cooper 1969, 208)

Omer-Cooper, like most disciples of the traditional wisdom, followed Bryant's descriptions of the "Nguni" as an almost timeless homogeneous people in the past. In this context, "Nguni" was/is an ethnic designation applied to all pre-Zulu, non-Ju/'hoansi (Khoisan), non-Sotho-Tswana peoples in southeast Africa. This notion has since been challenged by a number of authors (Hedges 1978, Appendix I, 253–57;Marks 1967b, 1969; Wright and Hamilton 1985,1996). Regardless of its origins, I use this term because it has been incorporated into the Settler Model.

Settlement Pattern and Residence

At contact, Nguni lived in dispersed isolated settlements on hill slopes with water, fuel, gardens, fields, and pastures all within walking distance (Schapera 1967,151. Mfecane/Difaqane theorists, using the "typical" Zulu homestead as a model, assume that all Nguni were characterized by similar overall architectural oppositions dubbed the "Bantu/central cattle pattern" by Huffman (1982, 1984, 1986).

The Bantu/central cattle pattern consists of settlement units spatially distinguished by:

- 1. A cattle enclosure at the center of every settlement containing underground grain storage silos and serving as a sacred burial ground for local male ancestors.
- 2. An outer arc of circular dwellings located near agricultural fields, with the principal dwellings of the homestead head at the highest elevation up-slope of the central enclosure. The remaining dwellings in commoner homesteads were occupied by extended family members. Elite homesteads were inhabited by wives arranged according to seniority and status on either side of the primary dwelling to form a semicircle. To the left were lower-status "left-hand" wives, and to the right were higher-status "right-hand" wives.
- 3. The interior spatial layout of the homesteads and the dwellings was also symbolized by rigid male-right/female-left divisions, usually oriented at right angles to a sacred-back/ secular-front distinction (A. Kuper 1980, 1982; H. Kuper 1986). Homestead entrances were usually oriented downhill facing east, on sloping ground directly opposite the entrance of the central cattle enclosure.
- 4. A men's court was in or adjacent to the central enclosure. This central zone between the dwellings and the central livestock enclosure formed the area for public meetings, court procedures, political discussions, and ceremonies.

Sotho-Tswana

The migrations of the Sotho-Tswana into southern Africa and their subsequent dispersal throughout southern Africa are explained in the following manner:

The first [Sotho] migration may have entered Bechuanaland [modern Botswana] in the thirteenth or fourteenth century, and the ancestors of the present Tswana peoples were settled near their present habitat by about 1600. (Omer-Cooper 1966, 14)

The origin of the Kgatla Kwena chiefdom clusters was the main historical development in the Sotho-Tswana area from the sixteenth to the late eighteenth century ... [and] ... the expansion of these groups seems to have pushed some others into arid country on the fringes of cultivable land where they came into particularly close contact with surviving Khoisan groups. (Omer-Cooper 1988,16)

At European contact, the Sotho-Tswana inhabited the interior plateau region and less well watered areas west of the Great Escarpment. There were a substantial number of eastern Sotho who, since at least the seventeenth century, populated portions of the eastern Transvaal (Meyer 1984,224). Because of the scarcity of good grazing land in these areas, agriculture was emphasized over livestock herd-ing until recently (Legassick 1969, 1-18). Today the Sotho-Tswana populate Bophuthatswana, the Free State, and Lesotho. They are also scattered throughout Swaziland, Zululand, and the northern and eastern Transvaal among the Nguni.

Settlement Pattern and Residence

At European contact, the Tswana lived in large centralized towns surrounded by several miles of agricultural fields and extensive grazing lands, with cattle often kept at outposts located away from the towns (Shillington 1987,151. The Sotho lived in large compact villages larger than Nguni homesteads but smaller than Tswana towns although similarly structured (Omer-Cooper 1988, 10).

Colonial Sotho-Tswana settlements, towns, and village units typically ranged from 50 to 300 inhabitants (Schapera 1967). They were divided into wards or hamlets consisting of groups of patrilineally related families concentrated around the senior clan head's dwelling. The ward or hamlet was often in a single settlement but could also be scattered over the countryside (Legassick 1969, 99). Sotho-Tswana settlements surrounded a centrally located cattle enclosure. Although Sotho-Tswana ranked their wives, they did not organizeleft- andright-hand houses spatially (Omer-Cooper 1988, 12).

Ju/'hoansi (Khoisan)

The term *Khoisan* is a combination of the terms *San* and *Khoi-Khoi*. Both these terms were used by Europeans to describe pastroforaging communities in southern Africa (for a thorough discussion of these terms see Lee 1979,29-38,1993; Wilmsen 1989,24-26, regarding San; and Elphick 1977, xxi-xxii, considering Khoi). According to Lee (1979, 31 and 38, and 1993) the term *Zhu/twasi* or *Ju/'hoansi* ("real or genuine people") and the term *Khoi* ("the people") are the terms preferred by the people themselves. For our purposes, the term *Ju/'hoansi* is used. Khoisan is used only in direct quotes from Mfecane/Difaqane theorists and when explaining something about the term itself or its constituents.

Omer-Cooper describes the Ju/'hoansi (San in this case) as:

Archaeological Correlates of the Settler Model

the most ancient of southern Africa's surviving peoples ... [who] ... were hunting and gathering people who practiced no agriculture and kept no domestic animals except dogs. (Omer-Cooper 1988, 3)

In the Settler Model then, the Ju/'hoansi, unlike the agropastoral Nguni and Sotho-Tswana, are assumed to be gatherer-hunters with no cultivation. Documentary descriptions of Ju/'hoansi pastroforagers have most often focused on the polar types Khoi and San, labeling these in terms of ethnicity. Omer-Cooper distinguishes between the Khoi and the San in terms of political organization, economy, environment, and ethnicity. For instance, Khoi polities were based on cattle, whereas San "bands" were grounded in a gathererhunter economy. In describing ethnic differences he says:

In South Africa and Namibia the San coexisted with a related people known as the Khoi-Khoi.... The two peoples together constitute the group known as the Khoi-san peoples. The origins of the Khoi ... are still not known with certainty. It seems most probable that they began as a community of San who were in close contact with Bantu-speaking cattle keepers and adopted pastoralism from them. (Omer-Cooper 1988, 5)

This view can be compared with Shillington's (1987, 6) descriptions of the pastoral mode:

Compared with the San, the Khoi-khoi lived in larger, more settled communities ... because their livestock provided them with a steady supply of food close at hand. Nevertheless it was still necessary for them to move settlement several times a year... between mountain, valley and coast.

Settlement Pattern and Residence

Historical and ethnographic descriptions of Ju/'hoansi have focused on cave and rock paintings and "stone age" artifact assemblages but have supplied few details of settlement distribution, architecture, and the like. For example:

The San lived in simple shelters of branches or caves in the hillside, and lacked material possessions other than their bows and arrows. They entered into trading relationships with other peoples, exchanging animal skins and ostrich eggshell beads for other goods, particularly iron for arrowheads.... Like the San they [Khoi] did not engage in agriculture and apart from their animals their material culture remained very basic. For clothing they had only cloaks ... made from the skins of their cattle or of wild animals.... Their homes were simple shelters woven of branches, twigs and grass which were sometimes carried on the backs of oxen when they moved their encampments. (Omer-Cooper 1988, 5)

Omer-Cooper describes the population and locational attributes of the foraging mode:

The [San] men hunted wild animals using bows and poisoned arrows. The women collected wild bulbs, tubers and fruits, digging up the hard ground with pointed sticks weighted with heavy stones. They were organized into small communities; a hunting band was made up of a few hundred members at most. Each band occupied an extensive but clearly defined territory. Within this territory the band would migrate from waterhole to waterhole in pursuit of wild game and wildgrowing vegetable foods. (Omer-Cooper 1988, 3)

In addition ... small San communities survived here and there in isolated and barren pockets in territories long occupied by Bantu-speaking populations ... like ... the mountains of Lesotho ... until the second half of the nineteenth century. (Omer-Cooper 1988, 5)

A number of such [Khoisan] communities lived along the coast, feeding mainly on shellfish. (Omer-Cooper 1988, 7)

Shillington also describes Ju/'hoansi (Khoi in this case) settlement layouts and population estimates:

A Khoisan settlement was much larger than those of the San and at times contained up to one or two hundred people. They ... consisted ofbetween ten and forty circular dwellings ... arranged in a circle. (Shillington 1987,6-7)

Thus, Ju/'hoansi settlements are described as small, scattered ephemeral cave and open foraging sites and pastoral camps reflective of pastroforaging production.

DIFFERENCES BETWEEN SETTLEMENT LAYOUTS, BY ETHNICITY

Despite the prevalence of "Bantu/Central Cattle Pattern" homesteads at Nguni agropastoral settlements, the documents suggest "ethnic" differences in settlement architecture, dwellings, and other aspects of material culture, which differed slightly from group to group.

In describing Nguni settlements and those of the Sotho-Tswana Omer-Cooper (1988, 10) says:

As agriculturalists, the Bantu-speaking people lived a more settled life in more substantial dwellings than the Khoi. Most Nguni peoples built low, dome-shaped huts of woven grass. Sotho-Tswana, who relied rather more on agriculture than the Nguni, built substantial thatched round huts of mud. The lower parts of the walls of these houses were sometimes faced with stone as a protection against rain. Their cattle enclosures were also often built of dry-stone walling. Huts were kept free of dust by treating the floors with a polish made of earth and cow dung. The walls were frequently ornamented with geometric designs drawn in colored clay.

Sotho-Tswana dwellings were further distinguished from Nguni by other architectural features. For instance, houses were round with conical, pointed, detachable roofs and cylindrical mud walls (Omer-Cooper1966,133).

Proponents of the conventional wisdom generally see different ethnic groups, characterized by different material culture, house form, and the like, occupying different geographical areas. Some, however, recognize the simplicity and limitations of such generalizations. Omer-Cooper hints that ethnic communities might blend at the margins or frontiers of their principal territories. He cautions:

Though the Nguni-speakers of the coastal area could be distinguished from the Sotho-Tswana group of the interior plateau, the two groups were not entirely separate from one another. There were tribes of Nguni origin living on the Transvaal high veld and in parts of modern Lesotho, while on the edges of the Drakensberg and particularly in the north-east corner of the coastal corridor, in the neighborhood of modern Swaziland, Sotho and Nguni peoples were in close contact with one another. (Omer-Cooper 1969,208)

European and Mixed Communities

Finally, Omer-Cooper (1966,21-23,1988,52-44) acknowledges sixteenth-and seventeenth-century conflictual interaction between Europeans and Africans at Delagoa Bay and the Cape, respectively. Yet he argues that beyond their immediate areas of interaction, European-African conflict had little influence on the Mfecane/Difaqane.

The Cape frontiers including the Free State are presumed to have been occupied by Ju/'hoansi until the mid to late seventeenth century when Ju/'hoansi were joined by Nguni, European, and mixed communities living in these regions. According to the Settler Model, European communities were on the extreme southern periphery of Zulu expansion, but remained "relatively unaffected" by the Mfecane/ Difaqane except for accommodating fleeing refugees (Omer-Cooper 1966, 176). Mixed frontier communities had a greater impact on interior African polities.

Griquas ... established a fairly elaborate polity modeled on Boer conceptions. With their wagons, horses and guns they had a great military advantage over the Bantu and ... terrorized a wide area. (Omer-Cooper 1966,23) The discussion so far demonstrates that the present conventional understanding of southern African history, especially the Mfecane/Difaqane, is based on a combination of the direct historical approach and a dash of diffusionism. The pre-Mfecane/Difaqane communities and their spatial distribution across the landscape are read out of the contemporary ethnographic and historic documents. Equally important is the Zulucentric focus of the settler paradigm.

ARCHAEOLOGICAL IMPLICATIONS FOR PRE-MFECANE/DIFAQANE NGUNI, SOTHO-TSWANA, AND Ju/'HOANSI

The historical models discussed so far make up a series of hypotheses about sequential transformations in both the forces and relations of production, which, if correct, should be consistent with the archaeological data. Some predictions about the expected spatial distribution and association of objects, ecofacts, features, landscape, and site types can be derived from these hypotheses. Hypotheses drawn from the documents are organized into a pre-Mfecane/Difaqane period and a post-Mfecane/Difaqane period, which includes the Mfecane/Difaqane itself.

Recall that there are three basic propositions of the Settler Model: There are discrete ethnic groups; these bounded groups are only loosely articulated; some internal conditions in Zululand precipitated Zulu state formation and hence the Mfecane/Difaqane Although the assumptions of the Settler Model are very interesting, the question remains—Is the model true?

If the first proposition of the Settler Model is true, different ethnic groups should be distinguished by different architectural and artifactual forms as well as different geographic locations. If the second proposition is correct there should be little evidence of interaction among these ethnic groups. If the final suggestion, Zulucentricity, is valid, there should be evidence for the various hypotheses in the Zulu heartland but no such evidence or evidence of different conditions on Zululand's peripheries.

A variety of theories in the Settler Model's proposition of Zulucentricity account for the Mfecane/Difaqane. The anthropological literature and the debates from standard story historians suggest that three factors might be significant "explanations" of the Mfecane/ Difaqane: ecological change, external trade, and demographic change. Here are the implications for these variants of the Settler Model. If the ecological argument is correct, we can expect to find paleoecological evidence for widespread drought, and soil erosion and/or exhaustion in Zululand. If the trade argument is an adequate explanation of the Mfecane/Difaqane, we can expect that an expansion of trade in European items in Zululand preceded the period of Zulu state formation. If the population pressure and stress argument is correct, then we can expect that a dramatic increase in population in the area of Zululand during pre-Mfecane/Difaqane times resulted in the rise of the Zulu state.

The different variants of the Settler Model all share a common set of assumptions about the nature of ethnic groups and their site types, population movements through time and across space, changes in social hierarchy, and the kinds of long-range and local interactions that differentiate the pre-Mfecane/Difaqane from the post-Mfecane/ Difaqane.

For purposes of analysis, I assume that the settler version is accurate to generate archaeological implications of this model. I present the types of sites postulated by the model, along with their expected locations, dates and material culture correlates.

The documentary sources indicate that pre-Mfecane/Difaqane southern Africa was populated by Nguni and Sotho-Tswana agropastoralists who had come from the north into regions already occupied or at least seasonally used by Ju/'hoansi pastroforagers. The primary interactions were among and between the agropastoral communities with differing degrees of dependence on livestock and cultivation. Each group had certain "preferred" environments based on particular subsistence strategies. These interactions were crosscut by those among and between pastroforager communities. In some areas far removed from the Mfecane/Difaqane heartland, there was interaction between mixed communities and African communities.

The Settler Model also suggests that variation in size and density of settlements indicates differences in economic type. Such differences between Nguni and Sotho-Tswana agropastoral and Ju/'hoansi pastroforager sites should be greater than those among agropastoralists in distinct geographical regions.

Racially mixed settlements should be different from either those in African or European frontier communities. They should be aggregated in and restricted to the frontiers and found in environmental locations different from Nguni agropastoral settlements. For instance, "mixed" settlements could be in areas of open country with little concern for defensive locations, unlike horseless African communities. Historical documents say that mixed community architecture remained essentially African, with rectangular European structures usually restricted to public buildings (Fredrickson 1981; Omer-Cooper 1988; Shillington 1987). These settlements should contain both African and European structures, material culture forms, trash dump locations, and differences in diet indicated by food residues.

Nguni and Sotho-Tswana

Nguni and Sotho communities occupied the well-watered lands east of the Drakensberg escarpment in what is today southern Mozambique, the eastern Transvaal, Swaziland, Zululand, and southward to the eastern Cape (Transkei and Ciskei) (Omer-Cooper 1966, 4). Those Nguni and Sotho communities who settled in the areas that became the Mthetwa-Zulu heartland emphasized cattle herding over agriculture.

In these areas, we should expect a preference for river valley agropastoral settlements located to best exploit inland seasonal grazing as well as coastal hunting and trapping resources. We might also expect evidence of long-term occupation like deeper deposits and more pottery, especially larger storage vessels, along with evidence of storage facilities like grain storage pits. Furthermore, we might expect these sites to contain more and larger animal enclosures, with cattle remains dominating the faunal assemblages, than are found in areas less hospitable to cattle herding.

In the eastern Transvaal lowveld, only the northerly river valleys were suitable for cultivation and were free of tsetse fly and trypanosomiasis infestation. Thus, we might expect sparsely populated Sotho sites restricted to these fertile areas. These sites should also be clustered in the vicinity of permanent water sources, near productive agricultural land.

There should be more Sotho-Tswana communities in the western highveld plateau west of the Drakensberg than in the eastern Transvaal. These communities, facing ecological conditions less amenable to cattle herding, concentrated on agriculture. Therefore, on the drier plateau, we might expect agropastoral settlements to cluster around permanent water sources and to contain fewer and perhaps smaller livestock enclosures and more and larger storage facilities and vessels. However, the absence of insect-borne animal and human diseases would have enabled goats and sheep and perhaps moderatesize cattle herds to be kept.

The documents suggest negligible conflict between Nguni and Sotho-Tswana before the Mfecane/Difaqane. The major sources of conflict in these communities were internal fissioning as individual and group rivals sought political independence from their parent groups and periodic conflicts over grazing land, which sometimes resulted in raiding. Thus pre-Mfecane/Difaqane warfare among and between these polities should be difficult to detect, because those in authority often lacked the power to coerce others into more organized types of warfare.

Ju/'hoansi

Documentary descriptions of Ju/'hoansi pastroforagers have most often focused on the polar types Khoi and San, labeling these in terms of ethnicity. In modeling the settler logic, we can assume that whereas both kinds of sites should have been occupied and might be detectable, those focusing on foraging should have been inhabited in greater numbers. Despite the difficulty of distinguishing gathererhunters from pastroforagers (Maggs and Whitelaw 1991,6), an important distinction between these polar types is the presence or absence of livestock. Indeed, faunal remains provide the strongest basis for discriminating the different foci of the pastroforaging continuum (Yellen 1984, 64). Communities emphasizing pastoralism should be located in areas where there is access to good pasturage. Those emphasizing foraging should be located near reliable water sources and near foraging resources. These sites should contain greater amounts of seasonally stratified wild game and possible marine resources like shellfish, especially at coastal sites. Therefore, theoretically at least, we can assume what examples of each might look like archaeologically and where they might be situated geographically.

Ju/'hoansi sites would have been occupied for shorter times (principally determined by the seasonal availability of foraging resources) and by smaller, more mobile groups. This relatively short duration of occupation by less sedentary communities suggests that the sites should be smaller, less densely occupied, and widely scattered throughout areas unsuitable for agropastoralism. This should be true for both ephemeral, small, seasonal forager camps and open, temporary, pastoral camps. Consequently, these sites might be difficult to detect archaeologically, unlike cave and rock shelter sites, which might be less subject to human disturbance.

The year-round abundance of wild game and sea resources in the eastern Transvaal lowveld coupled with an environment generally unsuitable for agropastoralism suggests that Ju/'hoansi sites should predominate in the landscapes away from the fertile northern river valleys.

If ethnographic descriptions are valid, there may be some outstanding features of material culture associated with specific economic activity that can help distinguish Khoi from San settlements. For example, the presence of "pointed base" and grass-tempered pottery in archaeological assemblages can indicate Khoi, whereas the absence of ceramics and the presence of ostrich eggshell beads may identify San (Hall 1990, 44; Maggs 1971, 53; Phillipson 1993, 206). Perhaps disproportionate percentages of stone tools, circular stone digging-stick weights, and projectile points in lithic assemblages can be used to identify San as well. These classes of archaeological data can identify economic and ethnic differences proposed by the settler version of southern African history.

European and Mixed Communities

European and mixed settlements should be widely dispersed along the frontier and should exhibit European material culture and evidence of horse-dependent activities like stables, barns, and wagon maintenance equipment and materials. Despite the presence of African architectural forms at European sites, resulting from African captives and refugees, rectangular dwellings and structures should predominate among the domestic structures, such as houses, animal enclosures, and above-ground storage facilities. Mixed communities should have similar kinds of structures and material cultural forms, but the African cultural forms should predominate.

ARCHAEOLOGICAL IMPLICATIONS FOR POST-MFECANE/DIFAQANE COMMUNITIES

The variants of the Settler Model postulate that for various reasons Zululand became overcrowded, polities became militarized, and Zulu expansion and conquest dominated local and regional interaction. Zulu state formation is seen as the first event of this kind in southeast Africa south of the Limpopo River. Omer-Cooper (1966,34) describes the new military settlement type.

In the central area of the Zulu kingdom a series of military settlements was established.... These were modified to meet the requirements of a permanent standing army. Each of them was circular in construction and contained a royal section opposite the entrance. On either side were the huts of soldiers around a central cattle enclosure. Gibixhegu was more than three miles in circumference and contained about one thousand four hundred huts.... Each settlement also contained a section of royal women.

The Swazi underwent a similar transformation as they expanded into modern Swaziland by conquering various Sotho groups. The Swazi political system wadis a dual monarchy in which the nation wadis governed by a "king" (Ngwenyama) and a "queen mother" (Ndlovukazi), known metaphorically as the "twins" (emapahla). The "king" and his military regiments live at the administrative capital the (lilawu), while the "queen mother" and her military regiments live at the ritual capital (Umphakatsi). The Swazi were invaded by the Zulu, but only some of the young male population were soldiers housed at the military capitals (Kuper 1972, 613; Omer-Cooper 1966, 49).

The southern highveld in the Free State was invaded by several Nguni groups fleeing the Zulu-inspired Mfecane/Difaqane (Omer-Cooper 1966,86). These Nguni attacks caused many refugees to flee to the Cape Colony.

Under the impact of the devastation caused ... by the spread of the Mfecane, hundreds of Sotho refugees flocked into the Cape Colony hoping to find protection... among the white colonists. They came at a favourable time, for the 1820 experiment in settling British settlers on small farms... where they were to till the land without the aid of Bantu labour, had failed. Those... settlers who remained... were demanding large farms... and labour to work them. (Omer-Cooper 1966, 93)

Omer-Cooper (1966, 93) describes the Mfecane/Difaqane transformations in the areas of the southeastern Cape frontier and western Transvaal.

Before 1823 the area inhabited by the southern Tswana tribes (now divided between the British Bechuanaland District of the Cape Province and the Bechuanaland Protectorate) had enjoyed relative peace and prosperity. The cattle-raiding of the Korana and the banditry of the lawless Griqua Bergenaars had brought much suffering to some tribes but it had not fundamentally affected tribal distribution and way of life.

The following discussion of the effects of state and class formation on settlement patterns, site types, architectural and artifactual contents describes the kinds of archaeological materials likely to be encountered in the Mfecane/Difaqane period. The subsequent archaeological expectations are drawn from the documentary sources.

The Mfecane/Difaqane should have left a variety of material cultural traces in the Zulu and Swazi heartlands and on the peripheries, especially archaeological manifestations of military conflict and social inequality.

Heartland Sites

The social dichotomy between aristocrats and commoners should be more pronounced and generally manifested spatially by a core group of royal families and military commanders owing their allegiance, authority, and power to the king residing at heartland royal capitals. Permanently barracked at these royal military settlements were military regiments consisting of all unmarried men between 20 to 40 years of age and war captives. These sites and settlement units were imposed on a network of smaller commoner villages, with aristocrat homesteads being larger-scale replicas of commoner ones.

Because only older men, women, and children remained in these commoner villages, the predominance of age- and gender-specific material culture could aid in detecting the different settlement types. Centralized cattle demand imposed on these smaller heartland sites prompted a greater dependence on agriculture. Perhaps granaries might be expected to increase in number and size in these areas.

Archaeological evidence of heartland military barracks, such as standardized dwelling size, military shield production and storage facilities, and a predominance of male military objects and ritual artifacts that exhibit differential distribution according to genderspecific and functionally specific activities, should appear in these royal capitals. The central court areas of these enclosures should be relatively large and should contain broken beer pots, ash from council fires, slaughtered cattle from fines and tribute, wild animal bones, and other refuse from elite families using the court (Huffman 1984,4; Parkington and Cronin 1979).

Faunal remains can be used in a number of ways to detect asymmetrical social relations. Central enclosure size, as well as the number of enclosures of varying sizes, is an important index of the number of cattle at a site, which mirrors wealth accumulation and concentration and hence power relations (Hall 1981; Huffman 1984, 38;1986).

Denbow and Wilmsen (1983, 1986) and Hall and Mack (1983) have demonstrated that stratified polities in Botswana and in Natal, respectively, exhibited disproportionate distributions of cattle age classes, indicating social stratification among or between site occupants (see Tanaka 1990, 515, for an East African ethnographic case that does not support this archaeological supposition).

At elite centers, bones of young and prime-age animals should be prevalent, implying an elite cattle-culling strategy, resulting from selective consumption of prime animals and emphasizing higherquality beef and greater meat yield (Denbow and Wilsen 1983,1986). This pattern suggests that elites were further removed from the herding process and reflects differential access to power and wealth. Another culling pattern emphasizing older animals also found at a royal capital has been explained as reflecting a need for military shield production using cowhide (Plug and Brown 1982, 120).

Elite and commoner diets probably also differed in the relative proportions of items such as cattle, sheep/goat, and game as well as in different cattle body parts. Elites ate more beef than goats, sheep, or game and preferred different cattle parts (Shillington 1987, 12; Watson and Watson 1990).

Mortuary data can also shed light on social relations of inequality. Atypical locations, manner of interment, age of burials, and their contents have most often been used to gauge the degree of social stratification. For example, most Swazi and Zulu commoner men were buried at the entrance to their central cattle enclosures, unless struck by lightning or killed in battle, in which case they were buried away from the homestead. Royalty was/is buried in mountain caves (Berglund 1976; H. Kuper 1947).

Although social inequality may seem apparent in burial effort and types and number of goods interred, there is no automatic isomorphic relation between buried wealth and socioeconomic status without independent evidence. It is important to try to distinguish whether the ascriptive status being signaled is related to gender, social role, or something else.

Zululand and Natal

The settlement typology for these regions and this period should consist of at least six different types of settlement:

- 1. Many large-size, densely populated, heartland military settlements with long occupations, large storage facilities, and cattle enclosures located near prime agropastoral land.
- 2. Surrounding the large settlements described in (1), many smaller settlements with fewer and smaller livestock enclosures. Documents suggest that Zulu royal capitals were provisioned with agricultural produce supplied by these communities for their age-regiments serving at the capital. Thus larger grain stores in these sites can be seen as surrogates of forced sedentarization of full-time farming border communities. There may also be medium-size sites inhabited by local elite along with evidence of site desertion by displaced populations.
- 3. On the periphery, large, densely populated, clustered, and fortified settlements with defensive locations and constructions reflecting the absorption of refugees and conflict. Livestock enclosures and grain stores should be smaller and protected, dispersed away from settlements, situated in atypical, disguised, altered, or hidden locations, and/or fortified or built in caves and other not easily accessible locations. Perhaps these sites may have different material cultural traditions. Sites should be located and architecturally arranged to concentrate labor, minimize transport costs, and facilitate rapid mobilization and deployment of troops during crises.
- 4. Also on the periphery, various refuge sites like caves, rock shelters, and caverns should exist in otherwise depopulated zones or in areas heretofore unoccupied.
- 5. At the extreme margins, sites should resemble pre-Mfecane/ Difaqane medium-size settlements in showing little concern for defense, with medium-size livestock enclosures.
- 6. Initially there should be a variety of small-scale European settlements and African sites that are hastily abandoned. These should be followed by the emergence of large, ag-glomerated, densely occupied settlements around the European trading posts.

Peripheral Sites

Because the Mfecane/Difaqane was later amplified by the Mdlatule drought and famine in 1824-25 we might anticipate evidence of large-scale famine, scarcity, and hardship, particularly in the less powerful peripheral sites where cattle raiding caused a greater dependence on agriculture (Omer-Cooper 1988,531. Increases in "starvation" food preparation materials (i.e., grinding stones) and floral remains of the foods themselves or even settlements moved to locations where the foods are available could indicate such stress.

Because cattle are not frequently killed for food by commoners, they should be under-represented archaeologically at commoner sites, and both younger and older animals should be recovered, representing "natural" mortality (Marker and Evers 1976, 61). Primary producer herd-management strategy that only slaughters nonreproductive-age cattle and keeps cattle of both sexes until they are fully adult serves to preserve breeding stocks and emphasizes maximum increase in herd size (Denbow and Wilmsen 1986, 1513). Faunal assemblages at peripheral and marginal sites should reveal a culling pattern in which old animals (greater than 3.5 years) predominate. Hall and Mack (1983,187) argue that this conservative pattern is the typical herd profile for post-fifteenth-century commoner sites in Zululand as well as for today.

One definitive sign of the conflictual relations that permeated the Mfecane/Difaqane is the increasing intensity and severity of warfare. Battles took place at still-remembered locations away from the military settlements and usually in peripheral territories. These sites are often referred to both ethnographically and in local oral texts. For instance, the surface collection of one hoard from Isandlundlu Hill, the site of the battle between the Zulu and the Mpondo in 1827, yielded six spears including typical Zulu foliate-type spearheads, along with other southern Nguni spearheads (Maggs 1991, 132). The spatial configurations and combination of spearhead styles support the implication of a battle locale.

In regions where Europeans were involved in warfare, the evidence may be clearer. The earliest firearms in southeast Africa were African trade muskets and later flintlocks, dating from the sixteenth to the eighteenth centuries, many of which were surplus military weapons destined for the open grasslands of southern Africa (White 1971,177–83).Hall (1990, 139) argues that muskets and rifles were only occasionally available in the first part of the nineteenth century but Edgerton (1988,38) says that the Zulu were using muzzle-loading rifles in warfare since the 1820s. The records of European gun exporters detailing their exports to Natal and the Cape are sketchy for earlier periods and do not include illegally traded weapons (White 1971,183).

Essential local resources for conducting successful warfare dur-

ing the Mfecane/Difaqane were iron and iron production. Because iron-rich soils and the concomitant slow-burning tree types are generally restricted to the coastal areas, it is here that we should expect to observe important transformations of iron-producing sites brought on by the Mfecane/Difaqane. These transformations include increasing variability and numbers of sites and furnaces and perhaps increasing density of site distributions. Maggs's (1991, 132) studies of iron and metal hoards show no connection between their distribution and that of iron-producing sources. Hoards were found buried both in iron-producing settlements and in areas far from such settlements.

Finally, mortuary remains can indicate disease and starvation conditions alleged to be endemic to the Mfecane/Difaqane. Disease, nutrition, war-related traumas, evidence of injury, and mortality patterns can furnish information on differential diet and exposure to risk.

Swaziland, the Eastern Transvaal, Southern Mozambique, and the Highveld

After their defeat by the Ndwandwe (ca. 1820), the militarized Ngwane-Swazi ruling elite and their entourages seeking sanctuary moved north of the Phongola River into what is today southern Swaziland. Here they encountered and incorporated *Emakhandzambili* ("those found ahead"), many of whom sought refuge in mountainous regions for defense (Bonner 1983; Kuper 1947,13; Matsebula 1980,3).

Oral accounts suggest that the Swazi settlements and landscapes occupied during these moves resembled an elite military occupation with "true" Swazi along with elite clans of "those found ahead" living in the heartland, while "those coming after" lived on the periphery. Later, elite family members were strategically distributed throughout peripheral areas in an extensive network of royal villages, which served to better control, supervise, and administer local regiments and affairs and to monitor the borders against enemies (Bonner 1980, 1983; Kuper 1947; Omer-Cooper 1988). Documents and oral texts also indicate that only the elite possessed cattle, whereas commoners kept sheep and goats.

The Mfecane/Difaqane was precipitated in southern Mozambique by fragmented Ndwandwe polities after their defeat by the Zulu in 1818. The Ndwandwe remained the paramount African polity in the Delagoa Bay region, battling the Portuguese until 1828, when they were dislodged by the Zulu. The iron-working communities living in southern Mozambique were granted autonomy by the Zulu because they were blacksmiths (Omer-Cooper 1966, 37). This suggests that their expertise was necessary for iron production, probably for military technology.

Omer-Cooper argues that the interior plateau saw no population stress from groups fleeing the Mfecane/Difaqane. Offshoots of the Mfecane/Difaqane attacked the highveld polities and disturbed population distributions rather than adding to them. Escaping military polities from the heartland attacked polities on the Free State plains and caused refugees to abandon their ancestral homes and seek protection through incorporation into the BaSotho polity in their mountain-top fortresses in Lesotho or at colonial European settlements (Omer-Cooper 1966, 92). The Mfecane/Difaqane settlement typology for these regions should consist of at least seven different types of settlements:

- 1. Small- to medium-size nucleated military settlements with medium-size cattle enclosures located near prime agropastoral land in Swaziland.
- 2. Large sites with few and small animal enclosures in southern Mozambique.
- 3. Large agglomerated settlements with medium-size cattle enclosures on the highveld.
- 4. Many stone-walled settlements, except in southern Mozambique, near areas with adequate stone for construction.
- 5. Refuge sites like caves, rock shelters, and caverns.
- 6. Iron-producing sites in coastal areas.
- 7. European forts in coastal areas like southern Mozambique.

The Cape Frontiers

The settlement typology for the Cape frontiers at the extreme margins of the Zulu state during the Mfecane/Difaqane period should consist of at least four different types of settlements:

- 1. Sites resembling pre-Mfecane/Difaqane medium-size settlements except that they are more densely populated, reflecting absorption of refugees, with little concern for defense and with medium-size livestock enclosures.
- 2. Small- to medium-size European farmsteads.

- 3. Large, more densely occupied towns around European trading posts and mission stations.
- 4. Large, racially mixed settlements.

SUMMARY OF THE MFECANE/DIFAQANE ARCHAEOLOGICAL EXPECTATIONS

The conventional wisdom suggests that the earliest archaeological manifestations should appear in the Mfolozi-Phongola region. These archaeological correlates should be related to population increase, overgrazing, environmental destruction, conflict over pasturage, cattle raiding, centralized military polities, and migrations from the heartland into the periphery. The landscapes, architecture, and settlement distributions must have changed accordingly, with implications for the archaeological record.

As for the salient features of the settlement patterns, the Settler Model scenario implies a core area and peripheries, each with different types, sizes, and distributions of sites and settlements. Moreover, there should be a correspondence between wealth, political power, and settlement hierarchies. In the heartland areas of the different polities, large military capitals with more, larger, and elaborately decorated settlement units along with bigger central courts, storage facilities, and cattle enclosures located near prime agropastoral land are predicted. Such settlements should exhibit standardized dwelling size, male military object production and storage structures, and greater number and types of aristocratic and ritual materials. The network of smaller settlements in the heartland should contain fewer and smaller livestock enclosures and larger grain stores and should perhaps include some medium-size sites. The number of ironproduction sites and furnaces in the coastal heartland should increase dramatically. These differences in the heartlands should result in multitiered regional settlement hierarchies.

European and African peripheral settlements should be large and densely populated and should display clumped distributions with fewer, smaller, and more dispersed animal enclosures and grain stores than in the heartland. Refuge sites and small, abandoned European sites with circular and rectangular architecture are predicted. Peripheral occupations should have evidence of defensive considerations and/or relocation where "starvation" foods are available. At the extreme margins of the Zulu state, European and African settlements should appear relatively unaffected except for signs of refugee accommodation. Less-complex settlement hierarchies should characterize the peripheral and frontier areas.

Both heartland and peripheral small sites should exhibit a wide array of different livestock enclosure sizes and locations, indicating the presence of both cattle and sheep/goats. All settlements should exhibit the so-called Bantu/central cattle pattern with its up-slope location of the homestead head's dwelling. At heartland military sites, large deposits of cattle bones, especially in the central courts, should exhibit an "elite cattle-culling pattern" along with differentially distributed specific cattle body parts. When both elite and nonelite culling patterns occur in a single site, they should exhibit differential midden distributions.

Faunal remains at peripheral and marginal smaller sites should be numerically dominated by sheep/goat bones. When cattle are present, they should display a "primary producer or bimodal cattleculling pattern" representing "natural" mortality.

The most prominent features of mortuary remains for investigating the standard story of the Mfecane/ Difaqane involves differential location of burials, which reveals social status archaeologically evident in commoner homestead and elite mountain burials. In peripheral areas, skeletal remains with evidence of combat, burnt and abandoned settlements, along with locationally modified and architecturally fortified storage facilities, livestock enclosures, and settlements are expected. Battlefields might reveal African skeletal remains and African weaponry. European forts, towns, and farmsteads with evidence of defacement and burning are expected only at the margins.

CONCLUSION

The foregoing discussion has shown that advocates of the Settler Model have used colonial ethnography and historic documents to retrodict settlement arrangements, ethnic groups, and geographical distributions into the pre-Mfecane/Difaqane past. Documentary accounts are used to construct pre-Mfecane/Difaqane and Mfecane/ Difaqane models to generate potential archaeological implications. I now summarize several important points about these models and their expectations made in this chapter.

The first point involves the diverse ecological situations result-

ing in the differential distributions of Nguni agropastoralists and Ju/'hoansi pastroforagers and their site types and "preferred" environments. Conventional settler projections envision particular ethnic groups associated with different geographic regions, based on definite subsistence strategies. Nguni and Sotho agropastoral communities occupied southern Mozambique, the eastern Transvaal, Swaziland, Zululand, and the eastern Cape (Transkei and Ciskei). The Sotho-Tswana inhabited the western highveld, while the Ju/'hoansi occupied the Cape frontiers. In these areas, environmental constraints determined whether agriculture or livestock herding was accentuated. Thus in the Zulu heartland and Swaziland, cattle herding was emphasized over agriculture, while in the eastern Transvaal and southern Mozambique, cultivation and herding were restricted to certain areas. In the drier highveld, agropastoralists stressed agriculture and foraging, and pastoralism was the main mode of production on the Cape frontiers.

The second point concerns the expected settlements and material worlds for the pre-Mfecane/Difaqane and the Mfecane/Difaqane periods necessary to support the standard version of the Mfecane/ Difaqane. Pre-Mfecane/Difaqane economic and ethnic types should show differences in faunal remains, material culture, and site-size hierarchies and should be located in geographic regions suitable for their subsistence strategies. For example, African agropastoral sites should be large with deep deposits, located near good agropastoral land, and displaying a limited range of settlement types. African pastroforager sites are expected to be smaller, with shallow deposits, and widely scattered in areas suitable for pastroforaging. These sites are expected to have more hunted game, more lithics, far fewer livestock bones and also to arrange themselves in simple settlement hierarchies. Only at Delagoa Bay and the Cape frontiers are European and "mixed" sites and material culture expected to be present.

TheearliestarchaeologicalmanifestationsoffheMfecane/Difaqane should appear in the Mfolozi-Phongola region. The standard story predicts population increase, overgrazing, environmental destruction, conflict, and centralized military polities developing first in this heartland. As repercussions spread from this area, other regions should show the effects of contact with these militarized polities.

The heartland is expected to contain large military capitals and smaller surrounding settlements near prime agropastoral land with more dwellings, structures, cattle enclosures, and elite objects than do earlier settlements. These military sites should contain large deposits of cattle bones, characterized by an "elite cattle-culling pattern." Very complex settlement hierarchies should characterize this heartland area, along with evidence for ecological degradation, population growth, and/or external trade, all preceding the widespread disruptions of the Mfecane/Difaqane.

With the spread of the effects of Zulu state formation, areas away from the heartland should show evidence of defensive considerations and/or relocation, refuge sites, abandoned African and small European sites with fewer, smaller, and more dispersed animal enclosures and grain stores than in the heartland. Sheep/goat remains should dominate faunal assemblages, and cattle, when present, should display a "primary producer cattle-culling pattern." Human skeletal and artifactual remains, settlement location, and architecture are expected to reveal evidence of conflict.

On the Cape frontiers, European and African peripheral settlements should exhibit clumped distributions of large, densely populated sites with circular and rectangular architecture.

My final point concerns the role of colonial categories in the production of historical knowledge about southern Africa. All the preceding interpretations are still influenced by colonialist concepts, specifically, the myth of a Zulucentric Mfecane/Difaqane, which disregards African/European and intra-European interactions and capitalist penetration. Therefore, matching these historigraphic constructs against an independent database is critical for checking the Settler Model's accuracy and for rooting out colonialist biases.

In Chapter 4, I show that previous archaeological research in southern Africa has always assumed that the Settler Model is accurate. The model has therefore structured the questions that researchers were trying to answer. This page intentionally left blank.

Previous Archaeological Research

An overall goal of this chapter is to describe the previous archaeological research to indicate the kinds of questions the researchers were trying to answer. I show that the previous archaeological work addresses a variety of important questions but always assumes the accuracy of the Settler Model. Therefore, I organized my fieldwork to question the assumptions of the Settler Model.

In this chapter, I (1) discuss recent trends in historical archaeological theory to help sharpen the problem of definition and to clarify the theoretical and methodological choices; (2) briefly summarize the nature of the archaeology of the pre- and post-Mfecane/Difaqane and pay particular attention to surveys versus individual site investigations to identify site reports to be used in further analysis; (3) describe my fieldwork and summarize the survey procedures I used and the data I collected in Swaziland.

THE ARCHAEOLOGY OF THE MFECANE/DIFAQANE PROBLEM: APPROACHES TO AN ARCHAEOLOGY OF IMPACT

Symbolic and Structural Approaches

Analytic attempts at an "archaeology of the mind" (Hall 1993) seek a logical understanding of a culture through the use of emic taxonomies and meaning systems. These cognitive approaches emphasize the concept of a cultural mind constructed from a combination of attributes that assume meaning and that create, operate, and mediate the various structural oppositions in a culture. The most influential proponent of this school in southern African archaeology is T. N. Huffman.

Elaborating on the ideas of A. Kuper (1980,1982), which identify fundamental oppositions as part of an underlying structural order in the spatial arrangements of African settlement architecture, Huffman (1980,1982,1986) presents a settlement layout model grounded in such oppositions for southeast African peoples. He names this model the "Bantu cattle pattern" and claims that it represents the cognitive code and rules that govern settlement architecture and that ostensibly reflect the Bantu symbolic system.

Structuralist models have been criticized by several scholars on a variety of grounds (Davison 1988; Hall 1984c, 1992,1993; Hodder 1986;Kus 1983;Leone andPotter 1988a and 1988b). Because symbolic models tend to view archaeological materials as diagnostic of conservative behavior, they ignore the historical context of colonialism and thereby implicitly justify the political economic status quo. Leone and Potter (1988a and b) criticize this lack of social responsibility by asserting that ethical problems arise because the knowledge used to construct these models was acquired in a context of cultural hegemony, from which a form of unconscious political oppression results. Thus, structural-functionalist approaches not only obscure power differentials like social relations of domination and resistance but are also insensitive to issues of change.

Symbolic approaches curb the possibility of investigating the archaeological materials as products of human agency by masking the cultural perceptions and ambiguity necessary for an understanding of how people use these structural principles. Concern with human agency reveals how the material world is used as an active social resource, open to strategic manipulation by individuals and groups in the activities of social life. Ordinary objects are meaningfully orchestrated in mediating, negotiating, perpetuating, contesting, and transforming social relations through time and space (Bodenstein and Raum 1960; Davison 1988).

In sum, the relations between social relations and their spatial material portrayal is complicated, scale dependent, multidimensional, and mediated by cultural experience and ideology. These relations involve both historical and current political, ethical, and logical issues and are products of multiple axes of variability and occur on a variety of scales. Their meanings are context dependent, socially constituted, and continually reproduced through social action.

Historical Archaeology

In southern Africa, the primary archaeological focus has been on the "stone Age" (Hall 1993; Perry 1991, 1998). A major practical problem resulting from this bias is that upper levels at such sites, although containing historic archaeological materials, have generally been ignored and often disturbed. This concern with the "Stone Age" was mystified under the guise of seeking early human origins in southern Africa. As significant as these discoveries are, they neglect the contemporary African populations and reflect the typical colonial focus of "controlled relationships with the past." This approach involves a denial of history by disregarding the archaeology of the more immediate ancestors of the modern African people.

In recent years, a considerable number of Africanist archaeologists have conducted research on later historical southern African sites. They have demonstrated the utility of combining archaeological and ethnohistorical approaches by focusing on the connection between archaeological data and oral traditions (e.g., Evers 1984; Maggs 1976a, 1976b, 1980; Markerand Evers 1976; Perry 1991; Scully 1978; Van der Merwe and Scully 1971; Wright and Kus 1979).

Early historical archaeology of whites in southern Africa focused on restoration of elite European structures. Most of this research was done by cultural historians and architects and was carried out for cultural history museums and invariably published in specialized cultural history journals. For example, Mason's (1975) excavation at Potchefstroom, a late-nineteenth-century British fort, was published in a military history journal. Mason and colleagues (1981) began work on nineteenth-century European farming sites on Remhoogte Farm in the Transvaal. These sites have been referred to as "cultural history relics" (Mason, Houmoller, and Steel 1981) in distinguishing them from historical sites occupied by Africans. I have seen no further research on these sites in general archaeological publications such as the *South African Archaeological Bulletin*.

In the mid-1980s, South African archaeologists became increasingly interested in the historical archaeology of European colonial sites. Around this time, H. Vos, the first full-time historical archaeologist in South Africa, excavated sites in Stellenbosch, while Abrahams (1984) excavated Van Riebeeck's mid- to late-seventeenth-century fort at the Cape and Deacon (1984) excavated Fort Selwyn.

Archaeology of the Underclass

More recently, members of the Historical Archaeology Research Unit of the University of Cape Town have embarked on several Cultural Resource Management projects. They are concerned with understanding the changing attitudes about the function of commodities in the daily life of eighteenth- to nineteenth-century white working-class households in urban Cape Town. They are also involved in investigating the material culture expressions of class-racenational-gender social relations and forms of resistance among the dispossessed African proletariat who came to the Cape as wage laborers and captives. This "archaeology of the underclass" has produced a growing number and variety of excavations generally in and around Cape Town. Such sites range from waterfront towns to the officialVOC (DutchEastIndiaCompany)headquarters; to Vergelegen, an eighteenth-century Cape VOC government estate (Avery 1989; Behrens 1992; Cruz-Uribe and Schrire 1991; Hall and Malan 1988; Hall, Halkett, Klose, and Richie 1990a, 1990b; Markell, Hall, and Schrire 1995; Saitowitz, Heckroodt, and Lastovica 1985; Schrire 1988; Schrire and Deacon 1989; Schrire, Cruz-Uribe, and Klose 1995). There is also increasing interest in marine archaeological research on historical shipwrecks off the southeastern coast (Meltzer 1984; Willcox1984).

Avery's work at the main house at Paradise (a small, early eighteenth-century outpost, later turned garrison) produced a predominance of mostly crossbred European and African sheep species and only a small proportion of cattle. The body part frequencies, however, indicate differential access to meat: Working-class soldiers' quarters yielded the lower limbs of old animals, while choice, meatbearing cuts from younger ones were associated with military officers (Avery1989,116).

Excavations on the late eighteenth- through early nineteenthcentury Barrack Street Well, located in an underclass neighborhood, examine the impact of urbanism and wage-labor capitalism that ensued with the colonization of the Dutch by the British. This research is particularly significant because it demonstrates a greater need for critical attention to contradictions between historic documentary sources and recovered archaeological materials. The Barrack Street Well research indicates that written documents obfuscated and "sanitized" race, class, and gender relations to facilitate capitalist social relations and colonial commercial investment. The archaeological excavations revealed both men and women's possessions that allow contradictory interpretations of class, race, and gender relations. Disjunction between written and archaeological data suggests that the particular historical context of each type of data can reveal the dynamics of often-veiled social relations (Hall et al. 1990a).

The Archaeology of Impact

A final theme in southern African historical archaeology, designated "the archaeology of impact" by Hall (1993), assumes the concept of the frontier as an intricate, volatile zone of interaction where the economic and political impact of European penetration was felt by Africans long before actual colonial settlement (Hall 1990, 1993). If this were the case, then archaeological evidence of "impact" encounters should be present at a variety of southern African sites. Early satellite sites such as mission stations, which often required African captives and refugees to accept material culture as part of their conversion process, are locations where "impact" may be seen. Other locations include European pastoralists' homesteads, forts, and trading posts. Archaeological materials from African sites, for example, glass trade beads as early indicators of coastal trade contacts between Europeans and African ruling classes, have been recovered in large numbers at various African capitals as well as at some Ju/'hoansi pastroforagersites. Interactions between Europeans and pastroforagers are especially significant because many mixed groups exiled from the Cape later turned to cattle, and slave raiding but have received no archaeological attention (Hall 1993, 185). One potential source of information depicting initial colonial interaction is rock art scenes, but the primary thrust of such studies remains cognitive analyses (Lewis-Williams 1981, 1982, 1984, 1989; but see Campbell 1986 and Dowson 1995, for examples of studies more concerned with the relations of rock art and European penetration).

Schrire's archaeological research on Oudepost I, a seventeenththrough eighteenth-century Dutch trading outpost and military garrison at the western Cape, was perhaps the first excavation of a historical military site whose focus was European and Ju/'hoansi social relations. Schrire's research has contributed significant insights into the devastating impact on both the wild and the domestic food resource base of the Ju/'hoansi pastroforaging economy by Europeans, which resulted in dispossessing Ju/'hoansi from their lands and forced them into dependence on Europeans (Cruz-Uribe and Schrire 1991; Schrire 1988, 1996; Schrire and Deacon 1989; Schrire et al. 1995).

In addition, she found "Late Stone Age" lithic assemblages in association with European colonial material culture. This "raises questions about the cultural attribution of prehistoric artefact assemblages elsewhere." Thus she concluded that "it is the context and not the form or typology that will inform on who produced them" (Schrire and Deacon 1989, 105, 110).

Because class and state formation are part of the standard Settler Model of the Mfecane/Difaqane, the archaeology of the Zulu, Swazi, Pedi, and Xhosa states is particularly relevant. These polities represent anomalous cases of state formation because although they were able to field large armies, incorporate neighboring polities, control vast areas, prevent fissioning, and resist European colonization, it is difficult to discern distinct classes. Thus, they are particularly crucial for understanding class and state formation in southern Africa.

There has been little archaeology in the areas to the south of Zululand (e.g., the eastern Cape, formally the Transkei and Ciskei) and no archaeological research concerned with the Pedi or Xhosa states. The only archaeological research in the Transkei and Ciskei of which I am aware was conducted by McKenzie (1984). His research focused on environmental deterioration in the areas of the eastern Cape after the fifteenth century.

Zulu state emergence was examined in the context of an ecologically focused settlement pattern study by Hall (1981). In this study, he concluded that the Zulu state could have arisen from internal ecological stress in the form of an imbalance between resources and demand as grazing availability declined and stock density increased (Hall 1981, 178). The Zulu state could have also possibly resulted from:

overall increases in demand following internal reorganization of the Iron Age economy, for instance as a result of a political need to support a non-productive class or to meet the demands for tribute imposed by a more powerful neighbour. (Hall 1981, 166)

The dilemma for archaeologists, however, lies in the fact that "events which led to the formation of the Zulu Kingdom must best be explained as due to the reorientation of economic demand from within farming societies" (Hall 1981, 178). The effects of economic demand, however, are difficult to distinguish archaeologically from those of climate stress and soil erosion. Unfortunately, "this however, is a domain that, because of limitations in both data and in methodology, is at present inappropriate for archaeology" (Hall 1981, 178).

More recently, Simon Hall (1995) used archaeological data from seventeenth- through nineteenth-century Sotho-Tswana settlement transformations and locations through time to examine the impact of

the Difagane in the western and southwestern Transvaal. He argued that the post-fifteenth-century western Transvaal shows three types of settlement strategies. The first type is stone-walled hilltop defensive settlements with abnormally low frequencies of cattle bone and glass beads. Between 1650 and 1750, these settlements began to rapidly aggregate into larger towns with perimeter stone walling. Simultaneously, another settlement type with different dwellings and layouts appears on the sides of steep hills. By the nineteenth century, Sotho-Tswana began to occupy underground cavern systems in settlements indicative of loose, fragmented communities under severe stress (S. Hall 1995,309). Simon Hall suggested that the initial settlement aggregation may have had local causes, but the accelerated regional aggregation after 1750 followed by the occupation of large-scale underground refuge villages with livestock was notable and "strongly underlines that a range of additional causes are sought. The increasing impact towards the end of the eighteenth century of the northern Cape frontier provides one possibility" (S. Hall 1995, 321).

This small sample of historical archaeology performed on European and African sites tantalizingly demonstrates the creative and productive integration of historical documents, oral texts, and archaeological data and is indicative of a promising future for such research in southern Africa.

THE ARCHAEOLOGICAL SURVEY OF SWAZILAND AND THE MFECANE/DIFAQANE PROBLEM

This section describes my fieldwork, the ways that I collected and organized archaeological data from southern Africa, and the methods I employed to investigate the Mfecane/Difaqane problem. The data from the Swaziland (Fig. 4.1) survey were complemented by the addition of other known post-fifteenth-century settlements mentioned in the ethnographic and historic literature, oral texts, and other archaeological sites with post-fifteenth-century components located in Swaziland. A broad survey of mostly published and some unpublished archaeological materials from this time was conducted and combined with the Swaziland data to expand them and establish a more robust database.

An archaeological survey is an economical way, in terms of time and financial costs, to provide a frame of reference for analyses and interpretation. The underlying assumption is that the spatial organi-

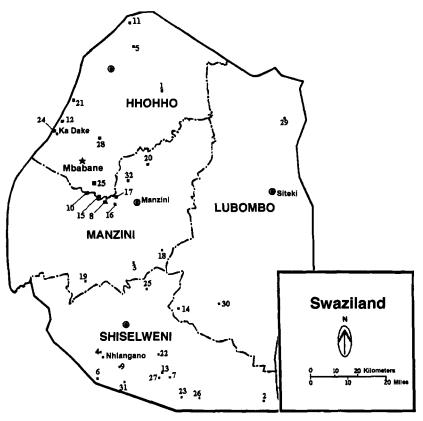


Figure 4.3. Map of Swaziland with sites used in the analyses.

zation and distribution of archaeological materials including settlements, landscapes, and sites of varying size and function are related to economic and political organization. It is in the investigation of the archaeological data on variability, configuration, structure, and content of historical sites that the documentary story of the Mfecane/ Difaqane with archaeological data is confronted.

Excavations

Two complementary survey procedures were employed: one to sample materials at or near the present ground surface, the other to explore more deeply for the presence of cultural material. The precise localities for excavation were chosen based on indications from aerial photos, discussions with oral historians, and density of surface materials.

After identifying the location of the site, it was generally given a minimum confirmed size. A fixed grid consisting of a number of squares measured in meters was surveyed over the site. The exact size depended on the site size. The squares were then subdivided into one-meter squares, which made up the actual excavation units. The site was mapped and walked over, and different artifact-class concentrations were marked with differently colored flags (red for ironrelated materials, white for ceramics, yellow for stone tools, etc.). Only some kinds of artifact samples, such as all rim sherds, were collected from the surface. The density of surface materials generally determined excavation locations. The underlying assumption is that surface-artifact densities are proportional to subsurface concentrations. Royal site excavations, however, concentrated on the middens at the upper ends of the sites where the homestead head resides, because ethnohistory and the excavations at uMgungundlovu have confirmed that such middens are more likely to yield richer archaeological materials (Hall and Mack 1983,174; Parkington and Cronin 1979). Thus the approximate loci of the central enclosures were sought from the oral historians.

Three sites were excavated in one-meter-square shovel tests by natural levels. The archaeological excavation procedures involved establishing a grid for each site excavated. Features and test units were then mapped in relation to fixed survey datum points. To control vertical measurements, temporary datum points were arbitrarily established near each excavation unit, with permanent structures (Somhlolo'srockatLobambaLomdzala; atree at ShishelweniNkundla, etc.) selected as convenient reference points. Numbered east-west lines and alphabetically marked north-south lines were placed 10 meters apart, and each intersection was marked by a wooden stake. All measurements for plan views, profiles, and stratigraphy were taken from hand-held, leveled lines attached to the temporary datum point. The coordinates and elevations of all temporary datum points were later surveyed in relation to the previously established site datum.

Excavation units were consecutively numbered with Roman numerals in each sample square. Stratigraphic level designations marked by Arabic numerals were given to each stratum of each excavation unit, and all measurements were metric. Four minimum and maximum opening and closing depths were recorded in the field catalog for each unit. Soil samples were collected and labeled with the appropriate catalog number. Our technique for collecting excavated soil samples was to trowel 500-gram samples into plastic bags from various levels. Stratigraphic profiles and plan views were consistently drawn for all excavation units. Photographic documentation of the field work included 35-millimeter black and white print, color, and infrared slide film. All formal photographic records of archaeological deposits included a metric scale and north arrow.

All soil deposits were first screened through 13-millimeter (½inch) mesh and again through 7 millimeter (¼-inch) screen mesh to secure the recovery of small items such as botanical remains, beads, and bones too small for the larger mesh. Our excavation deposits did not exceed 70 centimeters and had a mean of 49.5 centimeters depth of deposits, which is more or less typical for post-fifteenth-century sites in southern Africa (Mason 1975). All cultural material retained in the field was placed in labeled paper and plastic bags and transported to the National Museum's laboratory in Lobamba, Swaziland, for sorting, washing, labeling, storage, and analysis. Bag labels included provenance information as recorded in the project catalog.

Excavation was done by two teams of two people each when possible, composed of the permanent members, myself, Dunsani Sethebe, and whomever we could recruit. After the first month, Musi Khumalo and some Swazi and U.S. students were also involved. Dr. T. N. Huffman of the Department of Archaeology at the Witwatersrand University also took part and provided much valued and appreciated assistance in terms of time, labor, companionship, and expertise as well as access to collections at his archaeology laboratory at Witwatersrand University in Johannesburg. Archaeological collections were obtained from the 19 sites located along with other available "Iron Age" sites sampled earlier for comparison. Initial excavations revealed general locations of high artifact density and others where little or nothing was found. Further site survey and more extensive excavation is required for these sites to be studied to their full potential.

The Sites

Many Swazi sites, and all Swazi royal residences *(umuti wenkosi)*, have more than one name, not unlike Swazi kings' names. They are often alluded to by an official designation and locally by another term. Royal capital names are repeated in an irregular rotation serving to symbolically link them to the past (Kuper 1986, 9). Each new royal residence is inaugurated by a new king and is correlated with his

name(s) (Kuper 1947, 72). After the king's death, the ancient royal capitals are "kept awake" by successors who send royal wives to rule under the care of the *Ndovulakazi* until the new heir and his mother take control.

S151

S151 eShishelweni Nkhundla (the old scene or field of action [Rycroft 1982, 51]), Esikoteni (a branch of the Ndwandwe clan), or Emlotheni ("at the ashes") is a late-eighteenth/early-nineteenth-century royal capital and the ancestral home of the Swazi nation. It is located in the middle veld in an area with fertile land, a low incidence ofdrought, and access to year-round grazing. Bonner (1983, 14) suggests that this represents a greater concern with grazing and hence the importance of cattle in the early Ngwane/Swazi economy.

Oral accounts suggest that this royal residence was first occupied by King Ndvungunye (reigned 1790), who established his first *Lilawu* at Shishelweni (Matsebula 1980,13). King Sobhuza I (reigned 1815) also lived there before he and the "true Swazi" fled northward from the Ndwandwe, who are said to have sacked the site (ca. 1817). Most of the Ngwane/Swazi population remained behind as subjects of the Ndwandwe; still others under Maitawane moved into the western Transvaal. Thus, Shishelweni was probably occupied by "true Swazi" between 1790 and 1815, a period of 25 years, its later occupation coincident with the so-called Mfecane/Difaqane.

H. Kuper (1947, 12; 1986, 12) notes that her cultural experts informed her that huge quantities of ash were seen at the site when the Swazi arrived, suggesting previous inhabitants or sacking. Kuper fails to indicate the reigning king at the time of the Swazi arrival. This could have profound implications for Swazi historical accounts and for the position offered here: If Shishelweni was sacked before the arrival of the Ngwane/Swazi, then who had been occupying the area? Were the attackers Ndwandwe, Boer, or even Griqua slave raiders from the Cape periphery or perhaps British "frontier ruffians" from Natal? Both Griqua and "frontier ruffians" are known to have been operating at that time (Cobbing 1988).

Test square I was located approximately 30 meters up-slope northeast of the central enclosure at the location of the heaviest concentration of pottery encountered during the surface survey and was opened to a depth of 48 centimeters. This area contained a tree, which is not uncommon ethnographically; important meetings and courts were held there. There were three animal burrows in the west wall and one in the north wall of Test square I, indicating disturbance by ant-bear (*Oryc-teropus afer*). Despite this, Test square I deposits were treated as a single component because the site probably represents a single occupation by one group for less than a generation.

The excavations recovered a lot of typical post-fifieenth-century ceramics, one piece of which had applied bosses like those found in Zululand at Elangeni (1750s), a KwaButhelezi settlement (Hall and Mack 1983, 180), and Nqabeni (1700s), a KwaKhumalo "Type B" stone-walled settlement, which had three such pots (Hall and Maggs 1979,168).

Many diagnostic bovid (cattle) bones, 35 percent of which were burnt, were recovered in all levels, with heavier concentrations in the upper levels (42 cm). Caprine bones (sheep/goat), some of which were burnt, were recovered from Level 3. Dense burnt dung occurred throughout Level 2, ranging between 3 and 5 centimeters on all walls. There were three red glass beads ranging between 2.5 to 5 millimeter diameter, two hematite nodules, a tubular bone bead (ear plug?), and a round shale object in the top 42 centimeters as well.

Test square II was opened about 30 meters down-slope, southeast of the enclosure and about 80 meters southeast of Test square I. It revealed some post-fifteenth-century pottery in Levels 1 and 3. The rim-to-body sherd ratio was .20, with 38 rims to 187 body sherds. Some diagnostic cattle bone, about 85 percent burnt, came from Level 1; Level 3 contained diagnostic goat/sheep bone, about 40 percent of which was burnt. One green chalky ocher piece from Level 2, two quartz cylindrical points from Levels 1 and 2, respectively, and one quartz object from Level 3 were also found. What appears to be a daga (hardened manure) floor lens was detected running for about 40 centimeters along the east wall in Level 2.

Botanical specimens associated with disturbed soils were retrieved from several locations (Chippindale 1979, 604): *Sporobolus pyramidalis (umSingizane)* from inside the central enclosure; *Graminae cynodon dactylon (isiFulwane)* from the furrow where Test square I was opened; and from outside the furrow, *Fabancae rotalaria* (catstail grass) and *S. pyramidalis*.

SI48

LobambaLomdzala (old Lobamba), Kalangabane, or Entshakabili (burnt twice by Shaka) was a *Lilawu* built by Sobhuza I (born 1800, ruled 1815-1838, died 1839) ca. 1820 after leaving eShishelweni (Matsebula 1980, 17; Perry 1987). Bonner (1983, 24-34) argues that Sobhuza I's flight from eShishelweni and his resettlement at S148 were more like a military occupation in Sotho territory than a settled administration. It was still functioning during the reign of Mswati II in 1852 under the name of Ekufiyeni (Bonner 1983,118; Honey 1915, 32; Matsebula 1980,381. Thus Lobamba Lomdzala was probably occupied from 1820 to at least 1852, a total of 32 years.

S148 is located near Nokwane Hill in the Lusushwana River Valley in the transitional zone of the middle veld, with access to excellent cattle-grazing land, as well as fertile agricultural soils. Oral accounts attest to its location as an excellent vantage point from which to view the surrounding valley and hence enemy advances.

Test square I was placed at the northern limits of the site survey area at the approximate position of the central enclosure, which also contained a tree. Because the modern inhabitants along the road that now divides the old enclosure from the more southerly up-slope dwellings were reluctant to grant us permission, we surveyed only the areas north of the road and neglected up-slope locations. Excavations went to a depth of 46 centimeters but were sterile.

Test square II was placed at the locus of a heavy concentration of surface ceramics approximately 7 meters northwest of Test square I farther up-slope of the enclosure. A trench was sunk between plowed contours to minimize any disturbances, to a depth of 60 centimeters. This square contained an abundance of post-fifteenth-century ceramics in all levels. The square contained a rim-to-body ratio of .36, with 43 rims to 121 body sherds. Two distinct pottery concentrations were found in Level 2, one in the square's center and another in the northwest corner. The northwest corner collection contained a larger pot with an upside-down smaller pot inside¹ and

¹At S134 Siphiso Cave in Swaziland at a depth of 35 centimeters, two brewing pots (eMadziwi) were recovered upside down, one inside the other; the outer pot resembles U-shaped bowls from Mabhija (1690–1885) in Zululand (Maggs 1982). The measurements of the Swaziland pots fit into the range of Hall's (1981) Zulu pot rim diameters for open-mouth bowls. This is a common occurrence in western Africa according to A. Stahl (personal communication, 1992). Huffman (1972, 68) in describing Shona ceramic production, notes: "A small hole is dug about 60 to 90 cm deep and the pots placed on top of each other, mouth down." Klapwijk (1989) describes Transvaal royal pot burials in which a large pot containing human remains is sealed by a smaller one placed inside the larger one, but these pots are not inverted. S. Azizi (personal communication, 1989) has suggested to me that pots inside each other may reflect the potters' use of old bases in the production process, and bases may be in the spot where pots are being manufactured, accounting for the lack of bases in archaeological assemblages in southern Africa.

was overlaid by a 3-centimeters-thick lense of burnt cattle dung. This concentration was not treated as a feature because an undetermined portion remained inside the wall and rendered the boundaries indistinct. The finds, however, were separately bagged, with the general limits sketched onto the plan view.

Some rodent bones were recovered from all levels along with many diagnostic cattle remains, some of which were burnt. Diagnostic sheep/goat bones, none of which were burnt, were restricted to Level 4, suggesting that they could have been part of a pit fill.

Lithics found at the site included hammer stones, pottery rubbing/ smoothing stones, circular grinding stones, one stone scraper, some quartz fragments, and a scratching stone, underneath the silicified dung concentrations in the northwest corner. Glass beads in a variety of colors were found at all levels, with diameters between 2.5 to 5 millimeters. Level 1 contained two (green and aqua); Level 2 had two white/ivory; Level 3 had eleven beads (red, ivory, gray, white, blue/ green, brown, and yellowish with red edges and black spots), while Level 4 had one white bead. There were several iron objects: a nail 6.4 centimeters long and 4 millimeters wide, closely resembling heavyduty square-cut nails used in heavy construction, recovered from historical archaeological sites in the United States (Schuyler and Mills 1976, 74);² an iron ring (3.5 cm diameter) or perhaps a child's bangle or band, and another iron object in Level 1; and a long (17.5 cm) pointed implement (an iron awl?) that resembles a photograph of a spike spearhead from the Dargle hoard (Maggs 1991,133, Fig. 5, #11) and a spike from Rongpoort (Maggs 1991,133, Fig. 6, #5) in Zululand in Level 3 along with a possible bone ring. Ostrich eggshell pieces were also found in Levels 3 and 4. We also uncovered what appeared to be another daga dwelling-floor lens, approximately 12 by 8 centimeters, in the southeast portion of the square coming out of the south wall at the base of Stratum two, which began a "clean" interface at Level3.

There were some botanical specimens reflective of human disturbance at the site: *Rhynchelytrum repens* in the ploughed fields and *Sporobolus pyramidalis (umSingizane)* outside the cattle enclosure.

²There are many ethnohistorical accounts describing the procurement and use of nails from European vessels. For example, historic sources allude to the fact that Cape Nguni would burn shipwrecks to obtain nails: "[T]he Mpondo take masts and remove the iron to make assaygies and lances" (Carter 1782,6, in Shaw and Van Warmelo 1974,107). In addition, iron nails were sometimes used in local exchange networks and were often reworked into objects with new functional uses.

S149/S22

The last site excavated was S149, Kadake stone-walled BaSotho ruins (Londozi site [Price-Williams 19801) occupied around the eighteenth and nineteenth centuries in the highveld just west of the Londozi River. This excavation is important because it is not a royal Swazi residence, but rather an *Emakhandzambili* ("those found ahead") settlement.

Cultural experts and oral historians from the Magagula clan, one of the major Sotho clans in the area of S149, were interviewed and consulted about the ruins. Their direct ancestors were in northwestern Swaziland when the Ngwane/Swazi arrived. Oral traditions suggest the Kadake settlements were occupied during the reigns of Mswati (ruled 1839) and Mbandzeni (ruled 1875) and thus occupied for at least 36 years (Perry 1987). With the rise of the Swazi state, the Swazi king displaced the Sotho ritual power to become the supreme rainmaker for the nation.

Swaziland's northwestern highveld contains hundreds of stonewalled settlements located on the slopes of V-shaped valleys. These sites extend into the southeastern Transvaal and are clearly visible on 1:30,000 winter aerial photographs. From such photographs, an area was selected for survey and excavation near the Mzima homestead where excavation materials could be stored because the site was 10 kilometers from the road and in very mountainous terrain.

The survey area contained a series of stone-walled circular structures constructed from locally available talc schists and linked with more stone walling to form curvilinear enclosures and horizontal terraces with livestock tracts, similar to those found throughout the eastern Transvaal highveld (Evers 1975; Mason 1968). Many of the sites contained stone mounds, probably from field clearance (Price-Williams1980).

I found three basic types and dimensions of stone-walled settlements at Kadake, all with down-slope-facing entrances:

- A. Primary enclosures linked with secondary walling to another enclosure, ranging in size between 2 to 3 meters in diameter.
- B. Individual enclosures between 5 to 6 meters in diameter.
- C. Primary enclosures sharing walling. This type was the most abundant and showed the most variability in size and pattern. The central enclosures range from 8 to 10 meters in diameter, and the adjoining enclosures range from 1 to 4 meters in diameter.

The largest type relatively near the Nzima homestead was chosen for clearance and excavation. In addition, nearby were some early-twentieth-century European industrial structures we were also investigating. This steep hill slope had three other Type C structures and some Type A and B structures as well. The Type C structures' walls were generally 1 meter high and 1 meter across at their top, similar to stone-wall dimensions at Nqabeni in Zululand (Hall and Maggs 1979; Hall 1984c, 70).

Two test squares were selected based on Sotho archaeology in the Transvaal and suggestions of the Sotho cultural experts. Test square II was a "garbage dump" area at the northern end of the site, virtually sterile and filled with rubble to a depth of 60 centimeters.

Test square I was a "kitchen" area at the southern portion of the site about 50 meters down-slope southeast of Test square 11, also containing a lot of stone rubble. It was opened to 86 centimeters and produced three plain black-body sherds typical of post-fifteenth-century ceramics and sheep/goat remains from Level 1, some of which were burnt. Also retrieved from Level 1 were lithics, including a hammer stone, a cylindrical quartz tool point, a soapstone object with a circular central depression, and several soapstone cobbles in Levels 1 and 2. Several pieces ofred ochre and ostrich eggshell pieces were found in Level 1. Burnt wood fragments were recovered in both levels and were probably used for cooking and heat during the cold nights in the highveld. Samples of the wood were collected and taken to the National Herbarium in Molkerns, Swaziland, to be identified as to genus and species as well as to be dated by carbon-14 techniques. These results must await future funding.

According to Feely (1985), some *Acacia* species are associated with early village sites in the Transvaal, but he does not specify which species these are. There were several *Acacia* species present at Kadake. *Acacia divinorum (umGwali)* and *Acacia karroo (isinga)* were located outside the stone walls. *Rutaceae Zanthoxylum capense (umNungwane)*, a citrus tree thought to be associated with iron smelting when found in atypical locations (Feely 1985, 10), was found outside the stone walls as well.

S158

S158 KaHhohho I or Ezibondeni (wall/dip/valley in mountains) or Hlobane was the *Lilawu* of either Ngwane II (1695–1755)or III (1750–80)(died 1780) (Bonner 1983, 14; Matsebula 1980, 12; Perry

1987) or Ndvungunye (ruled 1790), Dlamini III (1680–1730), and Sobhuza I (ruled 1815, died 1839) (Perry 1987). It is located in the southern middleveld, and it too has access to different veld types on the Ngwede River near Mlosheni in a valley surrounded by several mountains.

The oral histones and the surface collection indicated the site's importance, and it was scheduled for excavation, but an auger test showed bedrock at 25 to 35 centimeter depths coupled with a less than enthusiastic response to excavation by the local populace, whose homesteads were located on the site itself. Therefore, we canceled the excavations. The site was surveyed and mapped, and an intensive surface survey was conducted.

The surface survey revealed a massive area of burnt cattle dung exposed by erosion, which did not appear to be continuous, along the truck road that runs directly through the site. Surface ceramics consisted of 1 rim and 30 body sherds, all undecorated, a rim-to-body ratio of .03. Various lithics including a large (17 cm) scratching stone, several hammer stones, and some quartz pieces were collected from the surface. A remarkable iron hoe 23 centimeters long and an iron leg from a pot, along with diagnostic cattle bones, were also retrieved. Botanical specimens collected were from none of the known types that suggest human activity or disturbed soil.

ARTIFACT PROCESSING AND ANALYSIS

All recovered specimens from the 19 surveyed sites including the 3 excavated sites were processed, analyzed, and curated at the National Museum laboratory, Lobamba, Swaziland, in 1987, and in the City University of New York Graduate Center archaeology laboratory in New York City from 1988 to 1992. All artifacts were cleaned, cataloged, labeled, and inventoried, to be eventually placed in a computer database before returning them to the National Museum in Swaziland. Materials were sorted into the following classes.

Ostrich Eggshell

Ostrich eggshell is found fairly often on African archaeological sites, where it is usually taken as evidence of Ju/'hoansi pastro-foragers. One piece was found at S148.

Pigments

Hematite ironstone specularite has been exploited in Swaziland for body decoration since AD 400 at Ngwenya. Among southern Africans, pigments have special ritual, spiritual, and medicinal significance, especially when used by both Swazi (*iZangoma* "blood of the earth") and Zulu (*Inyanga*) healers, who use pigments on dead bodies and bones (Mbatha 1960,92). Pigments also serve a variety of other functions such as decorative material for making cosmetics, decorating ceramics and clothing, coloring and closing the pores of blankets to maintain warmth and repel vermin, and coloring and dyeing other objects (Shaw and Van Warmelo 1974, 202).

Hematite nodules were present only at the excavated sites S151, a royal residence, and S149, a commoner residence. They were not encountered in any of the surface surveys.

Burnt Dung

Burnt dung, sometimes referred to as vitrified or silicified dung, is cattle manure that was burned as fuel. It can be identified by fired soil nodules in a midden with a more granulated texture than "regular" ash (Huffman personal communication, 1987). Denbow and Wilmsen (1983) have used dung deposit depths to indicate herd and site size and site duration and to classify settlements in Botswana.

In Swaziland, we found several such burnt dung concentrations but none as deep or wide as those found in Botswana. This situation suggests smaller sites with shorter occupations in Swaziland, which supports the oral texts. For example, the largest area of burnt dung is found at S158, and is 30 to 40 meters wide, and extends to a depth of 25 to 35 centimeters. These dimensions fall within the small site size and short duration for Botswana sites.

Ceramics

Although some Swazi cooking and drinking vessels had geometric designs during the 1940s and even today, (Kuper 1986,49) in postfifteenth-century archaeological collections throughout southeast Africa, undecorated, utilitarian ceramics predominate (Hall 1981; Hall and Mack 1983; Hall and Maggs 1979; Maggs 1971). Post-fifteenthcentury Swaziland ceramics are generally thin, undecorated graphite wares. They are usually black, gray, dark red, or buff with black mottling. When present, surface decoration consists of incising, burnishing, some applied bosses (small pieces of clay in a sequence), red hematite painting, and black graphite coloring (Sonkayane personal communication, 1987; Khumalo personal communication, 1987).

In Swazi society, women potters produce coiled ceramic vessels. The clay is collected from stream bed deposits, sun dried, and crushed to remove impurities. The walls of the pots are smoothed with a stone and placed outside to dry. Pots are then fired in a grass-covered pit along with slow-burning wood.

The most common ceramic vessels in modern Swaziland are the U-shaped open bowls and pots for cooking, water/beer serving, and group drinking and the smaller pots and larger beer-fermenting and -brewing pots.

Few post-fifteenth-century sherds from the Swaziland excavations have been large enough to permit the reconstruction of vessel size and shape profiles or formal metric analysis based on different characteristics of technology and vessel form and function. Furthermore, because the overwhelming majority are undecorated, stylistic analysis is largely precluded. Those sherds that are large enough, along with some almost complete vessels, tentatively indicate that utilitarian wares for personal household cooking/serving/eating dominate the Swaziland assemblages.

The sites containing pottery had a combined rim-to-body sherd ratio of .25, with 109 rims to 431 body pieces. Most sherds are plain, thin (less than 7 mm), smooth in texture and temper, burnished with red ochre or graphite, and well fired. There are only two decorated sherds, one from S151, which had applied bosses below the rim, and a surface rim sherd collected from S156 Mbekelweni, a late-nineteenth-century royal residence of Mbandzeni (ruled 1875). This sherd is buff with an impressed single horizontal groove parallel to the rim, with oblique hatching or comb stamping on the rim, similar to a motif found on pottery from the Eiland salt factory, a pre-fifteenth-century site in the Transvaal (Evers 1979, 98).

Metal Objects

Both oral and written texts claim a long, prestigious tradition in the eastern Transvaal, Natal, and Swaziland for iron specialists until their subordinate incorporation into military polities during the Mfecane/Difaqane. In Swaziland, certain hereditary clans, *Inyanga yokukhandza insimbi* (skilled ironworkers), had ritual power; they were held in high esteem and exchanged iron goods for cattle. Oral texts suggest that some of Shaka's iron blades were made in southern Swaziland by the *Gwebu* ("scum/froth ofbeer"), the *Shiba* ("add condiments to food"), and the *Mkhonta* ("those who seek asylum") (Induna Khumalo in Perry 1982, Tape B2,50; Price-Williams personal communication, 1985).

With the consolidation of the Swazi state during the mid-nineteenth century, these clans were held in low esteem and not allowed to accumulate wealth or prestige. Forced to live on the periphery of the kingdom, they took on low-status ethnic designations (Bonner 1983; Perry 1991,4). Archaeological excavations in Zululand indicate that some of these specialists did live at military capitals (Parkington and Cronin 1979; Plug and Roodt 1990).

Kuper (1947,143) notes that iron is not buried with individuals in Swaziland but is curated and that the forge is located away from the homestead and agricultural fields as is also the case among the eastern Transvaal Sotho (Evers 1975,761, the Cape Nguni (Shaw and Van Warmelo 1974), and the Zulu (Maggs 1980). The abundance of iron-smelting sites throughout the northern Mkhondvo Valley, in the Komati Valley, and in the Nottingham Hill areas above the Mkhomozane River attest to the importance of iron production in Swaziland. These sites are generally located near the lowveld where iron ore deposits and ample slow-burning tree species occur (Sithebe in Perry, 1987). The few dated furnace sites are all pre-fifteenth century (Price-Williams 1980; Beaumont 1972).

The iron-production process in Swaziland uses either subterranean bowl furnaces or elliptical furnaces with goatskin bellows that direct air through the tuyeres (fired clay blowpipes modeled onto the sides of the furnace) into the furnace, while the smelted iron runs into clay receptacles (Kuper 1947). Iron hammers and large anvil stones were used to complete the shaping of implements. There are several botanical species associated with iron-smelting sites in southern Africa: *Combreturn imberbe* at Phalaborwa (Van der Merwe and Scully 1971); *Euclea divinorum* at Hluhluwe (Hall 1980); *Combretum apiculatum, C. imberbe* and *Terminalea sericea* at Square (Van der Merwe and Killick 1979,63); and *Accacia caffra, A. ataxacantha,* and *A. burkei* at Mahbija (Maggs 1982, 140).

Many of the Swaziland sites investigated contained metal objects, and an iron-working site and three iron furnaces were located

during the survey. S160 site located near Inhlanhle Mountain just east of the Kahhohho I site contained an elliptical furnace eroding onto the road surface and another furnace in very poor condition on the western edge of the road. Both were considerably flattened by motor vehicle traffic. The most complete one was 40 centimeters wide by 76 centimeters long and resembles furnaces from the east unit at Hluhluwe (1680-1850) in form and dimensions (see Hall 1980). S161 Sitobela is a badly preserved furnace eroding out of a *donga* located near the Mhlayhuzane River.

The Maghebukeleni site (S152) is located about 5 kilometers southwest of Mashila, a pre-fifteenth-century iron furnace in the Mkhondvo River Valley, an area inhabited by the KwaGwebu who are renowned ironworkers in Swaziland. This site consists of a circular clearing with a diameter of 24 meters, with an opening facing eastward about 50 meters downward into a large *donga* gully. This *donga* contained large amounts of surface iron cinder slag (a waste product of iron working) with visible charcoal nodules and bloom (a spongy iron semisolid mixed with slag, charcoal, and other debris) piles, postfifteenth-century body sherds, stone tools, and a few dimple-faced hammer stones presumably for crushing ore and iron slag.

None of the botanical specimens collected from these sites was a known species associated with iron smelting or atypical of the environment, or a slow-burning species, or diagnostic of human activity.

Faunal Material

The faunal material from the excavations was tentatively identified by Dr. T. N. Huffman, myselfand Musi Khumalo. It was classified by animal species, diagnostic and undiagnostic bone, and burnt and unburnt bone. Animal bone was present at all excavated sites, and most of it was burnt. Most surveyed sites turned up faunal remains, but none of it was burnt.

There did not appear to be any wild animals suggestive of local hunting or trapping. Excavated assemblages seemed to be dominated by bovids (cattle), about 35 percent of which were burnt, at all levels except for the faunal remains from S149 the BaSotho site, which yielded only ovicaprids (sheep/goat), 40 percent of which were charred.

If this pattern is a general one, it can support oral histories that suggest that only the aristocrats possessed cattle and that sheep were taboo to all members of the royal Dlamini clan (Kuper 1947,45). This pattern may also indicate environmental constraints because the highveld is not conducive to cattle herding but is good for sheep and goats. It may also mean that elite Sotho lived elsewhere, closer to the middleveld with their cattle. The Sotho oral historian proudly informed me that "many *imfukwana* (the sacred royal herd of the Swazi king) were taken by the Swazi king from the Sotho of Kadake" (Magagula 1987, in Perry 1987, tape B3).

Beads

The primary use of beads and beadwork is ornamentation and decoration of men, women, and material objects. Beadwork and bead production are female crafts in southeast African society (Mbatha 1960,99).

By the early nineteenth century, beads figured prominently in African social relations: Cattle could be purchased with them (Shaw and Van Warmelo 1974,199); they formed part of marriage payments and regulated the love life of unmarried men and women; they indicated specific social, ritual and gender statuses; and they functioned in the installation ceremonies of political personnel.

Beads have played an important part in both inter-African and African-European trade. Southeast African sites yield beads produced from a variety of materials such as brass, iron, copper, clay, bone, and glass. Beads are also produced from perishable materials like seeds, leaves, wood, and other plant material with aromatic properties.

Archaeological evidence of bead manufacturing in southeast Africa comes from the sites of Harmony (1680-1820s) in the eastern Transvaal, which mass-produced beads of copper, bone, clay, and glass, and unMgungunglovu (1828) in Zululand, which produced copper, clay, and brass beads made from brass wire imported from Delagoa Bay (Parkington and Cronin 1979).

Glass beads are by far the most numerous type recovered and because they are imported, have aided archaeologists by providing a relative dating technique (Davidson and Clark 1976). For example, royal blue translucent hexagonal and round beads are the most common and well-known nineteenth-century beads recovered in southern African sites (Evers 1974, 35). Their popularity and value, however, have resulted in their curation by many African groups. These prized heirloom beads complicate the chronology somewhat and result in greater diversity in archaeological collections (Evers 1979). Glass beads themselves have been remanufactured in an African context. For instance, neutron activation analyses of garden roller beads and certain other blue-green beads from Bambandyanalo (K2) and Mapungubwe in Zimbabwe indicate that garden roller beads were made by reworking the blue-green beads (Davidson and Clark 1976,17). They were transported on large strings to regional elites for dissemination to local elite for regional networks (Fagan 1969, 11; Shaw and Van Warmelo 1974).

Imported glass beads, especially the large dark blue cane beads, came into southeast Africa from India up until 1660, after which they came from Europe (Shaw and Van Warmelo 1974, 198). The Portuguese plunder of the East African coast devalued copper, destroying the local copper industry in the eastern Transvaal, and glass beads replaced copper as the internal exchange medium in small transactions in the Delagoa Bay–Natalregion (Slater 1976, 152).

Our Swaziland excavations turned up 3 small red glass beads from S151 and a tubular bone bead. Red beads were highly coveted and used in local exchange networks by sixteenth- and seventeenthcentury southern Africans (Lee 1979, 78; Shaw and Van Warmelo 1974,191; Wilmsen 1983). There were also 12 small beads from S148, all with diameters between 2.5 to 5 millimeters by 1, smaller than Evers's (1982) beads from Lydenberg but within the range of those recovered by Evers (1979, 104) and Chatterton, Collett, and Swan (1979, 117) at Harmony.

Lithics

Stonework was performed principally by men, but lithics were used by both men and women for a variety of purposes in southeast Africa. The more general purposes might include grinding stones *(muti)* with an understone for grinding maize, pigments, snuff, and plant materials; hammer stones; bored stones with a central round hole used as digging-stick weights; stone for sharpening metal tools; stone axes for felling trees; house foundation stones and those used to construct houses, steps, cattle enclosures, and stock tracts; hearthstones; fall-trap parts; anvils for ironworking; and flat stones used for grain-pit covers. The Swazi and eastern Transvaal Sotho also used rounded stones for burial markers for nonroyal graves.

Our surface survey collections recovered many of the above types of lithics such as dimple-based hammer stones, lower grinding stones with broader, more circular hollows emblematic of later periods (Maggs 1980, 11-12), and modified chipped stone pieces and fragments suggesting maize and pigment production, indicating that these sites were used on a more permanent basis. Huffman (personal communication, 1985) suggests that grindstones and multifractured hand stones are reflective of specialized maize preparation in the highveld before 1750.

Our excavations revealed pottery rubbing stones and "scratching" stones that were identified with the aid of Swazi cultural experts. At S149, there were soapstone cobbles and soapstone objects with circular central depressions that could have been unfinished or flawed soapstone bowls used in salt production (Evers 1979).

S148 and S151, both royal residences, contained some cylindrical quartz points/objects whose function is unknown. There were abundant quartz pieces found at S150 Nsalitje cave, which according to local Swazi was a known quartz production site in the recent past. Posnansky (in press) mentions "Ghana strike-a-lights," which are produced from unmodified chunks of quartz and are part of the western African tradition of recycling raw materials. Unfortunately, no illustrations or measurements are given for comparison with the Swazi quartz objects.

Similar quartz crystals have been found in eighteenth- and nineteenth-century African-American captive cabins on plantation sites in the south often as part of a cache of other objects. Such objects have also been found grouped and displayed in front of hearths, outside entryways, and in the northeast corners of rooms where African captives lived and worked in the "urban" north (Singleton 1995,131; Singleton and Bograd 1996, 23). We have recovered some quartz crystals apparently associated with burials both from inside the graves and from what may be from the grave surface, at the eighteenth-century African burial ground in New York City (Perry 1996b, 1997a, 1997b). In BaKongo and African-American burials. surface decorative objects frequently function as sacred "medicines" of admonishment and love, to honor the spirit in the earth, guide it to the other world, and prevent it from wandering or returning to haunt survivors (Thompson 1983, 132). Thus these spiritually powerful objects have been linked to an African religious tradition of managing the spirit world, through a divination system called *minkisi* (plural -*nkisi* = "singular") practiced in West and Central Africa and throughout the African diaspora. Minkisi is believed to be used in curing and conjuring rites to predict the future, help heal the sick, and protect the house and its inhabitants (Thompson 1983).

S150 Nsalitje cave in the southeastern lowveld was brought to my attention by some local Swazi, who informed me that it was an ancient coal mine in use since the 1880s and still used by Swazi to mine coal. The Swaziland Department of Mines identified the coal samples as anthracite, which Swazi prefer because it is smokeless and leaves little ash (Bowen 1978,78). There were undecorated body sherds, stone tools, and many quartz pieces collected on the site surface. On the other side of the hill from S150, we located an area about 100 square meters, which appeared to be a modern quartz production center with approximately 7 to 10 huge piles of quartz nodules (Perry 1987).

SUMMARY

The Swaziland research suggests that events and place names associated with the later sequences from the oral traditions and the genealogical lists reveal important details about Swazi society in general and the rise of the Swazi state in particular. Discrepancies in the various accounts seem to suggest that disputes over succession had earlier precedents that continue today (Perry 1991). Some sites with historical referents may, at least tentatively, be corroborated by some archaeological evidence. The oral texts suggest that *enshakabili* (burnt twice by Shaka) and *Eshishelweni* (the place of burning/the hot country) were sacked. Test excavations at these sites have yielded large quantities of burnt bone, soil, and dung. On the other hand, burnt materials in central enclosures likely indicate residue from elite families using the court (Huffman 1984, 4).

This evidence could also represent areas for pottery firing, court fires, or samples of large ash middens, located between agricultural fields and the main entrance to the cattle enclosure, which cattle were herded through on their way to the enclosures so that ash adhering to their legs would reduce infestation ofticks and other pests (Hall 1981; Huffman 1984,1986). There was no evidence at either site for dung removal evidenced by lowering of enclosure floors, and charcoal lenses suggesting that trees were available for fuel were found.

One major problem with my Swaziland research is the bias toward elite and politically powerful areas. More survey is needed away from political centers to better indicate how state formation affected the social organization and dynamics of nonelite households. Such studies can also help us better understand the history of modern political dynamics in Swaziland. Another limitation is the small number of sites excavated and the small scale of the excavations themselves. On the other hand, given the virtual absence of any postfifteenth-century archaeology in Swaziland itself, this research represents a beginning.

It is clear that archaeology is a valuable and necessary adjunct to oral and documentary research in establishing a diachronic framework to study historical processes. With the development of more sophisticated methodologies of interpretation of oral texts coupled with an archaeology informed by such traditions, expectable results can contribute to southern African archaeology by complementing and improving understandings based on the historical record.

To address the questions that I have proposed in this book requires combining the Swaziland research with other post-fifteenthcentury research in southern Africa. It is to this synthesis and analysis that I now turn.

COMBINING THE SWAZI AND OTHER SURVEYS: ARCHAEOLOGICAL RESULTS

Chronological Limitations

Historical archaeology in southern Africa is fraught with problems when we seek to fine-tune chronometric dating of historical periods. Fluctuations in atmospheric radiocarbon during these periods coupled with broad ranges of standard deviations preclude precise dating of archaeological materials. Recent research on carbon-14 dating resulting in the Struiver and Becker calibration curve has shown that calibration works globally; region-specific calibration curves are not needed (Stuiver and Pearson 1986). Nonetheless, several carbon-14 calibration curves for southern Africa have been devised, and there are a number of chronologies for southern African sites (Hall and Vogel 1980; Maggs 1977; Maggs and Whitelaw 1991; Parkington and Hall 1987). In the current absence of any other choice, I have accepted these dates on face value and have given the time range of the probability values of their standard deviations.

There are other useful methods of dating the later historical periods in southern Africa. For example, archaeomagnetism has been successfully used by Henthorn, Parkington, and Reid (1979) to date African iron furnaces at uMgungundlovu. The analysis of datable imports such as European glass beads has also been used (Van der Merve and Scully 1971; Davidson and Clark 1976).

A number of useful chronological typologies developed for stonewalled enclosures and structures in southern Africa have been utilized (cf. Collett 1982a, 1982b; Hall 1981; Jones 1978; Maggs 1976a, 1976b; Mason 1973). For example, Type B settlement units, which are assumed to date from the sixteenth through early nineteenth centuries in Zululand, have been shown to be characterized by *robbing*. *Robbing* is a relative dating technique developed by Maggs (1976a) for southern highveld stone-walled sites, which involves consideration of transport cost of new stone to build new settlement units. It assumes stone construction of any particular period to be in a fairly uniform state of preservation, with the amount of robbing increasing with age. Well-preserved settlement units are assumed to be those last abandoned.

Finally, oral traditions have proved invaluable for dating archaeological sites (e.g., Maggs 1976a, 1976b; Hall and Mack 1983; Van der Merwe and Scully 1971; Wright and Kus 1979). As adjuncts to archaeological investigations, oral accounts can lend independent evidence and testing and consequently have been used to date many sites in this survey.

Often while reviewing the dating literature, I found that different authors used different dates and failed to specify whether they were referring to the entire site or to a particular component of the same cultural landscape. In such cases, I have taken the extreme dates to be ranges, and I assume that earlier landscapes with post-fifteenthcentury occupations represent a continuous historical process.

The resulting picture derived from the settlement descriptions and surface collection materials for the post-fifteenth century obviously presents a problem for any tentative chronology based solely on ceramic types. Therefore, more attention should be paid to spatial significance. Consequently, in analyzing the data, an effort is made to interpret these data as a reconstruction of historical interaction affecting post-fifteenth-century spatial organization.

SUMMARY AND CONCLUSIONS

The southeast Africa survey area is bounded by the 22 degree parallel of southern latitude (south of the Limpopo) and the 24 degree meridian of southern longitude in the west. For purposes of analysis the eastern and western Transvaal was divided by the 29-degree meridian of southern longitude. The entire area considered for analysis consists of 800,400 square kilometers (500,250 mi²). A total of 159 sites with known settlement sizes and/or calculable sizes was constructed for the settlement typology.

The data used in the analyses were obtained from two basic sources. The post-fifteenth-century materials and information resulting from the Swaziland ethnohistorical research and archaeological survey are one source. Nineteen sites located during the Swaziland survey are used in the analysis along with seventeen others from the ethnohistorical and archaeological literature on Swaziland with post-fifteenth-century components located in Swaziland for a total of thirty-six sites representing 22 percent of the total sites.

The second data source is the published archaeological and ethnohistorical literature on post-fifteenth-century southern Africa outside Swaziland. The breakdown is as follows: 40 or 25 percent of the sites are from Zululand; 4 or .02 percent are from southern Mozambique; 36 or 22 percent are from the eastern Transvaal; 24 or 15 percent are from the western Transvaal; 16 or 10 percent are from the Free State; 2 or .01 percent are from the Cape frontier; and 1 or .006 percent is from the eastern Cape (Transkei), for a total of 123 or 77 percent of the post-fifteenth-century sites. Together, the Swaziland sites and the other southern African sites total 159 sites.

The variables have been abstracted for each of these sites where available. The abstracted variables, sites, and site information from the literature and from my Swaziland survey are available on tables in six appendices in my doctoral dissertation (Perry 1996a, 348-479).

It remains to be considered how well the hypotheses generated in Chapter 3 fit or are discordant with the actual archaeological data. In Chapter 5, these archaeological projections are evaluated against the archaeological record for southern Africa.

5

Using Archaeology to Study the Processes of the Mfecane/Difaqane

This chapter explores what archaeology has to contribute to the discussions of the Mfecane/Difaqane. The main goal of this chapter is to answer the question: "Is the standard Settler Model of the Mfecane/Difaqane factually accurate?" To answer this question, I restate the archaeological correlates generated from Chapter 3 and compare them with the archaeological data from southeastern Africa.

The anthropological literature and the debates of historians suggest that pre-Mfecane/Difaqane and Mfecane/Difaqane models should have specific archaeological implications. These expectations derive from three fundamental assumptions of the Settler Model: (1) the existence of isolated ethnic groups with distinct architecture, material culture, and geographical locations; (2) little social interaction between these groups; (3) the idea that the Mfecane/Difaqane originated in the region that is today Zululand. In the Zulucentric focus, three factors have been proposed to account for the Mfecane/Difaqane: ecological change, external trade, and demographic change. I investigate the data collected from archaeological contexts to see how they can contribute to these issues.

If the standard Settler Model of Southeast African history is correct, we can expect distinctive and different settlement pattern location and hierarchy characteristics in the pre- and post-Mfecane/ Difaqane periods.

CONTRASTING THE SETTLER MODEL WITH THE ARCHAEOLOGICAL RECORD

The Settler Model predicts that certain sites in different geographic regions will have particular architectural features and artifacts at specified dates. To see whether the archaeological record supports these assumptions, I used mostly published and a few unpublished sources from the archaeological literature of southeastern Africa to generate an observed settlement typology.

OBSERVED SETTLEMENT TYPOLOGY

A settlement typology based on 14 functional classes identified by the historical and archaeological data was generated for all sites (Perry 1996a, 348–401).Unless there was evidence to the contrary, I assumed that the post-fifteenth-century occupations of a particular site covered the entire area of that site.

Several problems arose during the development of the settlement typology. One problem had to do with distinguishing categories. Some site types were not mutually exclusive; some sites served multifunctional capacities. In tabulating the sites used in the typology, I observed the following procedure. Sites were listed under as many functional categories as the archaeological descriptions required, but were counted as only one site in the total site count. Thus, a fortified royal residence located on a hilltop with one or more iron furnaces was listed as a royal residence, a military site, and an iron-producing site. Consequently, the total number of sites per category for any particular area or time was often greater than the number of actual sites.

There were also many multicomponent sites, that is, sites with occupations from different periods. For multicomponent sites, I used chronological site sizes when they were available; otherwise I assumed the overall site size applied to all periods of occupation. It should be noted that the site types listed refer to all sites plotted on survey maps and that not all mapped sites were used in every analysis. Furthermore, some sites used in the various analyses were not plotted because they lacked coordinates or other means by which they could be plotted. Nonetheless, all sites used for the analyses fit into one or more of the categories listed below. The numbers in parentheses refer to the total number in that particular category plotted on the survey maps.

The classes of settlements and their numerical breakdown are asfollows:

1. Royal Residences or Capitals (69)

These sites are the most frequently encountered in the Zululand (27) and Swaziland (19) samples. Although the inhabitants and the

site functions may have differed slightly depending on the particular polity and period, they were generally inhabited by the royal family, elite families, important military and ritual personnel, and other political dignitaries and their retainers. The ethnohistorical sources suggest that these sites functioned as commercial sites where goods and services were exchanged and as ritual sites where religious and other ritual activities took place. After the Mfecane/Difaqane, this class of settlement also served as military barracks for the army. The occupants of these sites were supported by the labor of the military units there and by extracting surplus food from national communities.

2. Primary Producer Villages (44)

The regions with the most primary producer settlements were the eastern Transvaal with 15 and the western Transvaal with 13. This category includes domestic sites generally occupied by food producers and perhaps some secondary elite along with their families and entourages. The presence of grass-tempered ceramics, ostrich eggshell beads, abundant stone tools, and other archaeological materials at some of these sites suggests the possibility that these were also pastroforager settlements.

3. Iron-Producing Sites (44)

The western and eastern Transvaal are first and second, respectively. The western Transvaal has 13 sites, and the eastern Transvaal has 11 sites. These sites were often both extractive sites where people removed resources from the land and industrial sites where the resources were turned into products. This site type includes locations where at least one iron-producing furnace or slag mound was present. The ethnohistorical literature suggests that iron-working communities were most often located away from the iron-producing sites.

4. African Military Sites (27)

There are 6 such type sites in the western Transvaal and in Zululand. This category includes sites with palisading and nonlivestockenclosing stone walling, "abundant" weapons (iron-production sites with abundant weapons were excluded because I assumed these sites produced weapons for distribution to military sites), military barracks, earthwork ditches, and difficult-to-reach hilltop locations. These characteristics were combined because I assumed that they reflect conflictual relations involving warfare. The ethnohistorical records indicate that some royal residences were fortified in Zululand; elsewhere these military sites were probably permanently occupied by secondary military elite along with soldiers drawn from the primary producer communities.

Also included in this category were sites with other functions like villages with archaeological evidence of conflict, such as burnt dwellings, skeletal remains with indications of wounds inflicted during conflict, and the like.

5. Production Sites (18)

The eastern and western Transvaal contain the most production sites with 8 and 4, respectively. This type includes extractive and industrial sites where products like salt, gold, copper, beads, soapstone, quartz, pigments, and other minerals and raw materials were exploited. For purposes of analysis, they have been distinguished from iron-production sites because one of my major concerns is the warfare that characterized the Mfecane/Difaqane and most weapons were made from iron.

6. Royal Graves (11)

This aristocratic site category was identified primarily by location rather than by grave goods and occurs most often in the western Transvaal, which has four pot burial sites, and in the eastern Transvaal, which has three. Most elite burials in Zululand and Swaziland are mountain/hill or cave locations away from the settlements. Ethnohistorical sources indicate that only royalty was entombed at such locations.

7. Nonelite Burial Sites (6)

The western Transvaal has four such burial sites; two other regions have one each. Although burials in the central enclosure often contained exotic grave goods, indicating a higher-status individual, they were considered part of this category.

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8. Battlefields (6)

Zululand contained the only battlefield sites, with six. This site type is usually defined by a location where only one activity, warfare, occurred. Battlefields are ethnohistorically documented locations where battles took place. As far as I know none of these sites has been archaeologically investigated, although many are historical landmarks. They were included because their location is precisely known and their archaeological potential is tremendous.

9. Ritual Sites (8)

These were characterized by ethnographic references to their specialized ritual function and/or material culture such as pit fields, miniature clay shields and cattle figurines, and rock-engraved settlement plans. These items are believed to be associated with initiation or other ceremonial activity. The eastern and western Transvaal contained four and three examples each of this site type, respectively.

10. Rock Shelters (6)

Swaziland with four and the eastern Transvaal and Zululand with one each were the leading regions for this site type. This site class includes landscapes that were used temporarily and in special circumstances by hunting or herding parties for observing game, herding livestock, and/or other nonpermanent occupations. Some rock shelters may have been used seasonally or periodically over a number of years.

11. Refuge Sites¹ (7)

The criterion of size was used in differentiating refuge sites from rock shelters. These sites were mostly cave locations or large rock shelters used as places of refuge where people fled to during periods of political unrest. There are four refuge sites in the Free State, two in Swaziland, and one in Zululand.

¹At the time of my original data collection and analysis, I was unaware of the later eighteenth- and early nineteenth-century defensive cavern sites in the western Transvaal discussed by Simon Hall (1995). Thus they were not included in my analysis.

12. Shell Middens (6)

These are coastal sites marked by marine resource exploitation. Southern Mozambique, the eastern Cape (Transkei), and Zululand each contained two examples of this site class.

13. Pit Fall Traps (1)

There is only one example from Zululand. This site type was constructed for local and regional hunting parties.

14. European Sites (18)

This is a general-purpose category running the gamut from missionary stations and trading posts to forts to farming homesteads and towns, including factories. There were many inland European forts, especially in Zululand and in the eastern Transvaal. Although many of these forts are shown on various maps indicating their approximate location, especially during later periods, few or none of these maps has information on their size. Because most of these sites were post-Mfecane/Difaqane, represented full-blown colonization, and were European, they are not included in generating the settlement size hierarchy, although they were plotted on the maps.

In the next section, I review the pre-Mfecane/Difaqane and post-Mfecane/Difaqane archaeological expectations for each region with regard to the different predictions of the Settler Model.

SITE TYPES AND LOCATIONS PREDICTED BY THE SETTLER MODEL

In my survey of the archaeological literature of southeastern Africa, differential archaeological research forced me to limit the number of areas used in testing the Settler Model. For instance, there has been little archaeological research conducted in several areas crucial to understanding Mfecane/Difaqane processes beyond the region. There are only four sites in southern Mozambique, two sites in the western Cape frontier, one site in the eastern Cape frontier, and no sites in Lesotho. Therefore, sites from these areas are not included in the subsequent analyses.

Several general observations emerge from this preliminary examination of the site types discussed in the ethnohistorical and archaeological literature. One observation has to do with the number and types of categories themselves. There seem to be more site types (14) and sites of greater complexity than the ethnohistorical literature suggests.

Observations and Discussion

The standard model predicts that sites in specific geographic and environmental regions will have specified architectural layouts and specified artifacts at specified dates. What do the observations from the site typology show?

The Settler Model

Zululand. Pre-Mfecane/Difaqane Zululand had only one primary producer site that contained microliths, hunted game, iron slag and a nearby rock shelter site. Zululand had three pre-Mfecane/ Difaqane African military sites. The most abundant site type in pre-Mfecane/Difaqane Zululand is royal residences (19), representing 56 percent of total sites. Yet Zululand was the only area with no elite burials and had no ritual sites at any time. This apparent contradiction can be explained by the secrecy surrounding elite burials along with the "taboo" on excavating such burials in Zululand. Furthermore, of the five excavated pre-Mfecane/Difaqane Zululand royal capitals, all were pre-Mfecane/Difaqane settlements without typical central cattle enclosure patterns (Hall and Mack 1983; Hall 1984c).

Post-Mfecane/Difaqane Zululand shows a decrease in royal residences and iron-production sites rather than an increase as predicted by the Settler Model. Zululand does, however, have the most post-Mfecane/Difaqane iron-production sites (4) and African military sites (5), which suggests that Zululand became more militarily active after the Mfecane/Difaqane. There is evidence of military objects and cattle bones at some royal residences but no ritual objects and no evidence of smaller agropastoral sites.

Swaziland. In pre-Mfecane/Difaqane Swaziland, there were no agropastoral sites, one African military site, and two rock shelters that continued to be used during the post-Mfecane/Difaqane. The types of artifacts found at these sites suggest agropastoral rather than pastroforager occupation. Like Zululand, the most numerous site type is royal residences (4), representing 36 percent of the total.

Swaziland's post-Mfecane/Difaqane increase in royal sites suggests an increase in social hierarchy and perhaps political power.

The three post-Mfecane/Difaqane primary producer sites from Swaziland are stone-walled sites believed to have been inhabited by Sotho. If we accept the Settler Model assumptions about architecture and ethnicity, these findings suggest that while Nguni groups in Swaziland were undergoing political transformation, expressed by increasing numbers of royal sites, some Sotho communities were affected differently. Moreover, ethnically defined architecture in Swaziland does not seem to have appeared until after the Mfecane/Difaqane. Thus the architectural distinction between Nguni and Sotho is supported in Swaziland.

There is some evidence of defensive considerations, elite objects, grinding stones, and stock enclosures at post-Mfecane/Difaqane nonstone-walled Nguni sites. This is not the case at stone-walled Sotho agropastoral sites, which are located in areas less desirable to agropastoralists and have only sheep/goat remains as predicted. The number of refuge sites does increase after the Mfecane/Difaqane as predicted by the Settler Model.

Eastern Transvaal. The eastern Transvaal had 2 pre-Mfecane/ Difaqane African military sites, the most ritual sites with 2, which continued to be occupied later, and the most primary producer sites with 12. As predicted, 3 ofthe 12 primary producer sites representing 25 percent of the total have wild game and pastroforager artifacts. All these sites are stone walled (said to be characteristic ofthe Sotho) and contain nonpastroforager ceramics, iron furnaces, and evidence of productive activity. There are 5 primary producer sites, representing 42 percent of the total, with cattle and sheep/goat remains. The 1 agropastoral site in the river valley where we expect Sotho had diseased cattle and an abundance of wild game and marine resources.

Although there are no refuge sites, material culture from pre-Mfecane/Difaqane rock shelters suggests pastroforager occupations, and these sites were abandoned in the later periods. This finding suggests that pastroforagers abandoned their rock shelters after the Mfecane/Difaqane, while agropastoralists continued to occupy their sites. The mixture of architecture, artifacts, and faunal remains indicates that ethnic distinctions based on criteria generated by the Settler Model are difficult to define in the case of the eastern Transvaal. Unexpectedly, eastern Transvaal had the most pre-Mfecane/ Difaqane production sites (11). This suggests that eastern Transvaal was an area where most pre-Mfecane/Difaqane raw material production was taking place. Also contrary to the Settler Model predictions, there are no post-Mfecane/Difaqane pastroforager refuge sites, although they appear in every area except eastern and western Transvaal, but cave sites used before the Mfecane/Difaqane seem to have been abandoned after the Mfecane/Difaqane.

The reduction in post-Mfecane/Difaqane primary producer sites and production sites to seven indicates that eastern Transvaal production was drastically curtailed after the Mfecane/Difaqane. Eastern Transvaal was tied for the most post-Mfecane/Difaqane ironproducing sites with four and tied for second place with three African military sites.

Western Transvaal. The western Transvaal had eight pre-Mfecane/Difaqane primary producer sites with artifacts and faunal remains similar to those from the eastern Transvaal, such as nonelite burials, furnaces, cattle, sheep/goat, and wild game. Two of these sites have evidence of agriculture as predicted by the Settler Model. The most abundant site type was iron-production sites (10). The remaining western Transvaal pre-Mfecane/Difaqane sites were four royal residences, three royal grave sites, three production sites, two military sites, and one ritual site.

This array of pre-Mfecane/Difaqane western Transvaal site types suggests that iron production was a major activity at this time. Furthermore, evidence of social hierarchy, ritual and military activity, and raw material production were present earlier than predicted in the western Transvaal.

African military sites predicted for post-Mfecane/Difaqane western Transvaal remain at two. The only site type that increases is ritual sites, which increase from one to two. The predominant western Transvaal pattern is decrease. Decreases occur in nonelite burial sites, which remain concentrated in western Transvaal; primary producer sites; iron-producing sites; and production sites. This indicates that western Transvaal production sites, not unlike eastern Transvaal sites, also decreased significantly after the Mfecane/ Difaqane. This pattern is intriguing because it suggests a general decrease in post-Mfecane/Difaqane iron-production sites at a time when demand for iron should be increasing. Finally, post-Mfecane/ Difaqane refuge sites appear in every area except in the eastern and western Transvaal. Thus the kind of activity that was generating refuge sites elsewhere was absent in the western Transvaal.

FreeState. There are five pre-Mfecane/Difaqane primary producer sites, all stone walled and with artifacts and faunal remains similar to those from the eastern and western Transvaal, cattle, wild game, and some grass-tempered ceramics but no evidence of cultivation. There is no evidence of pre-Mfecane/Difaqane European farmsteads.

Free State had the most pre-Mfecane/Difagane African military sites with six. These sites were all multicomponent sites, with evidence for agriculture, cattle and sheep/goat, marine resources, ostrich eggshell beads, European goods, and ritual objects. There are five royal capitals with a wide range of ironwork, iron tool stores, evidence of various productive activities, cattle, sheep/goat, marine resources, wild game, and evidence of cultivation and military activity. Here too there is evidence of pastroforagers, like grass-tempered pottery, and red ochre-stained bored stones along with cattle, furnaces, and elite burials. These pre-Mfecane/Difagane archaeological patterns strongly suggest some very complex activities including iron and other production, ritual activities, the presence of social hierarchy, and warfare. Finally, Free State has the only two pre-Mfecane/ Difagane refuge sites in the entire sample, which continued to be used after the Mfecane/Difagane. This suggests that some kind of activity was generating refuge sites in the Free State before the Mfecane/Difagane. Furthermore, the need for these sites arose in most other areas following the Mfecane/Difagane except in eastern and western Transvaal.

Free State had the most post-Mfecane/Difaqane refuge sites, with two. There are four primary producer sites with cattle and lots of wild game, and the three military/elite sites continued to be occupied. Iron-production sites disappear, and there is no evidence of European or racially mixed sites.

The archaeological evidence about site types suggests that the kinds of sites, their locations, and dates are much more complex than the standard Settler Model implies. Areas like the eastern and western Transvaal, argued to be peripheral in the Settler Model, seem to have been very important early on. For instance, contrary to the Settler Model's predictions, western and eastern Transvaal had more pre-Mfecane/Difaqane primary producer sites, iron-production sites, ritual sites, production sites, and elite and nonelite burials than Zululand. Free State had the most pre-Mfecane/Difaqane African military sites and refuge sites. Even after the Mfecane/Difaqane, when Zululand assumed the lead in some of these site types, it lacked the significant numbers that the other areas had earlier. Only in numbers of pre-Mfecane/Difaqane royal sites did Zululand have disproportionate numbers.

Demography Predictions

Another prediction of the standard model is that population sizes in specific regions will have a certain pattern pre-Mfecane/Difaqane and that these population sizes will change in specified ways after the Mfecane/Difaqane. Is that what the archaeological record shows?

This population pressure and stress argument is also an internal explanation of the Mfecane/Difaqane. The basic proposition suggests that a population explosion in the Zulu heartland led to increased competition for land, generating overgrazing, environmental degradation, and intra-African warfare. If this argument is correct, then we might expect a dramatic increase in population in the area of Zululand during pre-Mfecane/Difaqane times, which resulted in the rise of the Zulu state.

Population and Area Size Estimates. There are several references to population size estimates and site sizes in the ethnographic, historic, and archaeological literature on southern Africa for various polities and groups. These estimates range from the general to the specific. I compiled a listing of some of these citations in table form to use in estimating pre-and post-Mfecane/Difaqane demography (Perry 1996a, 402-422).

Taylor (1975, Appendix 1), for example, suggests that for precolonial Africa there was a tendency for populations to concentrate into large villages on the order of 3,000 people. Taylor's (1975) investigation of African agropastoral societies from eastern and southern Africa suggests a general correlation between political organization and settlement hierarchies, but she found that some tributary polities had larger and denser populations than some states.

The most comprehensive discussions of population in Zululand are presented by Stevenson (1968) and Huffman (1984,1986). Stevenson's basic premise is that earlier scholars examining the Zulu case had confused population size with population density. He calculates the Zulu population size by determining the age groups that belong to the military regiments, the proportion of men to women, and the total number of regiments in Zululand. His results suggest that the population density of Zululand, especially in the Zulu core area, was substantially more than that proposed by Gluckman and others.

Huffman (1984, 6–7) argues that for southern African polities there is a close association between population size, territory size, wealth, and political power, and these relations are expressed in terms of hierarchical settlement levels. For instance, polities with two to four hierarchical tiers represent populations between 200 and 1,000 people; larger four- to six- level chiefdoms are populated by 1,000 to 15,000 people; senior chiefdoms and above have populations around 2,450. He also gives a figure of approximately 15 to 20 dwellings in villages of "weak petty chiefdoms," with more complex chiefdoms having between 50 to 250 dwellings (Huffman 1984, 19). In addition, the number and size of court levels are related to the size of the population at the capital and the area under its control (Huffman 1984,1986).

Many of the settlement-size data from the archaeological and especially the ethnographic and historical sources consist of descriptive, order-of-magnitude information rather than quantified data such as actual population sizes or number of dwellings. Despite Huffman's examples cited above, the number of dwellings is rarely given. I did find that some scholars, especially archaeologists, gave precise numbers of dwellings excavated. It is possible to obtain some data on the population size of settlements and the distances between settlements, but rarely on the size of a polity's territory or on population density in it. Thus, I can use territorial size and the combined total of all site sizes in the territory to obtain an index of population density.

The general consensus seems to be that some kind of correlation exits between site size and population size. Therefore, for this analysis, I shall assume territorial size and site size to be reasonable indicators of population size.

Territorial-size estimates were calculated from illustrations, pictures, drawings, and written references in the historical and archaeological literature, which contained a measurement scale by which area could be determined. In other cases, authors gave specific estimations of territorial sizes. For example, Huffman's citation that the Zulu kingdom at its height was approximately 31,000 square kilometers along with Gluckman's listing of the size of the Zulu kingdom as 156,000 square kilometers would be added to all other estimates, and the mean would then be calculated to derive a general figure (Gluckman 1960; Huffman 1986).

Although reliable estimates of absolute population sizes in early historical documents are rare, the figures compiled by Stevenson, Huffman, and others for Zululand, along with population estimates for other southern African polities, were calculated to derive hypothetical population estimates for pre-and post-Mfecane/Difaqane sites and times based on mean population densities and mean territorial sizes. These calculations were made by adding all the population estimates and deriving means. The resulting information was then used in estimating population sizes for pre-and post-Mfecane/ Difaqane periods.

Results of the Demographic Analyses

The results of the ethnohistorical analysis are as follows: Pre-Mfecane/Difaqane Zululand had a mean population estimate of 5,166 people, well within the hypothesized estimates for tributary modes of production (Flannery 1972, 403-412; Sanders and Price 1968,74-86) but more than twice the size estimated for southeastern African tributary societies noted above (Huffman 1984,19). After the Mfecane/Difaqane, Zululand had a mean estimated population of 262,665, within the range of population estimates for states (Flannery 1972; Sanders and Price 1968). The post-Mfecane/Difaqane figure is just under 51 times larger than the earlier one.

A second analysis was performed on the population data. This consisted of using the population density figures for pre-and post-Mfecane/Difaqane sites calculated by Stevenson (1968) to derive other population estimates. These results indicate that the hypothetical pre-Mfecane/Difaqane population was 2,600 people, whereas post-Mfecane/Difaqane Zululand had 907,460 people. The density figures indicate that there were 349 times more people after the Zulu state formation than before.

The most obvious bias that affected these results is that more information exists for post-Mfecane/Difaqane Zulu populations (19 citations) than for pre-Mfecane/Difaqane times (7 citations). This bias at least partially results from the need to levy taxes following European colonization, and indeed, many of the figures come from colonial census data.

REGIONAL DEMOGRAPHY AND POPULATION MOVEMENTS PREDICTED BY THE SETTLER MODEL

Zululand

Pre-Mfecane/Difaqane agropastoral sites should grow larger and more densely populated through time and should reach their zenith before the Mfecane/Difaqane. Overall post-Mfecane/Difaqane population size and density should remain about the same as earlier. Populations at the royal capitals should increase whereas populations in the surrounding sites should decrease as young male adults are housed at the royal sites.

Swaziland

There should be more Pre-Mfecane/Difaqane Sotho people at large agropastoral sites and less Nguni (Swazi) at smaller agropastoral sites. We expect fewer Sotho populations and more Nguni communities during the post-Mfecane/Difaqane as some Sotho populations fled the encroaching Nguni.

Eastern Transvaal

Pre-Mfecane/Difaqane Ju/'hoansi pastroforager sites should be numerous. There should also be a few sparsely populated Sotho agropastoral sites. Post-Mfecane/Difaqane agropastoral sites should be more densely populated than earlier as Sotho fleeing the Mfecane/ Difaqane moved into these communities. There should be, however, no change in pastroforager population densities.

Western Transvaal

There should be many densely populated pre-Mfecane/Difaqane Sotho-Tswana agropastoral sites. Post-Mfecane/Difaqane Sotho-Tswana sites should now be nucleated and more densely occupied than earlier.

Free State

There should be moderately populated pre-Mfecane/Difaqane Sotho agropastoral communities and sparsely populated European

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communities. Neither agropastoral sites on the interior plateau nor European settlements should show any post-Mfecane/Difaqane increase in number of sites or density. There should be an increase, however, in mixed communities and sites.

ARCHAEOLOGICAL ANALYSIS

The goal of the archaeological analysis was to provide another way to contrast and compare pre-and post-Mfecane/Difaqane demographic differences. It involved generating population estimates for both pre-and post-Mfecane/Difaqane southeastern Africa by constructing histograms of site sizes for each area with sufficient data. Besides southeastern Africa combined, these areas include Zululand, Swaziland, the eastern and western Transvaal, and the Free State, (Figs. 5.1–5.6).

The numbers of sites in each size class were defined in 1-hectare intervals from 1 to 100 hectares. Possible discontinuities were noted in the distribution and were used to define the site/population size classes.

Histogram Interpretations

Zululand

The pre-Mfecane/Difaqane site-size histogram for Zululand exhibits a bimodal distribution, and the post-Mfecane/Difaqane distribution is trimodal (Fig. 5.1). In the earlier period, there are 10 sites: 9 small sites with a range ofvariation between 0.1 to 7.5 hectares and a mean size of 3.9 hectares, representing 90 percent of the total, and 1 very large 50-hectare iron-production site, representing 10 percent of the total.

The later period has 13 sites, an increase of 3 sites: 9 small sites with a range of variation between 0.1 to 7.2 hectares and a mean size of 2.7 hectares, representing 70 percent of the total; 3 medium-size sites with a range of variation between 22.5 to 30 hectares and a mean size of 26.6 hectares, representing 23 percent of the total; and 1 large site of 50 hectares, representing .07 percent of the total.

Six sites did not appear earlier: four large royal residences, one small animal trap site, and one small refuge site. Of the five new later sites, two are small sites, and three are large sites. Sites less than 1

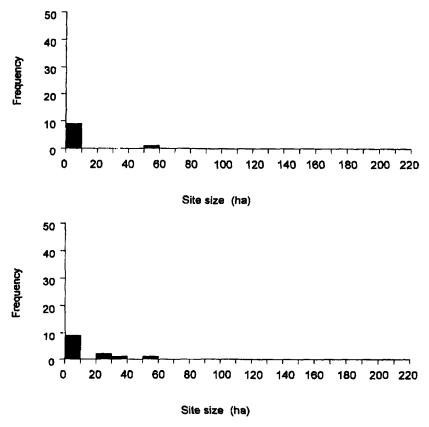


Figure 5.1. Population/settlement size histograms of pre- and post-Mfecane/Difaqane Zululand.

hectare increased in number from one pre-Mfecane/Difaqane to three post-Mfecane/Difaqane. Finally, the only large pre-Mfecane/Difaqane site of 50 hectares, an iron-production site, continued to be occupied and remained the largest post-Mfecane Difaqane site. The three additional large sites between 22 and 35 hectares are all royal residences. Thus the pre- to post-Mfecane/Difaqane transition in Zululand shows the formation of a middle tier of larger royal residences that probably housed a significant portion of the young male population. This, combined with the increase in total sites, suggests that population increased only after the Mfecane/Difaqane in Zululand.

The site typology suggests that the largest sites were iron-

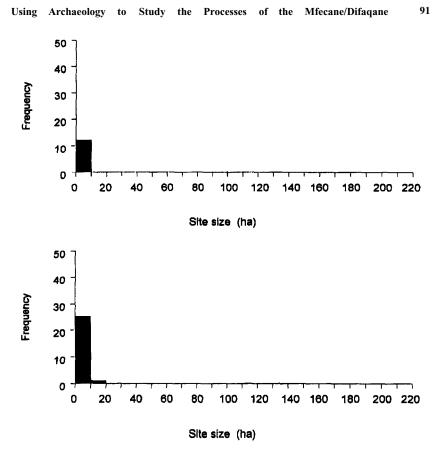


Figure 5.2. Population/settlement size histograms of pre- and post-Mfecane/Difaqane Swaziland.

production sites, and only later were royal residences among the larger sites. Thus, the population pressure hypothesis is not supported by these results because it appears that population increased after Zulu state emergence rather than before. I suspect that the post-Zulu state population numbers may actually reflect increasing demographic densities resulting from population relocation. Therefore, I attempted to assess regional population densities from different areas of southeast Africa with archaeological data by analyzing regional site-size transformations through time.

The pre-Mfecane/Difaqane site-size histogram for Swaziland (Fig. 5.2) exhibits a unimodal distribution with all "small" sites. In

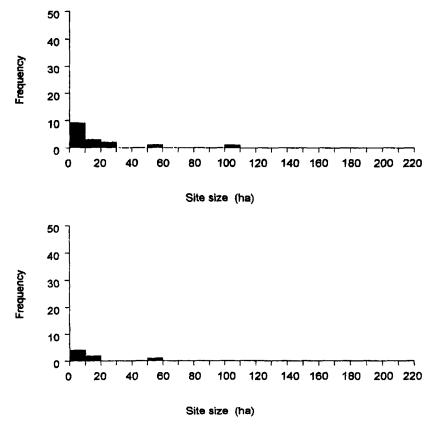


Figure 5.3. Population/settlement size histograms of pre- and post-Mfecane/Difaqane eastern Transvaal.

the earlier period, there are a total of 12 small sites with a range of variation between 0.004 to 6 hectares and a mean size of 0.76 hectares.

The later site-size histogram shows a bimodal distribution with small and medium sites. The later period has 26 sites: 25 small sites representing 96 percent of the total with a range of variation between 0.003 to 6 hectares and a mean size of 1 hectare; and 1 medium-size 12.5-hectare royal residence representing 4 percent of the total. Through time, the total number of sites more than doubles, from 12 to 26. After the Mfecane/Difaqane, 11 of the 12 pre-Mfecane/Difaqane

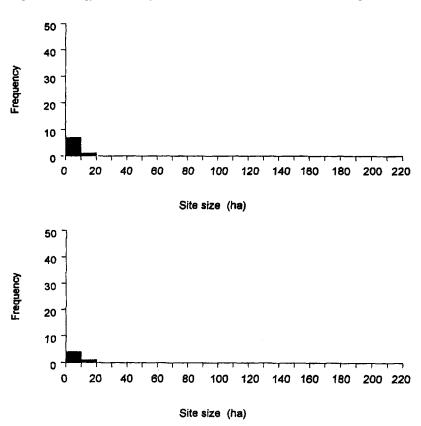


Figure 6.4. Population/settlement size histograms of pre- and post-Mfecane/Difaqane western Transvaal.

sites continued to be occupied. The one exception is a royal burial site. Of the 15 sites that emerged after the Mfecane/Difaqane, 8 representing 54 percent of the total are royal residences; 3 representing 22 percent of the total are primary producer sites. There is also one fort, one refuge site, one royal grave site, and one production site, each representing 6 percent of the total.

The transition from pre- to post-Mfecane/Difaqane Swaziland shows an increase of 14 small sites. This increase represents almost a doubling of small sites and suggests a significant population increase at these sites. Through time, only one medium-size site emerges, an early twentieth-century royal residence. This analysis suggests that

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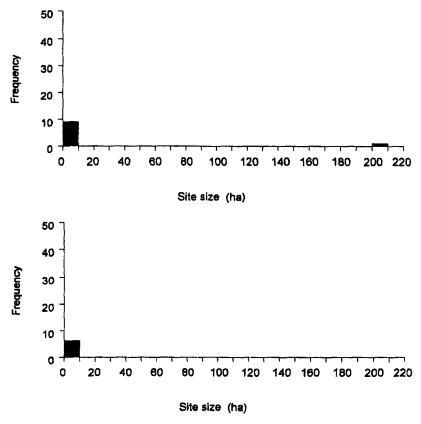


Figure 6.6. Population/settlement size histograms of pre- and post-Mfecane/Difaqane Free State.

population size in Swaziland increased even more dramatically after the Mfecane/Difaqane than did that in Zululand and that the increase is concentrated in the small-site-size class.

In the eastern Transvaal, the earlier period has a trimodal settlement hierarchy with a total of 16 sites: 14 small sites with a range of variation of between 0.01 to 26 hectares and a mean size of 6.3 hectares representing 88 percent of the total; 2 medium-size sites ranging between 51.2 to 100 hectares and a mean size of 76 hectares representing 10 percent of the total. The largest site of 100 hectares is part of a specialized complex of manufacturing sites, which extended a minimum of 37 square kilometers.

The later site-size histogram shows a bimodal distribution with small and large sites and a total decrease of nine sites. This period has six sites: five small sites with a range of variation between 0.01 to 16.5 hectares and a mean size of 5.7 hectares representing 83 percent of the total; and one large site of 51.2 hectares representing 17 percent of the total. This large royal residence associated with iron production and other productive activities and primary producer homesteads remained occupied from the earlier period.

Through time, population size appears to have decreased dramatically in the eastern Transvaal in all size classes.

The histogram for the eight pre-Mfecane/Difaqane western Transvaal sites (Fig. 5.4) shows a bimodal distribution of small- and medium-sized sites. The six small sites range between 0.03 to 3.24 hectares with a mean site size of 1.3 hectares. The largest site is an 11.25-hectare royal residence.

The five later sites also exhibited a bimodal distribution of smalland medium-size sites. Small sites range between 0.03 to 1.2, with a mean site size of 0.6 hectares. The largest site remains the 11.2hectare royal residence from the earlier period.

The site-size ranges in the western Transvaal are very similar to those found in post-Mfecane/Difaqane Swaziland. In both cases, the largest sites are royal residences. What is different is that there are so many small sites in Swaziland. Finally, the three small-site decreases through time suggest that population size in the western Transvaal decreased.

The histogram for the 10 early sites in the Free State (Fig. 5.5) sample yielded a bimodal distribution. The 9 small sites ranged between 0.02 to 1 hectare with a mean site size of .48 hectares, representing 90 percent of the total. The remaining large site of 200 hectares, probably a royal residence, was substantially larger than any in the entire southern Africa sample. This one site represents 10 percent of the total.

The five later sites show a unimodal distribution and are all small sites having a range of variation between 0.1 to 1 hectare with a mean size of 0.57 hectares.

The four small-site decreases through time, coupled with the disappearance of the very large 200-hectare site, suggest that population size in the western Transvaal decreased.

Combined site/population-size histograms for southeastern Af-

rica (Fig. 5.6) were constructed by using samples from Zululand, Swaziland, Southern Mozambique, the Free State, the eastern and western Transvaal, the Cape frontier, and the eastern Cape (Transkei).

The combined site/population-sizehistograms for southeastern Africa yielded a multimodal distribution for the pre-Mfecane/Difaqane period and a bimodal distribution for the later periods (Fig. 5.6). In the earlier period, there are a total of 56 sites: 52 small sites with a range of variation between 0.01 to 23 hectares and a mean size of 2.9 hectares, representing 92 percent of the total; 3 medium-size sites

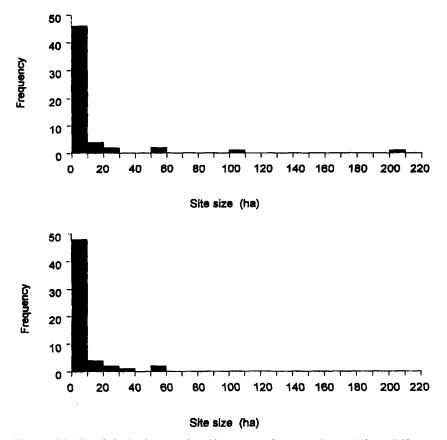


Figure 6.6. Population/settlement size histograms of pre- and post-Mfecane/Difaqane combined.

with a range of variation between 50 to 100 hectares and a mean size of 67 hectares, representing 5 percent of the total; 1 large site of 200 hectares, representing 3 percent of the total. The later period has 57 sites: 56 small sites with a range of variation between 0.1 to 35 hectares and a mean size of 3.4 hectares, representing 98 percent of the total; and 1 medium-size site of 51.2 hectares, representing 2 percent of the total.

The results of the combined regional site size analysis suggest that through time the overall population in southeast Africa increased slightly, from 56 earlier sites to 57 later ones. It is important to note that through time all large sites are abandoned and there is a slight increase in small sites expressed by an increase in their mean size, which increases from 2.9 hectares to 3.4 hectares.

The most glaring result of these analyses is that the transition from earlier to later periods was accompanied by a 34 percent decrease in total sites (and by implication, people), for all areas except for Swaziland and Zululand, which showed a 33 percent increase in total sites and, we assume, an increase in population.

Assuming a correlation between settlement and population sizes has several limitations. First, there are the difficulties of defining site size, establishing site boundaries, distinguishing permanent from temporary occupations, distinguishing site contemporaneity, and accounting for differential fieldwork intensity. Second, in seeking to estimate populations, several caveats must be recognized and adhered to. Combining population figures for different polities from different times undoubtedly biases data. Furthermore, the organizational scale and not the population size may be the important variable for understanding the population–resource relation. This variable is measured by the number of basal organizational units like the number of extended families rather than simply by the number of individuals (Johnson 1982).

In this regard, more extensive information about the number of dwellings, structures, and settlement units would have provided a means to estimate figures for basal organizational unit size. Such information is rarely available. The population estimates from the literature for later periods showed an increase in population 51 times greater than earlier, and population estimates based on population densities indicated an even greater increase of 349 times larger than before earlier. Such drastic increases in Zululand most likely reflect increasing population density, resulting from population agglomeration rather than from general population increase.

To address questions of regional population density, I used the data for other areas of pre-and post-Mfecane/Difaqane southern Africa including both ethnohistorical and archaeological analyses like those used in examining Zululand. These regions include samples from Zululand, Swaziland, the Free State, and the eastern and western Transvaal.

The ethnohistorical analysis used population estimates for various southern African groups (Perry 1996a, 402–422). The use of this data, however, presented particular difficulties. First, population estimates for post-Mfecane/Difaqane groups far outnumbered pre-Mfecane/Difaqane estimates. For instance, there are 7 citations giving population estimates for pre-Mfecane/Difaqane Sotho-Tswana and 29 for post-Mfecane/Difaqane Sotho-Tswana. An extreme example is the Swazi, with no pre-Mfecane/Difaqane demographic information and only 2 population estimates for the post-Mfecane/Difaqane. This bias toward the later periods probably reflects a differential emphasis on post-Mfecane/Difaqane population estimates.

Furthermore, population estimates were given for particular "ethnic" groups (e.g., Tlokwa, Pedi, etc.), whereas the larger classification of Sotho-Tswana was often presented as Sotho-Tswana, Sotho, or Tswana. Because different groups of Sotho-Tswana inhabited different areas at different times, it is not always clear from the literature which Sotho-Tswana at what time is being referred to. Consequently, the Sotho-Tswana were the only other people with enough information on population size for performing an ethnohistorical population analysis. Although there were some statements of territorial sizes, there were no population density figures for pre-Mfecane/Difagane Sotho-Tswana.

The results of the ethnohistorical analysis of general demography show a mean population for pre-Mfecane/Difaqane Sotho-Tswana of 13,416, whereas post-Mfecane/Difaqane Sotho-Tswana have a mean population of 183,433. Based on these figures, population among the Sotho-Tswana after Zulu state formation was about 14 times greater than before the Zulu state emerged.

Site-size data were used to produce population estimates for Zululand, Swaziland, the eastern Transvaal, the western Transvaal, and the Free State (Perry 1996a, 348–402).Local population in Zululand, as indicated by total site size, increased substantially, from 78 hectares to 155 hectares in settlement, an increase of 77 hectares. Local Swaziland population, as indicated by total site size, increased 18 hectares, going from 21 hectares to 39 hectares in settlement.

Eastern Transvaal's local pre-Mfecane/Difaqane population decreased dramatically, from 214 hectares in settlement to 80 hectares after the Mfecane/Difaqane, a decrease of 134 hectares. Local population in western Transvaal decreased only slightly. Area in settlement went from 17 pre-Mfecane/Difaqane hectares to 13 post-Mfecane/Difaqane hectares, a decrease of 4 hectares. Free State population suffered the most precipitous decrease, falling from 204 pre-Mfecane/Difaqane hectares, a decrease of 13 post-Mfecane/Difaqane hectares, a decrease of 13 post-Mfecane/Difaqane hectares in settlement to only 13 post-Mfecane/Difaqane hectares, a decrease of 191 hectares.

On the basis of the total number of sites per period, overall population in southeastern Africa seems to have increased slightly. At the same time, the total number of hectares in settlement in the southeastern African sample dropped by 441 hectares, from 637 hectares during the pre-Mfecane/Difaqane period to 196 hectares for the post-Mfecane/Difaqane period. Thus although site number appears to have remained somewhat stable despite increases and decreases in certain areas, overall area in settlement was reduced by about 31 percent. These results suggest that populations abandoned certain areas and clustered in others after the Mfecane/Difaqane. Furthermore, the transition from pre-Mfecane/Difaqane to post-Mfecane/ Difaqane in southeastern Africa was accompanied by a 34 percent decrease in total sites for all areas except for Swaziland and Zululand, which showed a 33 percent increase in the total number of sites.

The demographic situations in eastern Transvaal and the Free State are perhaps the most interesting. In terms of regional demographics, during the earlier periods the eastern Transvaal and Free State populations were apparently significantly larger than that of Zululand, but during the later periods as the Zululand population increased, the eastern Transvaal and Free State populations underwent an overall reduction, which suggests a population shift from these areas into Zululand and Swaziland.

The regional evidence then does not support a hypothesis of population increase before the Zulu state formation. I interpret the increases in the later numbers as supporting increasing demographic relocation resulting from warfare combined with captive and cattle raiding by colonial agents. The raiding for African captives and cattle probably lessened regional population although increases in demographic densities resulting from relocation probably did occur and might well account for increasing population densities following the Mfecane/Difaqane This explanation might better account for the slightly smaller regional population accompanied by greater population densities in Zululand and the decrease in hectares of settlement following the Mfecane/Difagane.

What seems to be occurring are massive shifts in population from one region to another and a shift from more uniform to more clustered distributions of sites across the landscape, as would be expected if warfare was the stimulus for this population movement. Thus the Mfecane/Difaqane is associated with an unprecedented increase in the amount of movement induced by violence. In other words, peace has a centrifugal tendency, spreading primary producer sites across the landscape, and war has a centripetal tendency, pulling primary producer populations into centers.

SOCIAL HIERARCHY PREDICTED BY THE SETTLER MODEL

The Settler Model predicts what kinds of political organizations existed in specified regions before the Mfecane/Difaqane and what kinds existed in those regions afterward. Does the archaeological record support these predictions? There are two major sources of information used to investigate these assumptions: settlement hierarchy, as seen in the site-size histograms, and differential control over cattle, as seen in stock-enclosure sizes. In addition, more traditional archaeological evidence of social differentiation discussed below is also used in evaluating the Settler Model. I calculated the percentage of pre- and post-Mfecane/Difaqane sites with evidence of social hierarchy. I included all sites with oral historic claims to have been royal residences, sites with elite culling patterns, and the traditional evidence described below.

Several anthropological scholars concerned with political evolution have sought ways to archaeologically distinguish states from other forms of political organizations. Studies investigating archaeological correlates for "chiefdoms" in southern Africa (Evers and Hammond-Tooke 1986; Huffman 1984; Taylor 1975) and "middlerange hierarchical societies" (Taylor 1975) have argued for a systematic relation between settlement hierarchies and political organization in these societies (Huffman 1984; Taylor 1975). Henry T. Wright (1977, 381), Johnson (1977, 1978), and Wright and Johnson (1975), using Near Eastern data, argue that the decision-making organization (not necessarily levels of stratification or "symbolized hierarchy") of states results in a minimum of three hierarchical levels of settlement size above that of the primary producers.

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Other types of archaeological expectations have also been suggested, such as (1) large deposits of cattle bones characterized by an elite cattle-culling pattern and differential midden distributions when both elite and nonelite culling patterns occur at capitals; (2) many large central enclosures and/or courts accompanied by deep midden deposits; (3) larger and more complex decorated settlement units with a greater number of wives represented by more dwellings; (4) a greater variety, number, and concentration of high-status foreign commodities and/or specialized goods and resources and/or insignia or staffs of office; (5) superstructural archaeological evidence for centralized control of initiation schools to indoctrinate warriors, expressed by clay shields and miniature, abstract human and animal (cattle) figurines associated with elite courts and enclosures; and (6) differential burial practices, locations, and contents (Evers and Hammond-Tooke 1986; Evers 1984; Huffman 1986).

Huffman (1984, 1986) argues that class and state formation in southern Africa is expressed archaeologically by a "Zimbabwe cultural pattern" as distinct from the "Bantu or central culture pattern" described above. The "Zimbabwe culture pattern" sites house elites and are represented by much larger "acropolis" sites. These sites are far larger than any other in the region and are situated on ground higher than the surrounding area, which contains smaller sites inhabited by subordinate classes. Elite sites have "prestige" stone walling, elite burials, a huge court with various elite symbols, a ritual headquarters, and faunal remains exhibiting an elite cattle-culling pattern.

Zululand

According to the standard Mfecane/Difaqane model, we should expect minimally tiered settlement hierarchies in pre-Mfecane/Difaqane Zululand along with minimal evidence of social differentiation. Cattle enclosure sizes should be small to moderate, with faunal remains characterized by primary producer cattle-culling patterns.

State and class formation should be evident only after the Mfecane/Difaqane. The artifactual evidence diagnostic of state formation cited above should be present along with a multitiered regional settlement hierarchy. We should also expect large stock enclosures/

courts with extensive deposits of cattle bones characterized by an elite cattle-culling pattern.

Swaziland

Similarly, pre-Mfecane/Difaqane sites should have little architectural, artifactual, or faunal evidence of social hierarchy and fewer than three tiers in their settlement hierarchy.

Post-Mfecane/Difaqane Nguni sites should be multitiered and should contain elite objects, large enclosures, and cattle bones with elite culling patterns. Sotho sites should maintain settlement hierarchies of three tiers or less, have small enclosures, yield sheep/goat remains, and contain no elite artifacts.

Eastern Transvaal

There should be little or no archaeological evidence of social hierarchies at either pre- or post-Mfecane/Difaqane agropastoral sites and certainly none at pre- or post-Mfecane/Difaqane pastro-forager sites.

Western Transvaal

Archaeological evidence for social hierarchy should be minimal at pre- and post-Mfecane/Difaqane agropastoral sites. Faunal remains should be numerically dominated by sheep/goat bones, and when cattle are present, they should display a primary producer culling pattern.

Free State

There should be little or no archaeological evidence for pre- or post-Mfecane/Difaqane social hierarchy at Sotho-Tswana sites. European homesteads located on the frontier should show little evidence of social hierarchy until after the Mfecane/Difaqane, when Africans began to seek refuge at these and other European sites. Only post-Mfecane/Difaqane racially mixed Griqua and Kora sites should exhibit social hierarchy,

ARCHAEOLOGICAL ANALYSIS

Settlement-Size Hierarchies

A settlement-hierarchy analysis was run on both earlier and later sites in Zululand to investigate the hierarchical relations of the study area, which might shed light on the Mfecane/Difaqane explanations. I assumed that all settlements in Zululand were involved in one political economic system. For comparative purposes, a second set of settlement-hierarchy analyses was run on the settlementdata samples from Zululand, Swaziland, eastern and western Transvaal, and the Free State. I was particularly interested in the eastern Transvaal and the Free State because earlier analyses suggest an inverse relation between these areas and Zululand.

Settlement-unit sizes were tabulated for each period, calculated in hectares and stated as minimum confirmed sizes. Site/population– size histograms of settlement sizes for all areas in southeastern Africa and each period were constructed and the frequency distributions interpreted to see how many size types exist (Figs. 5.1-5.6). These histograms have been described in detail earlier. Each site type was defined in terms of(1) mean size, (2) range of variation, (3) number of sites belonging to that type.

Some tripartite schemes have been developed for southern African settlements like that used by Wright and Kus (1979) for sites in central Imerina, Madagascar: small equals 1 to 0.49 hectares; medium equals 0.50 to 3.0 hectares; and large equals more than 3.0 hectares. For Botswana, Denbow and Wilmsen (1986) also defined three categories: hamlets equal 0.1 hectares; middle-range (hinterland secondary villages) equal 1 hectare; and capitals or large towns equal 10 hectares.

Huffman (1984, 1986) has proposed a positive correlation between the degree of political stratification and the number of sitesize modes for southern African agropastoral polities. He argues that the levels of the political hierarchy have a corresponding sitesize hierarchy of anywhere from two to six levels with most populations having two-tier political and settlement hierarchies (Huffman 1984,19). His hierarchies include "petty chiefs" who have three-tier hierarchies with small settlements about the same size; "senior chiefs" and above who have four levels; and "paramount chiefs" with five-plus–level hierarchies. Furthermore, the larger-size level is sometimes three or four times the size of the small base of settlements near agricultural fields, which typically accommodates more than one-half of the population (Huffman 1984,2,1986,292). It is in this five-tier hierarchy that he places the Zulu, Swazi, and Sotho.

Furthermore, Huffman argues that this correlation between settlement size and political stratification also includes the number and size of courts, cattle, agricultural fields, wives, population, and territory controlled (Huffman 1984,3-6, Huffman 1986,293). He suggests that these relations increase and are most clearly evident at the upper levels of a hierarchy when comparing capitals whose absolute size and relative differences from subordinate settlements are most marked because of the many activities and elite individuals and their retainers located there (Huffman 1984, 4-6, 1986, 294).

I examined the site-size histograms to see whether Huffman's or Denbow and Wilmsen's model fit the southeastern African data and to see what kinds of political organizations existed in southeastern Africa before and after the Mfecane/Difaqane. The point of the settlementipopulation-sizehierarchy discussion is that the complexity of political organization after the Mfecane/Difaqane is expected to be greater than it was before, according to the Settler Model. Therefore, the issue is not whether hierarchy was absent before Mfecane/ Difaqane times, but rather whether there was less hierarchy.

INTERPRETATIONS OF SOCIAL HIERARCHY BASED ON HISTOGRAMS, ORAL TRADITIONS, AND ARTIFACTS

Zululand

Pre-Mfecane/Difaqane Zululand sites exhibit a two-tier settlement hierarchy, Although 19 sites were classified as royal residences, there was no artifactual or mortuary evidence of social differentiation at these sites. Of the 27 pre-Mfecane/Difaqane sites, 19, representing 70 percent of the total, have artifactual evidence of social hierarchy including oral history accounts claiming them as royal residences (see Perry 1996a, 348-56, Table 1).

Post-Mfecane/Difaqane Zululand had a trimodal settlement hierarchy with ll fewer royal residences than earlier and no artifactual or mortuary evidence of social differentiation. However, of the 22 post-Mfecane/Difaqane sites, 9, representing 41 percent of the total, Using Archaeology to Study the Processes of the Mfecane/Difaqane 105

have artifactual evidence of social hierarchy (see Perry 1996a, 348–56, Table 1).

The pre- and post-Mfecane/Difaqane Zululand patterns do not correspond to Huffman's five- and six-tier political levels predicted for the Zulu. The greatest increase in sites through time is in medium-size sites. Furthermore, the largest site for both periods is not a royal residence as expected but rather an iron-production site, significantly larger than all others in the earlier period and continuing to be occupied. Only during the post-Mfecane/Difaqane did royal residences become larger, and even then they remained smaller than the largest iron-production site. The evidence from oral traditions and artifacts indicates a 30 percent decrease in the percentage of sites with elite material culture.

Thus, the archaeological evidence suggests that the sociopolitical situation in Zululand is quite complex. The argument for increasing social hierarchy after the Mfecane/Difaqane in Zululand is only partially supported. Although elite site sizes increase through time, their total number decreases. Furthermore, none of the pre-Mfecane/ Difaqane sites contains elite material culture, and the percentage of sites with such goods decreases. Yet, it appears that not only were there many elite sites before the Mfecane/Difaqane, but there were also fewer elite sites after the Mfecane/Difaqane. Finally, the largest earlier and later site is an iron-production site.

State formation outside Zululand apparently resulted in many competitors in the pre-Mfecane/Difaqane who did not monopolize access to surplus. This situation is followed by the emergence of a single Zulu state with the ability to control surplus, and thus elitelooking sites appear.

Swaziland

Pre-Mfecane/Difaqane sites have a unimodal settlement hierarchy with the largest site being a 6-hectare royal residence. Of the 12 pre-Mfecane/Difaqane sites, 5, representing 42 percent of the total have artifactual evidence of social hierarchy (see Perry 1996a, 357-64, Table 2).

Despite the fact that the largest post-Mfecane/Difaqane site is a 12.5-hectare royal residence, the settlement-size hierarchy indicates a continuation of minimal social hierarchies in post-Mfecane/Difaqane Swaziland. Of the 30 post-Mfecane/Difaqane Swaziland sites, 16,

representing 53 percent of the total, have artifactual evidence of social hierarchy.

The archaeological evidence for sociopolitical organization in Swaziland, not unlike that for Zululand, is complex. For instance, the settlement hierarchy shows the maintenance of a unimodal distribution of small sites, combined with a slight increase in the percentage of sites with elite items.

Eastern Transvaal

Contrary to the Settler Model predictions for pre-Mfecane/Difaqane eastern Transvaal, the largest site observed is twice as large as the largest site in Zululand (an iron-production site) during any time period. A second royal residence, the same size as the largest Zululand site, shows evidence of involvement in large-scale mineral production. The material culture, faunal remains, and burials from many sites, including the very large site, suggest pastroforager occupation and the presence of social hierarchy.

Of the 22 pre-Mfecane/Difaqane sites, 7, representing 32 percent of the total, have artifactual evidence of social hierarchy (see Perry 1996a, 348-56, Table 4). Furthermore, sites with agropastoral material objects are far smaller than those with pastroforager artifacts.

The decrease from an early three-tier settlement hierarchy to a later two-tier site-size hierarchy suggests a decrease in social hierarchy. Of the 15 post-Mfecane/ Difaqane sites, 8, representing 53 percent of the total, have artifactual evidence of social hierarchy. The archaeological evidence is once again ambiguous on the issue of increasing social hierarchy. The decrease in settlement tiers suggests a decrease in social hierarchy, whereas there is an increase in the percentage of sites with elite material culture. Finally, other provocative archaeological evidence, such as the abandonment of the largest earlier specialized production site, "pastroforager" sites with evidence of social hierarchy, and the continued occupation of the largest royal residence, demonstrates the complexity of social hierarchy in eastern Transvaal.

Western Transvaal

The pre- and post-Mfecane/Difaqane site-size distributions are unimodal for western Transvaal, which suggests no increase in social hierarchy. Of the 19 pre-Mfecane/Difaqane sites, 5, representing 26 Using Archaeology to Study the Processes of the Mfecane/Difaqane 107

percent of the total, have artifactual evidence of social hierarchy. Of the 8 post-Mfecane/Difaqane sites, 2, representing 25 percent of the total, have other kinds of evidence of social hierarchy (see Perry 1996a, 382–91,Table 5).

In the western Transvaal, both the site-size analysis and the artifactual analysis suggest that social hierarchy remained the same. This conclusion is also supported by the fact that the largest site in both periods is a 11.2-hectare royal residence. Furthermore, artifactual, architectural, and faunal differences, ascribed in the Settler Model to ethnic and subsistence differences, seem to be less apparent here than in the eastern Transvaal.

Free State

The Free State pre-Mfecane/Difaqane site-size distribution is bimodal. Yet, the one large site of 200 hectares, probably a royal residence, is the largest site in the entire southeastern African sample. In addition, this huge site has evidence of social hierarchy and pastroforager occupation. Of the 14 pre-Mfecane/Difaqane sites, 9, representing 64 percent of the total, have evidence of social hierarchy, whereas 7, representing 50 percent of the total, have archaeological evidence of social hierarchy and pastroforaging (see Perry 1996a, 392–99, Table 6).

The unimodal distribution of all small sites, 1 hectare or less, displayed by the later sites strongly suggests a decrease in social hierarchy. Yet, of the 10 post-Mfecane/Difaqane sites, 6, representing 60 percent of the total, have other evidence indicating social hierarchy, whereas 5, representing 50 percent of the total, have archaeological evidence of social hierarchy and pastroforaging. The evidence from Free State settlement-size hierarchies and the decrease in the percentage of sites with material culture expressions of social hierarchy suggest a decrease in social hierarchy through time.

Site-size histograms for southeastern Africa suggest a transformation from a multimodal settlement hierarchy to a bimodal settlement hierarchy, indicating a decrease in social hierarchy through time. The general results of the regional site-size analysis and artifactual analysis are complex and varied. Only the settlement hierarchies from Zululand show an increase in evidence for social hierarchy, with all other regional hierarchies decreasing. Simultaneously, other archaeological evidence in all regions indicates the opposite result for social hierarchy formation over time. The most intriguing area is the Free State, whose early bimodal distribution contained a very large site, OFD 1, which is four times larger than the largest in Zululand and is the largest site in the entire southeastern African sample. This elite site is particularly interesting for other reasons besides its huge size. The faunal assemblage, although dominated by wild game and containing marine resources, is characterized by an elite cattle-culling pattern along with sheep/goat. There is evidence of glass beads and bead production, copper, rock gongs, and miniature pots, suggesting initiation or other ritual practices. Also, there are burials with stone-lined tombs and many grave goods. Stone tools, red ochre chunks, bored stones, and undecorated grass-tempered pottery typical of ethnographic pastroforagers are also present. Finally, there is evidence of at least one burnt dwelling, and the site was no longer occupied during the later periods.

The most provocative regional relation is seen in the transition from earlier to later periods, accompanied by a 34 percent decrease in total sites for all areas except for Zululand and Swaziland, which showed a 33 percent increase in total sites. This relation strongly suggests that Zululand and Swaziland were experiencing similar transformations, which were having the opposite affect on the other regions. This core area containing Zululand and Swaziland may represent state-formation processes. In addition, the increase and concentration of small sites in this area could suggest that Swaziland is peripheral to the Zululand core area.

After the emergence of the Zulu state, the Free State sites exhibit a unimodal distribution of all "small" sites less than 1 hectare. The largest site is Khartoum I, a 1-hectare primary producer site that was occupied in the earlier period as well and is located about 50 kilometers west of the now-abandoned OFD 1. Khartoum I contains glass beads from the Atlantic coast, undecorated grass-tempered ceramics, and both cattle and wild game (Humphreys 1982; Maggs 1977).

These analyses suggest that earlier periods were perhaps more peaceful than later times because the smaller (primary producer) and large (production) sites were more evenly distributed spatially across the region. Furthermore, the fact that the largest early site in Zululand was an iron-production site could suggest less stratified social relations and iron production for local markets. Finally, the larger production sites were all outside Zululand.

In sum, the structural evidence from settlement hierarchies alone is very misleading: The evidence for social hierarchy is quite complex and dependent on the number and kinds of evidence selected for analysis. Furthermore, different regions experienced social hierarchy differently at different times. Whatever the case, the Settler Model's prediction of increasing social hierarchy after the Mfecane/Difaqane is not supported. The evidence from these limited analyses indicates that the situation was far more complex.

CATTLE ENCLOSURE SIZES

In Chapter 3, I discussed the political economy of cattle in southern Africa and stated that differential possession of cattle and their accumulation are key indicators of social inequality among southern African polities. Consequently, cattle enclosure size can heuristically be used as a surrogate to inform on status, wealth, and power, and hence class and state formation in southern African societies.

Hall has combined the concept of "animal unit" (AU) from Mentis and Duke (1976) with modern Zulu herders' estimates of possible numbers of cattle housed at Zululand archaeological sites to devise a formula to estimate AUs on cattle enclosure size. He estimated a requirement of 5 square meters per adult animal in a herd enclosure. He then used this number to estimate the total herd size of each region in his Zululand study area (Hall 1981, 135 and 158).

Other Africanist scholars have derived mean central enclosure sizes. For instance, Denbow and Wilmsen's (1986, 13) middle range sites in Botswana have central enclosure sizes 70 meters in diameter (3,848 m² area). Maggs (1971, 42-44) measured cattle enclosures sizes of the Riet River settlement units in describing the structure of his Type R settlements. His histograms revealed two distinct size classes: many small enclosures between 2 to 14 meters in diameter (3-154 m² area) and few large enclosures ranging between 21 to 70 meters in diameter (346-3,848 m² area). He suggested functional differences in terms of adult and juvenile animals or cattle versus sheep/goat. Maggs also noticed that there was at least one large enclosure on every settlement units. Huffman (1984) stated that 50-meter diameter (1,963 m² area) central enclosures are representative of small, weak "petty chiefdoms" or a ward headperson.

The goal of my analysis was to gauge the wealth of the different sites through time to assess whether any changes resulted from Zulu state emergence. Because cattle, sheep, and goats all represent wealth in some form, a standardized faunal unit was thought to be appropriate. I used the formula for the area of a circle (πr^2) to calculate the enclosure size in square meters. Then following Hall (1981, 137), I divided the enclosure area by 5 square meters per adult animal to obtain an estimate of "animal units" penned at each enclosure and at each settlement.

Early and later period central enclosure sizes were then tabulated in square meters for all areas with faunal data by period, and histograms for both were generated (Figs. 5.7–5.12). An estimated number of AUs based on Hall's formula were also calculated (see Perry 1996a, 423–441and 479–481).

Archaeological Expectations

Zululand

Pre-Mfecane/Difaqane Zululand cattle enclosure sizes should be small to moderate, with faunal remains characterized by primary producer cattle-culling patterns. Post-Mfecane/Difaqane Zululand should have large stock enclosures/courts with extensive deposits of cattle bones characterized by an elite cattle culling pattern.

Swaziland

Pre-Mfecane/Difaqane Nguni cattle enclosure sizes in Swaziland should be small to moderate, with faunal remains characterized by primary producer cattle-culling patterns. So the cattle enclosure sizes should be small and contain mostly sheep/goat bones.

Post-Mfecane/Difaqane Nguni agropastoral sites should show evidence of numerous cattle bones and larger stock enclosures than at Sotho sites yet smaller than those in Zululand. Sotho sites should have fewer and smaller animal enclosures with sheep/goat remains.

Eastern Transvaal

Pre-Mfecane/Difaqane pastroforager sites should have small and very few, if any, livestock enclosures and cattle bones. The few Sotho agropastoral sites should have small- to moderate-size animal enclosures and some cattle remains.

Post-Mfecane/Difaqane pastroforager sites should have no livestock remains or enclosures. Nguni agropastoral sites should have few and small enclosures and livestock remains with primary pro-

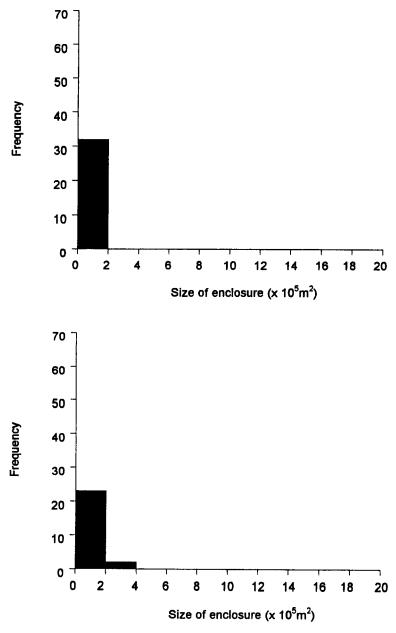


Figure 5.7. Enclosure-size histograms of pre- and post-Mfecane/Difaqane Zululand.

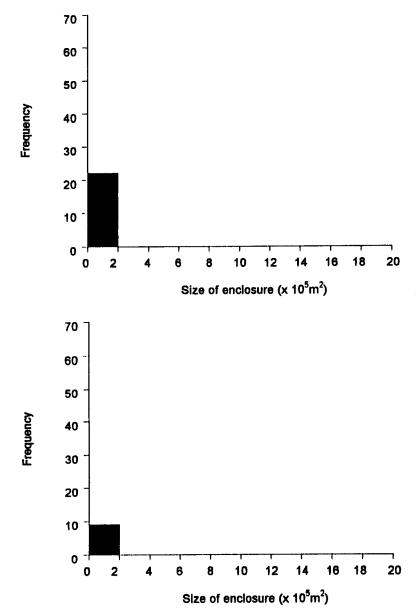


Figure. 6.8. Enclosure-size histograms of pre- and post-Mfecane/Difaqane Swaziland.

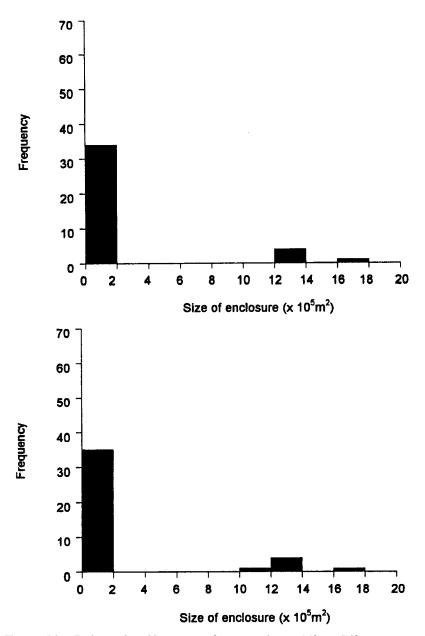


Figure 5.9. Enclosure-size histograms of pre- and post-Mfecane/Difaqane eastern Transvaal.

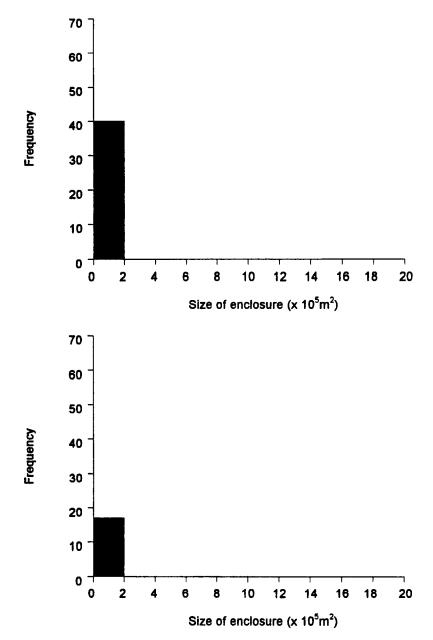


Figure 5.10. Enclosure-size histograms of pre- and post-Mfecane/Difaqane western Transvaal.

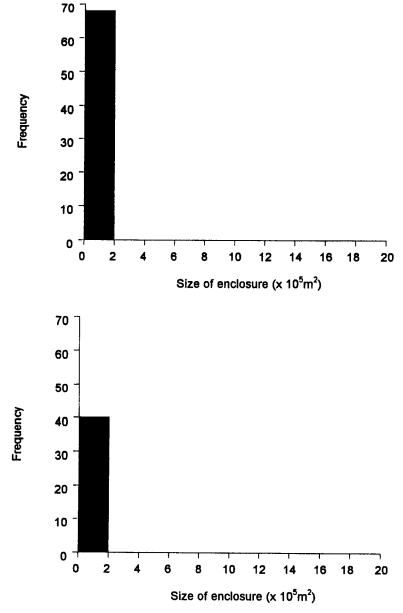


Figure 5.11. Enclosure-size histograms of pre- and post-Mfecane/Difaqane Free State.

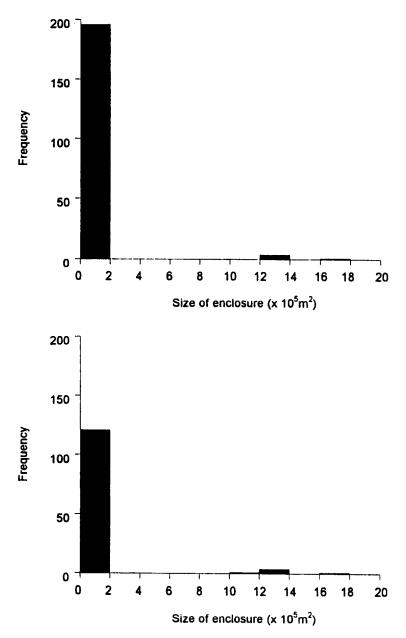


Figure 5.12. Enclosure-size histograms of pre- and post-Mfecane/Difaqane southern Africa combined.

Using Archaeology to Study the Processes of the Mfecane/Difaqane 117

ducer patterns. Sotho-Tswana agropastoral sites should have small livestock enclosures dominated by sheep/goat remains.

Western Transvaal

Pre-Mfecane/Difaqane Sotho-Tswana agropastoral sites should have few small- to medium-size animal enclosures with few cattle remains, exhibiting primary producer patterns, and some sheep/goat remains. Post-Mfecane/Difaqane Sotho-Tswana sites should have more small stock pens dominated by sheep/goat remains.

Free State

Pre-Mfecane/Difaqane Sotho agropastoral sites should have moderate-size stock enclosures with primary producer cattle patterns and some sheep/goat remains. Post-Mfecane/Difaqane Sotho and Nguni agropastoral sites should have small protected stock pens with mostly sheep/goat remains.

ANALYSIS AND RESULTS

Histogram Interpretations

In interpreting the enclosure-size histograms, I assumed that larger cattle enclosure sizes represent more cattle and hence a greater degree of social hierarchy.

Zululand

The pre-Mfecane/Difaqane enclosure-size histogram for Zululand exhibits a unimodal distribution, and the post-Mfecane/Difaqane distribution is bimodal (Fig. 5.7). In the earlier period, there are 32 small enclosures with a range of variation between 7 to 1,257 square meters and a mean size of 105 square meters.

The later period has 25 enclosures, a decrease of 7 enclosures. There are 24 enclosures with a range of variation between 7 and 331,830 square meters and a mean size of 30,130 square meters, representing 96 percent of the total; and 1 enclosure of 331,830 square meters, representing 4 percent of the total. These findings suggest increasing social hierarchy in Zululand. The evidence from cattle enclosure histograms in Zululand suggests that livestock was more evenly distributed during the earlier period, but became more concentrated into larger enclosures during the later period. Overall, livestock and/or royal courts, and consequently social hierarchy, increased tremendously after the Mfecane/ Difaqane as predicted by the Settler Model.

Swaziland

The pre- and post-Mfecane/Difaqane enclosure-size histograms for Swaziland exhibit a unimodal distribution with all small sites for both periods (Fig. 5.8). In the earlier period, there are 22 small enclosures with a range of variation between 3 and 7,854 square meters and a mean size of 708 square meters. The later period has 9 enclosures, a decrease of 13 enclosures. These enclosures have a range of variation between 314 and 2,827 square meters and a mean size of 1,130 square meters.

There appears to have been a dramatic decrease in the number of small enclosures through time, accompanied by a significant increase in mean enclosure size from 708 to 1,130 square meters, yet none as large as the earlier 7,854 square meters enclosure. The continuation of small enclosure sizes through time suggests that no increase in social hierarchy occurred. The increase in mean enclosure size indicates that through time fewer people had access to livestock and/or that livestock was being aggregated into fewer and larger enclosures.

Eastern Transvaal

The pre- and post-Mfecane/Difaqane enclosure-size histograms for eastern Transvaal exhibit a trimodal distribution (Fig. 5.9). In the earlier period, there are 38 enclosures with a range of variation between 7 and 1,767,145 square meters and a mean size of 886 square meters. Of the 38 earlier enclosures, 33, representing 87 percent of the total, were between 7 and 9,503 square meters; 4 enclosures, representing 11 percent of the total, were all 1,227,184 square meters; and 1 enclosure, representing 2 percent of the total, was 1,767,145 square meters.

The later period has 41 enclosures, an increase of 3 enclosures, with a range of variation between 3 and 1,767,145 square meters and a mean size of 192,190 square meters. There are 35 enclosures, representing 85 percent of the total, between 3 and 9,503 square meters and a mean size of 2,028 square meters; 5 enclosures, representing

13 percent of the total, between 1,130,973 and 1,227,184 square meters and a mean size of 28,274 square meters; and 1 enclosure of 1,767,145 square meters representing 2 percent of the total. This distribution suggests that there was little change in social hierarchy through time in eastern Transvaal.

There is a slight increase of three enclosures through time, two in the small-size range and one in the medium-size range. This evidence suggests that social hierarchy was present early, and continued during the later periods. The 200-plus increase in mean enclosure size through time, from 886 to 192,190 square meters, seems to indicate an aggregation of livestock at larger enclosures.

Western Transvaal

The pre- and post-Mfecane/Difaqane enclosure-size histograms for eastern Transvaal exhibit a unimodal distribution of small enclosure sizes (Fig. 5.10). In the earlier period, there are a total of 40 small enclosures with a range of variation between 1 and 104,635 square meters and a mean size of 2,682 square meters.

The later period has 17 very small enclosures, a decrease of 23 enclosures, with a range of variation between 1 and 50 square meters and a mean size of 24 square meters. The enclosure-size histograms suggest that during the early period in the western Transvaal live-stock was fairly evenly distributed. The histograms also indicate that social hierarchy through time in the western Transvaal remained at the same minimal level. Although the social hierarchy did not change, there is a drastic decrease in number of enclosures and mean enclosure size from 2,682 to 24 square meters, with the largest enclosure only 50 square meters in area. Furthermore, 88 percent of all later sites had very small enclosure sizes of about 1 square meter. Using Hall's AU estimate of 5 square meters per adult animal suggests that no adult animals were present in these very small enclosures.

These results strongly suggest a significant decrease in number of enclosures and enclosure sizes and hence a loss of livestock through time, whereas social hierarchy remained the same during the later periods in the western Transvaal.

Free State

The pre- and post-Mfecane/Difaqane enclosure-size histograms for the Free State have unimodal distributions of small enclosure sizes (Fig. 5.11). In the earlier period, there are 68 small enclosures with a range of variation between 1 and 1,662 square meters and a mean size of 162 square meters. The early period Free State enclosure-size histogram suggests that livestock was fairly evenly distributed.

The later period has 40 small enclosures, a 59 percent decrease of 28 enclosures, with a range of variation between 1 and 3,848 square meters and a mean size of 193 square meters. The dramatic decrease in the number of enclosures is most apparent in the under-1,000-square meters–sizeranges. Despite a decrease in the number of enclosures greater than 1,000 square meters from 4 to 2, the largest later period enclosure is slightly larger than 3,000 square meters.

Not unlike the western Transvaal, the Free State enclosure-size histograms suggest that through time there was a fairly even livestock distribution; a significant decrease in total enclosures; and a continuation of minimal social hierarchy.

The combined enclosure-size histograms for southeast Africa yielded trimodal distributions for both periods (Fig. 5.12). In the earlier period, there are 200 enclosures with a range of variation between 1 and 1,767,145 square meters and a mean size of 855 square meters. The later period has 132 enclosures, a 66 percent decrease of 68 enclosures, with a range of variation between 1 and 1,767,145 square meters and a mean size of 6,554 square meters.

The trimodal distribution histogram patterns for the combined southeastern Africa enclosure sizes most closely resembles the patterns from the eastern Transvaal. These combined results for southeastern Africa suggest that social hierarchy and livestock distribution remained essentially the same in southeastern Africa through time.

In sum, the cattle enclosure analysis suggests that only in eastern Transvaal and southeastern Africa was there the presence of a continuous social hierarchy Every region except eastern Transvaal (which gained three enclosures) showed a decrease in the number of cattle enclosures through time. This was also the trend for southeastern Africa.

If we look at each region in terms of total enclosure areas presumably housing livestock and mean enclosure size, a different, more complex pattern emerges. Zululand showed an increase in both areas enclosed and mean cattle enclosure size. Swaziland exhibited a decrease in areas enclosed and an increase in mean cattle enclosure size. Eastern Transvaal, like Zululand, increased in both categories, whereas western Transvaal decreased in both categories. Free State, like Swaziland, increased in mean enclosure size. Southeastern Africa, like Zululand and eastern Transvaal, increased in both categories. Obviously, southeastern Africa is very misleading in terms of structure expressed by enclosuresize histograms. Using the number of total areas enclosed and mean enclosure size by region and periods reveals the complexities involved in understanding changing social hierarchy through time.

Worksheets

The results of the analyses on animal units by region and by period are summarized as follows: the four early measurable enclosures from Zululand yielded a mean number of AUs per central enclosure of 90, and the mean AUs for all enclosures is 134 (see Perry 1996a, Appendix 6,479-81, for all worksheets). Later central enclosures yielded a mean of 30,082 AUs in central enclosures and a mean of 30,130 AUs for all enclosures. Furthermore, there was a total increase of 149,980 AUs in Zululand.

These results suggest that the number of cattle penned increased dramatically during the later periods in Zululand. The three later period sites that had the most AUs were all royal residences whose central enclosure was the only enclosure. The smallest of these enclosures has 32,555 more AUs than the largest early site. This finding supports the argument for an increasing social hierarchy after the Mfecane/Difaqane. Because all these sites were royal residences, it is highly probable that the extensive size of the central enclosures reflected the court sizes rather than or in addition to cattle enclosures.

The four early measurable enclosures from Swaziland have a mean of 453 AUs in central enclosures, 779 AUs in all enclosures, and a total of 3,114 AUs. The three later enclosures have a mean of 210 AUs in central enclosures, a mean of 678 AUs in all enclosures, and a total of 2,034 AUs.

The evidence from the AU analysis shows that livestock numbers decreased through time in Swaziland. The sites with the most AUs in both periods are royal residences. The earlier of these sites has 1,085 AUs more than the later period royal residence, and the total AUs decrease by 1,080. This decrease coupled with the tremendous increases in Zululand could be interpreted as more cattle at royal residences before European colonization and/or cattle being siphoned off from Swaziland into Zululand. In any case, the level of social hierarchy judged by AUs seems to have decreased in Swaziland.

The eight early measurable enclosures in the eastern Transvaal

have a mean of 45,258 AUs in central enclosures and a mean of 268,811 AUs for all enclosures with a total of 1,344,053 AUs. The four later central enclosures have a mean of 145,774 AUs in central enclosures and 393,917 AUs for all enclosures, and a total of 1,575,668 AUs.

The results of the AU analysis suggest that livestock numbers increased through time in eastern Transvaal. This finding contradicts the Settler Model because it indicates that despite the inhospitable environment for cattle herding, far more cattle were kept during both periods in eastern Transvaal than in any other area and period. Furthermore, all the eastern Transvaal sites with huge numbers of AUs are specialized sites and part of the Lydenburg complex of production sites and settlements. Finally, the number of cattle penned in eastern Transvaal is more than 10 times as large as that in the later periods in Zululand, even in view of court sizes in Zululand.

These results indicate that specialized sites in the eastern Transvaal remained important places to keep cattle although the environment was quite inhospitable. It is important to note the enormous impact on the mean enclosure sizes introduced by the ritual site of Klingbeil. Klingbeil was occupied during both periods and had a substantially larger central enclosure and hence more animal units than any other site in the entire sample. Without this site, however, the eastern Transvaal is not that different from other regions. Therefore, Klingbeil is very different, and understanding its place in the eastern Transvaal could help explain the larger enclosure sizes and presumed numbers of AUs. For instance, Klingbeil was constructed of stone walling and contained slag piles, copper, iron and metal beads, specularite, engraved settlement plans, pit fields, and ivory objects. The larger stock facilities in the eastern Transvaal may be related to the fact of European ships bringing supplies to Delagoa Bay.

The four early measurable enclosures from the western Transvaal have a mean of 5,252 AUs in the central enclosure, a mean of 5,363 AUs in all enclosures, and a total of 2,145 AUs. The one later central enclosure contained 10 AUs, with a mean of 14 AUs for all enclosures of this period. This sharp reduction in AUs could indicate a reduced social hierarchy and the collapse of power in this area through time.

The most conspicuous thing about the western Transvaal data is that there is only one measurable enclosure for the later period. This might suggest that elite cattle were no longer being kept in this region, a possible indication of cattle loss, dispersion, or site abandonment.

The last area, the Free State, had a total of 2,166 AUs, for seven early measurable central enclosures, with a mean of 202 AUs in central enclosures and 309 AUs for all enclosures. The six later central enclosures yielded a mean of 198 AUs in central enclosures, 257 AUs for all enclosures, and a total of 1,541 AUs.

Based on enclosure size alone, the number of livestock in the Free State decreased slightly through time, which indicates a similar decrease in social hierarchy. Unexpectedly, the site with the most AUs (770) is a later period primary producer site. The sites with the second and third most AUs are earlier ones, a primary producer site and an elite site, respectively.

The large enclosures at primary producer sites, especially the largest enclosure, might suggest the presence of wealthier families lending their cattle, in a political patronage relationship called *Ma-fisa* among the Khoisan and the Sotho-Tswana, *Busa* among the Xhosa and Cape "Nguni", *Sisa* among the Zulu, and *Ethula* among the Swazi. In this arrangement, commoner families could use milk and sometimes could eat and keep a proportion of the offspring. A key advantage for elite families in such an agreement was that the contract could be terminated at the lender's volition. This anomaly could also indicate sites occupied by racially mixed cattle raiders.

In terms of the Settler Model, only Zululand and eastern Transvaal show increases in the total number of enclosures, mean size, total number of AUs, mean number of livestock at central enclosures, and mean AUs at all enclosures. These findings strongly suggest increasing social hierarchy. There is also evidence for nonstate societies before the Mfecane/Difaqane in Zululand, and state formation appears to have begun after the Mfecane/Difaqane. The evidence from the eastern Transvaal suggests a long and continuous tradition of the presence of social hierarchy in this region, with state formation in Zululand not the first such incident in southeast Africa. Furthermore, the enclosure-size evidence from eastern Transvaal may also suggest interaction with Europeans in the Delagoa Bay area well before the Mfecane/Difaqane.

In Swaziland, western Transvaal, and the Free State, there is a decrease in the very categories (enclosures, animals, and the like) that increased in Zululand and eastern Transvaal. This finding strongly suggests decreasing social hierarchy in these regions.

SCALE OF INTERACTION PREDICTED BY THE SETTLER MODEL: EXTERNAL VERSUS INTERNAL RELATIONS

The Settler Model predicts that before the Mfecane/Difaqane the polities in the various regions are essentially autonomous rather than interdependent and that after the Mfecane/Difaqane this pattern changes in specified ways. Long-distance trade is one of the major types of interaction proposed by the Settler Model. Trade proponents stress African-European interaction in arguing that conflict over control of European trade items in the polities of the Delagoa Bay–Zululandregion consequently gave rise to the Zulu state (e.g., Carlson 1984; Hedges 1978; Slater 1976). If the Settler Model is correct, then in the Zulu case we might expect that an expansion of trade in European items in Zululand preceded the period of Zulu state formation. Are these predictions confirmed by the archaeological data?

There are two types of analyses, not necessarily mutually exclusive, that might be used to test the Settler Model's predictions. The first, rank-size analyses, are important for identifying areas involved in long-distance relations through investigations of deviations from an expected rank-size distribution (Haggett, Cliff, and Frey 1977,111; Paynter 1982, 145). A second approach involves demonstrating an increased presence of European goods at African sites, especially in Zululand royal residences before Zulu state formation.

Another spatial tendency that seems to be a reasonable hypothesis is that site clustering should be a response to warfare and that a more even site distribution should be a response to periods of relative peace. The creation of very large sites with densely packed populations is indicative of people gathering together or being gathered together as a result of cattle and captive raiding and consequent warfare.

Rank-Size Relations

Johnson (1980) argues that as systems become more integrated, they shift from either concave or convex deviations to log-linear distributions. Peripheral areas are notoriously poorly integrated, whereas core areas tend to be well integrated. Thus, examining deviations from the rank-size rule can prove useful for establishing the status of the selected areas in southern Africa and for identifying peripheral regions and hence large-scale interaction based on the rank-size relation.

A concave or primate deviation is a classic pattern identified with underdeveloped countries and dendritic patterns of trade. Such patterns can indicate an area in which small places are tied to a big place that is linked to the outside (Hirth 1978, Kelly 1976).

Paynter (1982) argues that a convex rank-size pattern indicates large-scale interaction when it appears in the extreme peripheries of large interaction spheres. Johnson (personal communication, 1988) notes that such distributions, however, may be the result of the pooling of multiple small-scale independent systems, so that additional information is needed to distinguish whether a convex distribution is indicative of large- or small-scale systems.

Falconer and Savage (1995) have recently proposed the double convex pattern as also indicative of large-scale interaction. This pattern is associated with colonialism, in which the system associated with a large-scale system is superimposed on a small-scale system, a combination of the points raised by Paynter and Johnson. At any rate, double convex systems are indicative of external influence.

Patterns indicative of a lack of external interaction are log-linear patterns where the observed is reasonably close to the expected or convex patterns where Johnson's pooling interpretive model holds.

In the southern African case, the major limitation results from problems of site sample bias. For example, smaller, more ephemeral sites are most likely to have been missed because of large site bias, resulting from a variety of "natural transforms" as well as their lack of archaeological visibility. Bias in favor of large sites can also result from conscious selection by archaeologists and local cultural experts alike (Perry 1991).

Some archaeologists have offered possible solutions to these and other limitations of rank-size analyses (Falconer and Savage 1995; Johnson 1977,1980; Paynter 1980,1982). For instance, Falconer and Savage (1995) randomly inflate or deflate site sizes by using an assumed percentage range for a predetermined proportion of sites along with incorporating a "sliding probability" in an effort to avoid misestimating site sizes. Similarly, Paynter (1982,152) proposes partitioning the study area into semiautonomous microregions and studying their rank-size temporal trajectory. His experiments with "dummy" data sets, in which smaller and medium-size sites were added to his distributions to gauge their effects on curve shapes, suggest that in general core-area samples are concave, while peripheral areas are convex.

Missing large sites has more of an effect on the accuracy of interpretations than does missing medium or small sites. Because I am fairly confident that the large sites have been recorded, my interpretations should be robust. A statistical analysis along the lines suggested by Falconer and Savage could produce some interesting results, but for the purposes of historical interpretation my preliminary analyses can be considered as a contribution to southern African archaeology, if only to encourage further research.

RESULTS AND INTERPRETATIONS

Zululand

Early sites in Zululand showed a concave primate curve (Fig. 5.13). The concave curve is at odds with the Settler Model's assumption of autonomy and suggests interaction.

Later settlements in Zululand are described by a rank-size curve that is slightly convex at its upper end and joins a more accentuated lower convex curve with a stair-step-likedistribution. Such distributions, when identified in Levantine data, have been called "double convex" (Falconer and Savage 1995, 52). According to Falconer and Savage, such compound curves may represent a superimposition of one settlement system on the other. This compound distribution results, in the Southern Levant, from

loosely knit towns and cities ... established amid ... an increasingly disarticulated system of small villages. Statuary excavations from coastal sites and texts from Egypt suggest that this patterning reflects the presence of Egyptian commercial missions in coastal towns. (Falconer and Savage 1995, 53)

Although the post-Mfecane/Difaqane Zululand rank-size curves are concave as predicted by the Settler Model, the compound curves indicate that although colonialism such as happened in the Levant certainly seems to be a reasonable social process to create a double convex pattern, internal forces might also be responsible. For instance, during periods of state formation, as a region's population finds itself splitting into two groups, those at a number of sites under the sway of contenders for the surplus accumulation role of sovereign

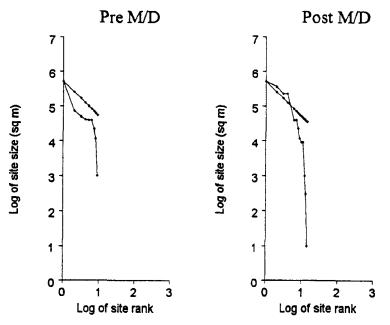


Figure 5.13. Pre- and post-Mfecane/Difaqane rank-size curves for Zululand.

and those seeking refuge from such a state, a double convex pattern may also occur. To be more confident of these interpretations, however, we must look beyond the Zululand hinterlands.

Swaziland

The rank-size curve for early Swaziland exhibits an extreme concavity in its lower ranges, with all sites smaller than expected (Fig. 5.14). This plot could represent problems of scale and defining boundaries, specifically the problem of "partitioning," which may produce essentially artificial primate distributions. Partitioning can occur when an area is only a small sample drawn from a much larger actual region of interaction, thereby excluding the primate and/or midlevel center(s) of a much larger system.

This exaggerated curve is characterized by a definite absence of large and medium-size sites and by many small lower-order sites. Such a distribution could also represent a dendritic system in which

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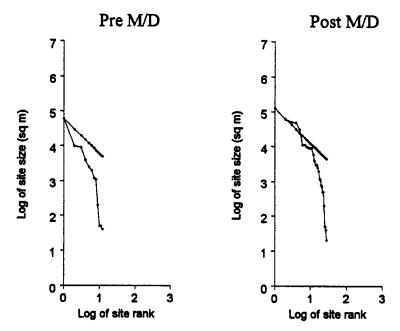


Figure 5.14. Pre- and post-Mfecane/Difaqane rank-size curves for Swaziland.

surplus is concentrated in a few entrepots outside the sample area (Johnson 1980; Paynter 1982). Hirth (1978) has argued that dendritic hinterlands are created by long-distance trade networks. Thus, the pre-Mfecane/Difaqane Swaziland rank-size curves are dissimilar from Zululand in their absence of any large and medium sites and an abundance of sites smaller than expected.

The later Swaziland rank-size curve is double convex, incorporating elements of rank-size primacy in its upper-size range and convexity in its lower range. The social process would be much like that suggested in the discussion of Zululand, namely, after the Mfecane/Difaqane, Swaziland was participating in a two-tier settlement system, such as is found in some colonial situations. These curves are not in accordance with the Settler Model's expected convex curves.

The Eastern Transvaal

The early eastern Transvaal distribution is double convex in its upper ranges with large and medium sites slightly larger than ex-

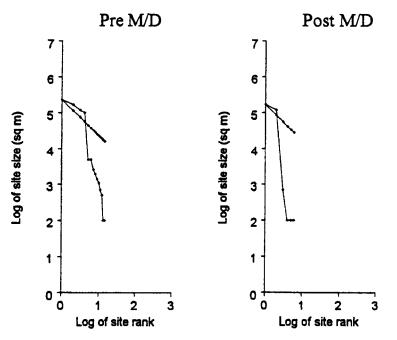


Figure 6.16. Pre- and post-Mfecane/Difagane rank-size curves for eastern Transvaal.

pected and small sites much smaller than expected (Fig. 5.15). This rank-size curve is also different from those curves predicted by the Settler Model.

The rank-size curve for the later eastern Transvaal is also double convex, then drops off and then becomes convex. Thus both eastern Transvaal rank-size distributions resemble the late rank-size curves for Zululand and Swaziland; all are double convex. Here again, the predicted rank-size distributions from the Settler Model do not match the observed curves.

Western Transvaal

The curve for the early western Transvaal is slightly concave with large and medium sites slightly smaller than expected, and small settlements much smaller than expected (Fig. 5.16). This distribution does not fit the expected log-linear-to-convex curves proposed by the Settler Model.

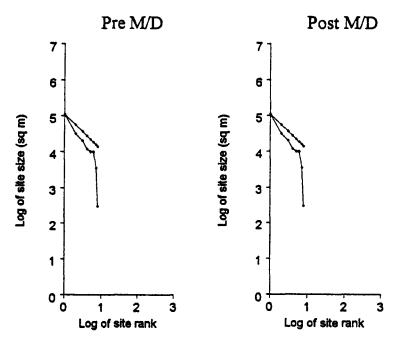


Figure 5.16. Pre- and post-Mfecane/Difaqane rank-size curves for western Trans-vaal.

The later distribution for the western Transvaal is markedly concave, with only one large site. The small sites are smaller than expected. The western Transvaal curves are the first post-Mfecane/ Difaqane sites thus far not to have any double convex distributions. With the exception of a slightly greater size difference between post-Mfecane/Difaqane expected and observed sites, the late distribution closely resembles the earlier one. These rank-size curves are not convex as predicted by the Settler Model.

The Free State

Early Free State settlements exhibit regional primacy characterized by a precipitous concave curve, with only one large site and all small sites significantly smaller than expected (Fig. 5.17). Kelly (1976) has suggested that dendritic systems exhibit large numbers of low-level places oriented toward one higher place and a concentration

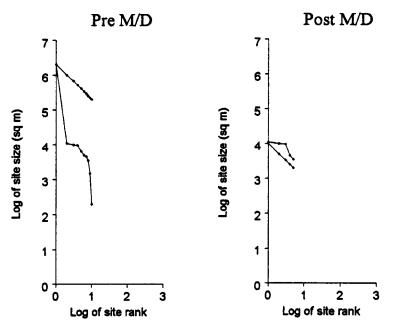


Figure 5.17. Pre- and post-Mfecane/Difaqane rank-size curves for Free State.

of elites in the higher level place. This appears to be the situation in the early Free State. Once again, the rank-size distributions do not fit the Settler Model predictions.

In accordance with the Settler Model, the later Free State sites produce a convex distribution with all sites larger than expected. This rank-size curve is assumed to indicate the region's peripheral relation to Zululand.

BEYOND THE HINTERLANDS

In recognizing the need to look beyond the hinterlands, all sites in southeast Africa were combined. Johnson (1977, 498) has cautioned that the larger the scale, the greater the probability for various stochastic processes to affect the rank-size curves. The rank-size curve for southeast Africa should be convex in both periods because we are most likely compounding many settlement systems. Instead, the pre-Mfecane/Difaqane rank-size curve for southeastern Africa is concave. As sites decrease in size, they become increasingly smaller than expected. The post-Mfecane/Difaqane rank-size distribution for southeastern Africa produced a more log-linear distribution with larger settlements lying along the linear rank-size line, whereas smaller sites show lower limb falloff and are smaller than predicted.

Very complex settlement processes are clearly happening in postfifteenth-century southeastern Africa, and the analysis points to effects beyond the regions and indeed beyond the scale of southeastern Africa. Throughout southeastern Africa, the pre-Mfecane/ Difaqane period was marked, to varying degrees, by concave ranksize patterning, patterns of relatively few large places and many small places. This was the case in every region investigated with the exception of the eastern Transvaal, which had a double-convex pattern. Post-Mfecane/Difaqane patterns show a more complex situation— Zululand, Swaziland, and the eastern Transvaal show double-convex patterning, whereas the western Transvaal is concave, and the Free State appears convex.

When the entire region of southeastern Africa is studied, instead of exhibiting the extreme convexity expectable of pooling independent systems, it actually looks as if southeastern Africa is a single operation—with a concave pattern early on—as in the case of early colonialism—and a log-linear distribution later for larger sites and an increasingly concave pattern as sites become smaller—as the region becomes a functioning system in the larger global political economy with more mature colonialism (Fig. 5.18).

All these patterns indicate the effects of large-scale processes, even in the pre-Mfecane/Difaqane period, processes certainly larger than any of the individual regions and beyond the scale of southeastern Africa. These patterns point out the involvement of Europeans in state formation in southeastern Africa, yet leave open the issue of the nature of that involvement. Is trade for prestige goods in the early period driving state formation?

CONCLUSIONS

My analyses suggest that the standard model is wrong, that the various proposed "explanations" of the Mfecane/Difaqane are all moot—what they attempt to explain is not what actually happened.

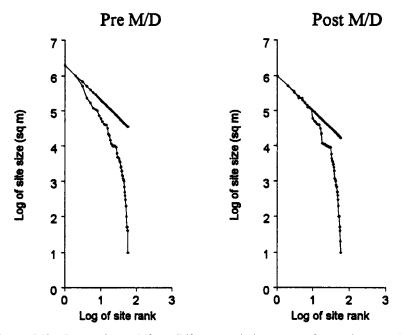


Figure 5.18. Pre- and post-Mfecane/Difaqane rank-size curves for southeastern Africa combined.

Pre-Mfecane/Difaqane primary producer settlements did not all exhibit "typical central cattle patterns," nor were they characterized by material culture forms indicative of their mode of production (i.e., stone tools associated with gatherer-hunters, pots with agropastoralists, etc.). For example, OFD1, the largest site in the sample, had ritual paraphernelia, elite burials, an elite culling pattern, and pastroforaging material culture. This anomalous site does not fit the standard Settler Model.

Second, landscape diversity was not always associated with geographic regions or ecological characteristics. For instance, the environmentally poor herding area of the eastern Transvaal has the most animal units for both periods. The presence of large mineral and iron-production sites and their association with European goods and elite cattle patterns do not fit the settler version models. These observed site types are better explained by a hypothesis based on preMfecane/Difaqane African-European trade relations. Finally, royal residences, particularly those in Zululand, do not fit the settler version model until the later periods.

The emergence of the Zulu state and the ensuing Mfecane/ Difaqane has been the object of study by many different scholars of many different disciplines for more than fifty years, yet the archaeological data are remarkably incomplete. The comparison of the archaeological data, although fragmentary, with the Settler Model and with some of the ethnohistorical single-variable hypotheses seems to better explain the relevant processes of demography and external trade in a number of ways. Although circumstantial evidence strongly suggests post-Mfecane/Difaqane conflictual relations, the exact reasons for this conflict in terms of the captive- and cattle-raiding hypothesis cannot adequately be addressed with the present data. In Chapter 6, I discuss possibilities for future research that might shed light on this particular explanation.

Both the ethnohistorical and population density analyses showed that only after Zulu state emergence did population and settlement size and density in Zululand increase along with the number of royal residences. Later population increased 33 percent in Zululand, Swaziland, and the western Transvaal and decreased 34 percent in the Free State and the eastern Transvaal. I suspect that this inverse relation may reflect increasing demographic densities resulting from population relocation. Furthermore, the eastern Transvaal and the Free State had the largest early sites in the entire sample, both of which were involved in exchange networks with Europeans at Delagoa Bay and the Cape frontier and were abandoned after the eighteenth century.

The question of autonomous or interdependent polities and types of interaction like trade processes was investigated by analyzing the archaeological distribution of European trade goods, especially glass beads. Zululand had no European goods in earlier sites and only one later-period royal residence with glass beads. The Free State and the eastern Transvaal had the most sites with European goods for both periods. Only later did Free State royal residences contain more glass beads than did eastern Transvaal mineral production sites, and Free State forts were third. Indeed, during the later period, the Free State fort is the only site with "abundant" glass beads. Thus external relations were most likely at work in the early Free State and the eastern Transvaal and only later in Zululand. Using Archaeology to Study the Processes of the Mfecane/Difaqane 135

Zululand

Early Zululand's primate curve deviation indicated that both large and small settlements were smaller than expected. Although Zululand's largest site was an iron-production site, larger mineral and iron-production sites existed outside Zululand in the eastern Transvaal and the Free State. This could suggest less stratified social relations and iron production for local markets in Zululand. Furthermore, the only early Zululand site with an elite cattle-culling pattern is a military site, whereas the two royal residences had primary producer–culling patterns.

Later Zululand is described by a double convex curve, with large sites larger and small sites smaller than expected and with more medium-size sites. All but the largest iron-production site are royal residences, two of which had elite cattle patterns. I argue that the double convex curve is associated with colonial situations and quite possibly with those of the early stages of state formation. The curve indicates that either "independent" or subordinate settlement systems are being sampled. The cattle patterns suggest that the defensive site was continuously occupied by higher-status individuals who felt a need for protection.

The central cattle enclosure sizes at royal residences in Zululand, along with the number of cattle penned, increased dramatically during the later periods. The increased site sizes may indicate courts. Thus, not until after the emergence of the Zulu state did elite culling patterns and increases in herd size appear at royal residences in Zululand.

Swaziland

Swaziland's early rank-size curve indicates involvement in a possibly long-distance-trade-related larger system outside the sample area. The later Swaziland curve could be interpreted as related to more centralized integration of large and medium sites and more pronounced ruralism reflecting the dismantling of the old system. Although mean central enclosure sizes in Swaziland became larger through time (591 AUs pre-Mfecane/Difaqane and 677 AUs post-Mfecane/Difaqane), the large central enclosures at royal residences got smaller. These results, coupled with the fact that the total number of AUs in Swaziland increased only slightly, suggest that cattle were probably removed from royal residences and dispersed into other locations. Finally, in terms of European trade goods, Swaziland follows a Zulu pattern of none to some. This suggests that Swaziland, not unlike Zululand, became engaged in international trade networks only after the Mfecane/Difaqane.

Eastern Transvaal

The eastern Transvaal rank-size curves for both early and late periods are double convex for both periods and resemble those of later Zululand. Elite herd profiles in the early eastern Transvaal are found at one royal residence and two mineral-production sites. The only later site with an elite pattern is a large mineral-producing complex with enclosures greater than 100 meters in diameter. Thus, despite the inhospitable environment for cattle herding, far more cattle were kept here during both periods than in any other area and period. It seems reasonable to suppose that eastern Transvaal was going through trade-induced state formation during the early period, possibly a trade concentrating on beef. However, the whole stateformation process fell apart, in part from competition from the Zulu and in part from the withdrawal of European connections or from the intensification of European slaving.

Western Transvaal

The western Transvaal curves remained primate through time but lost 50 percent of their sites and all but one central enclosure. This suggests that cattle were no longer kept in this region, indicating cattle loss, dispersion, and/or site abandonment. Two military sites, one with an elite culling pattern and the other with a primary producer pattern, were occupied during both periods. Here, too, elites felt a need to be fortified during both periods.

Free State

The early Free State curve exhibits regional primacy like the late western Transvaal and contains a fort, one iron-producing site, a ritual site, and a royal residence, both royal residences have elite culling patterns. Regional primacy has been argued to possibly reflect the effects of long-distance trade processes. Indeed the Free State has a significant number of European trade items, especially European weapons and horses. The early ritual site, the largest in the entire sample, had evidence of conflict and was later abandoned. The archaeological remains and assemblages are anomalous and indicate that stratified pastroforagers had occupied this site.

The later Free State sites produced the only occurrence of a convex pattern for the entire sample while losing 50 percent of their sites. This pattern is consistent with my argument for a loss of power in the Free State through time and is indicative of the later Free State's peripheral position. An iron-producing site that was occupied during both periods goes from an elite to a primary producer–culling pattern. This might suggest a loss of power for those residing at the iron-production site. Cattle enclosures and total AUs in the Free State got slightly larger through time but remained relatively stable.

The rank-size analysis indicates that fifteenth- through seventeenth- century rank-size curves for each area are all primate concave curves, varying only in their degree of steepness, with the exception of that in the eastern Transvaal. This finding is interesting in that it suggests that a state-formation process occurring in the eastern Transvaal got totally disrupted. Indeed, this is the most common rank-size distribution for polities involved in colonialism.

Demographic patterns parallel these rank-size interpretations. Through time, Swaziland and Zululand had the greatest increases in their large sites; the eastern Transvaal lost 75 percent of smaller sites, the western Transvaal lost 50 percent of all sites, and the Free State lost 33 percent of small sites and all large and medium sites.

The later rank-size curves are more diverse. Zululand, Swaziland, and eastern Transvaal exhibit the same double-convex distribution curves. Free State's curve is convex, and western Transvaal's curve is concave. It seems reasonable to suggest that population growth in Zululand and Swaziland was related to the marked population declines in eastern and western Transvaal and the Free State. Discerning what is driving these demographic shifts seems important for understanding the organizational changes suggested by the rank-size analyses. It is also reasonable to see the rapid growth in Zululand and Swaziland as related to the decline in the Free State and eastern and western Transvaal. Attention needs to be devoted to the causes of these declines, instead of focusing exclusively on the effects of population growth.

These analyses suggest historical processes at odds with those proposed in the Settler Model. Instead of a series of self-contained regions from which the state emerges in one, Zululand, which then sweeps out to peripheralize all the others, a more fractured account seems required. For one, the pre-Mfecane/Difaqane interaction fields were much larger than any of these self-contained regions, although the exact nature of the relations in these fields is still obscure. For another, similar processes seemed to be happening in Zululand and Swaziland, processes suggestive of relations of imposed colonialism and/or imperfect state formation. The eastern Transvaal seems to have passed from a period of relative organization to one of imposed colonialism or imperfect state formation. The western Transvaal became increasingly peripheralized, and the Free State became very marginalized and thoroughly internally disorganized.

I suggest that these findings are directly related to changing power relations among southern African polities and their European allies, revolving around the trade in African captives. For example, Zululand and Swaziland are very similar with the exception that Zululand seems to win the state-formation struggle. The eastern Transvaal seems to stop being directly under the sway of European trade, and its formerly organized polity disintegrates into independent polities, possibly each raiding the other for captives or possibly each being tied to different external sources of power. Something very similar may be happening with the Free State, except that it is even more shattered by captive raiding so that hierarchically organized polities of any size are missing.

Interpretations for the western Transvaal are more varied. The western Transvaal could be a refugee area with a central place that is either trying to exploit everyone or that shifts from being exploitative to being defensive. The western Transvaal could also represent a central place that is now thoroughly disconnected from the peasantry or a central place that is a Zulu-Swazi dependency.

Now that I have shown discordance between the Settler Model and the actual archaeological data, how might we investigate the captive- and cattle-raiding hypothesis proposed above? In Chapter 6, I present some material manifestations of the slavery hypothesis from the archaeological record for southern Africa.

Toward an Archaeology of Impact 6

SUMMARY OF THE RESULTS

Most historical research on southern Africa has uncritically accepted the role of Zulu state formation in the Mfecane/Difagane as the most important political event in later south African history. The Mfecane/Difagane describes a cataclysmic event precipitated by Zulu consolidation and expansion and involving the emergence of a number of other African military polities. There are several assumptions underpinning this standard settler version of southern African history. The first implies that the near-genocidal warfare characterized by cattle raiding, starvation, forced migrations, and terror was internally generated. Another assumption is that the black-on-black violence created African refugee communities seeking "asylum" among European colonists and resulting in large tracts of depopulated areas where Europeans settled. Most settler version theorists assume that European involvement was minimal and consequently have omitted European agents from the equation. They have focused instead on increasing conflictual relations between traditional African rivalries arising from demographic stress and ecological deterioration. Others who concede European involvement highlight the commercial competition between African polities for control of ivory and cattle exports at Delagoa Bay. The notion of an internal, Zulucentric, Mfecane/ Difagane remains unchallenged.

My research and analysis suggest that the Settler Model of the Mfecane/Difaqane is wrong: It has the wrong people in the wrong places with the wrong political organization, and it incorrectly assumes a lack of political/economic ties between regions (Table 6.1). Why did we end up with this situation, and where do we go from here?

The reason we ended up with this situation is that people believed the settler version because it served European colonial interests and the interests of European-sanctioned African elites. The Europeans, for example, had an interest in obscuring the role and

Table 6.1. Table for Southeastern African Changes from Pre- to Post-Mfecane/Difaqane

Site	Population size		Social hierarchy		Number of cattle enclosures		Rank size		Trade European goods	
	EXP	Obs	EXP	Obs	EXP	Obs	EXP	Obs	EXP	Obs
Zulu	Increase	Increase	Increase	Increase	Increase	Decrease	LL to cave	Cave to DC	Increase	Increase
Swazi	Same	Increase	Increase	Same	Increase	Decrease	LL to vex	Cave to DC	None same	Increase
Et	Increase	Decrease	Same	Decrease	Decrease	Increase	LL to LL	DC to DC	Decrease	Decrease
Wt	Increase	Decrease	Same	Same	Increase	Decrease	LL to vex	Cave to cave	None same	Same
Fs	Increase	Decrease	Increase	Decrease	Decrease	Decrease	Vex to vex	Cave to vex	None same	Decrease
SEA	Increase	Increase	Increase	Decrease	Increase	Decrease	Vex to vex	Cave to LL	Increase	Decrease

Note: Cave = Concave, DC = Double Convex, LL = Log-linear, Vex = Convex refer to the type of rank-size curves. Expected = Exp; Observed = Obs.

magnitude of slaving and the effects of slaving on African populations. The post-1820 African elites had an interest in legitimizing their own superordinate status and therefore had reason to disguise the nature ofpre-1820 polities. Where do we go from here? We start by using archaeology to bypass the biases of the ethnohistorical and documentary record. Archaeology is the way to find out what pre-Mfecane/Difaqane societies were like and how both European and African polities were inter-related.

Cobbing's (1988) provocative reformulation of the Mfecane/ Difaqane constructs a compelling case for considering the role of European trade in African captives, which stimulated internal conflicts and the militarization of African polities throughout southern Africa. This trade was meant to meet the internal and external labor demands of European colonists and the internal demands of their African agents. Cobbing also demonstrates how and why the standard settler version, which vilifies the Zulu, functions in the modern South African political economy by masking the role of whites in destabilizing African polities and by placing the onus of responsibility for the destruction of African societies on the Africans themselves.

To investigate Cobbing's hypothesis, we must look at the historical documents, oral texts, and archaeological record beyond Zululand and consider the full range of both African and European dynamics in southern Africa. Essential to this endeavor is comprehending differences and similarities between African forms of incorporation and European notions of slavery.

According to Hall (1990,1461, African captives who lost all kinship ties went on to "become members of the conquerors' armies and households—in a word, 'slaves." He correctly emphasizes the wider application of the term *slavery* to distinguish armies used by *Prazeros* (land titles granted by the Portuguese king, making former renegades "official" landholders and loyal Portuguese subjects) from African captives used for domestic and plantation labor in European colonies (Hall 1990, 129–32). Although he does not specifically say that "slavery" was a factor south of the Limpopo, he does call attention to the simultaneous occurrence of Zulu state formation, Mfecane/ Difaqane, and establishment of the trade in African captives between African groups throughout the subcontinent.

He argues that African "slavery" was an extension of the processes by which war captives were initially incorporated into African states, evolving out of indigenous African systems of forced incorporation. Hall (1990,132) states that the definitive characteristic was the manner of capture and sale, which resulted in detaching people from their communities. Many southern African polities yielded their autonomy in production and distribution to more powerful groups. However, this reality raises several questions that must be addressed. How repressive were the means, and how long lasting and how socially extensive were their loss of power? Did the loss of power extend to all segments of the society? Finally, what were the effects on other communities not incorporated by these emergent states? Thus, can precolonial African social relationships between captors and captives legitimately be called "slavery" and equated with "racial commodity slavery" as defined and described below?

RACIAL COMMODITY SLAVERY AND AFRICAN INCORPORATION

Slavery can be heuristically seen as a range of points on a continuum of labor relations. Both the conditions of coerced labor and the means used to procure it have been shown to be highly variable and historically specific in Africa and elsewhere (Etherington 1991b, 156; Meillassoux 1986). Hence, although racial commodity slavery and African incorporation involved subservience and exploitation of labor and its products, there were qualitative differences worthy of note.

Variable African Labor Relations

African incorporation and exclusion yielded different ways by which wealth generated from expropriated labor was transformed into elite political and economic power through accumulation and the attraction of followers.

Harries (1981, 320) points to the myriad types of incorporation known ethnographically and historically in southern Africa such as ransomed hostages, volunteers, and concubines (i.e., daughters given to elites by fathers as tribute or taxes for material assistance and protection during upheavals and insecurity). Royal daughters from concubines produced agricultural surplus and commanded inflated bride wealth in addition to providing lineage members. Mbatha (1960,18 and 66–69)refers to persons reared from childhood by a clan not their own as "affiliate clansmen." He explains that this status entails mutual obligations and involves individuals and groups (war captives, commoners, refugees, etc.) who are forced to submit themselves and/or their families into service to a king, chief, or headman who sponsors them for land. Captive raiding also provided a rapid means of acquiring labor, lineage descendants, and profits. Elite used captives to enlarge the size of the superordinate groups' lineages with socially and economically dependent subordinates without kin, home-stead affiliation, or territorial ties. Thus captive raiding furnished a process by which reciprocal sets of kinship and marriage obligations could be avoided (Cohen 1967, 44; Kopytoff and Miers 1977, in Hall 1990, 132-33; Harries 1981, 314; Meillassoux 1986).

The Zulu state was characterized by processes of expansion, subordinate incorporation, displacement, and consolidation of an assortment of local and regional eighteenth-century polities (Slater 1976; J. Wright 1990). Zulu incorporation used kinship ideology to create pejorative ethnic identities by differentiating elite from commoners (Hamilton and Wright 1984, 7-9; Wright and Hamilton 1996).

Yet African captives traded to other Africans, although relegated to the lowest social positions in a captor's society, had varying degrees of social mobility, often depending on their manner of recruitment. For instance, most captives had some expectable political and economic rights such as protection against outsiders, ability to obtain marriage partners, access to the means of production, and sometimes, depending on their skills, an opportunity to earn an independent compensation. They often became loyal and trusted political and administrative appointees precisely because they had no outside kin obligations.

Furthermore, one was not necessarily a "slave" for life. Captives could be heirs, and many obtained positions of power and influence. Captives could achieve higher status and acquire freedom during their lifetime, through bravery in battle, skilled workmanship, and loyal service or after a specified period when autonomy was granted and the person was incorporated into the superordinate's kin group as a full-fledged member. In addition, one's children did not necessarily share a "kinless" fate. Often the rank of a captive's offspring was determined by the superodinate's rank; certain captives' offspring were sometimes ranked higher than those of noncaptives (Cohen 1967, 45). Finally, captives remaining in Africa were often able to sustain their own or similar African institutions, language, customs, beliefs, and cultural practices. A captive could often run away to a neighboring village as long as the old superordinate was compensated by the new. Similarly, those captives traded to European colonists in Africa were reasonably familiar with the terrain and often escaped to more friendly African polities.

Racial Commodity Slavery

The nature of racial commodity slavery, on the other hand, excluded captives from rich interactions with others in society (Mintz 1978). On the basis of phenotype, language, and culture, captives were afforded a permanent stigmatized social status, transmitted to their descendants with little or no opportunity for acquiring freedom. Moreover, these conspicuous attributes became justifications for European racist disdain, inhumane treatment, and permanent use of slaves as property. In addition, the use of firearms and violence to obtain African captives for the European marketplace transformed African communities into specialized captive-raiding states and others resisting raiding. Globally, this traffic altered the political economy ofAfrica while it created a tributary power relation between Europe and Africa (Wolf1982).

In most cases, Africans were transported to a completely different cultural and environmental milieu too far from Africa for them to return. These African captives were forced to create new cultural forms of self-identity and survival. There were also "mixed" communities like the Griqua and Korana, who, despite rejection and abuse by Europeans, were willing colonial agents. They adopted European dress, religion, culture, and values. They also collaborated with Europeans in hunting down escaped captives and raided Africans to provide captives and cattle for Europeans and themselves (Etherington 1991a).

In sum, all southeast African polities possessed a variety of means for incorporation into and exclusion of individuals and groups out of their societies. African incorporation sought to build kin groups by incorporating kinless individuals. Racial commodity slavery was expansive and based on a global division of labor rooted in an ideology of racism. Its nineteenth-century escalation into African polities drastically altered the nature of differential incorporation and culminated in social marginality in militarized, heterogenous, nationalized states. These states were themselves products of incorporation and amalgamation, some with the capability for sustained coalescence and resistance.

As European penetration coalesced, members of some conquered groups were enslaved by European frontier communities, and others were variously incorporated into African societies. The increasing physical and social separation of whites from their African labor force facilitated a legally sanctioned class ideology of racism and segregation, which enabled greater elite control of a racially divided labor pool. This process in southern Africa involved the political creation of colonial-defined, externally imposed color categories of new racial and ethnic identities of white inclusion and black exclusion.

More acquiescent African polities were given some internal autonomy to reinforce the new racial and ethnic distinctions of colonialism. Groups were identified, their identities transformed, eliminated, assimilated, and co-opted as struggles on economic, political and cultural fronts took shape (Paynter personal communication, 1994). Other Africans seized this opportunity to use these dichotomies to act independently of the colonizers to create sociocultural and ideological structures of resistance in their quest for liberation.

African struggles over exclusion and incorporation were actively contested. Because the ideological and physical separation proceeded together, architectural trends accompanying the physical segregation should be reflected by particular artifact configurations or symbols of cultural continuity similar to Patterson and Gailey's (1987) "archaisms" and by other spatial realms of colonial architecture, material culture, and African cultural landscapes.

The Impact of Racial Commodity Slavery

Raiding for captives involved killing and capturing people, burning villages and fields, and confiscating livestock and grain stores. These conditions effectively destroyed the agropastoral economic base, fostering insecurity and driving many families from their historic communities and into migrant labor, commodity production, and military organization.

The sheer number of captives, even counting only those "legally" traded, suggests that African societies suffered enormous population losses, particularly of the younger, more productive members of society, especially men. This had detrimental consequences for the age pyramid and biological reproduction. It left many women without men. The more that women outnumber men, the more vulnerable women are to men. Hence communities with fewer fighters tended to be vulnerable to attack. Captive raiding also severely transformed gender relations and caused an expansion in the incidence of polygamy (Cobbing 1988; Eltis 1987; Lovejoy 1983).

Social reproduction was drastically altered as African networks ofkinship and marriage, which had served as the traditional basis for alliances, power, and authority, could now be circumvented by groups connected to Europeans and their agents. European weapons facilitated both the ability to exact tribute over wider areas by raw military force and the ability to resist raiders. As captive and cattle raiding replaced trading as the dominant form of economic activity, African labor became worthless without military protection (Wilmsen 1989). Racial commodity slavery was a brutal but effective means of accumulating the necessary labor for global capitalism. The stigmatized groups served capitalist accumulation by providing an available labor pool for external plantations and internal colonies and by lowering European wages at little cost to the colonial powers.

Finally, captive raiding generated an advancing colonial frontier that violently seized land and dispersed African populations, thereby providing huge depopulated areas on the peripheries of settlements of Europeans and their agents and creating opportunities for more European settlement and expansion.

REGIONAL LANDSCAPES AND ARTICULATING MODES OF PRODUCTION

Marxist theory assumes that concepts like capitalist penetration and resistance represent actual historical sets of social relations yielding certain archaeological expectations dependent on how hypotheses are framed to include archaeological data. Such concepts facilitate understanding of some distinctions not readily apparent from the archaeological data alone, distinctions that tend to be obscured in the more generalized models (Hall 1990, 64).

Althusser and Balibar (1971) have argued that colonial areas were social formations characterized by "articulating modes of production" where the capitalist and noncapitalist modes of production coexisted contradictorily in conflict and acquiescence. Southern African landscapes were dynamic and operated at different scales; that is, they constituted regions or parts of regions that varied considerably in function, size, extent, duration, and interaction from social formations outside Africa.

The sixteenth-century Portuguese destruction of eastern African coastal polities shattered the once-stable commercial relations between the coast and the interior and forced the collapse of Great Zimbabwe and the emergence of the Torwa and Mutapa states to the south. The new kingdoms had alliances with the Portuguese based at Mozambique, who plundered local groups for captives and established markets and hegemony over vast estates (Hall 1990,130). The demand for African labor collapsed local lineages and made access to coercion and destruction the basis for alliances and power.

Farther south, powerful eastern Transvaal polities that had been heavily engaged in metal trade with African interior groups for hundreds of years became involved in commercial relations with Europeans at Delagoa Bay. During the seventeenth century, European competition to control ivory resulted in African-European conflictual relations and alliances in and around Delagoa Bay. By the midseventeenth century, ivory sources were coming primarily from the areas south of Delagoa Bay (Hedges 1978). By the eighteenth century, the Mthetwa-Zulu were engaged in regional elite commercial relations, initially involving commodities of little value in their own economies. For instance, ivory was exported for commodities given value by their rarity, These exclusive wealth forms were essential to the emergent ruling class and replaced cattle accumulation as the principal means for signifying wealth, power, and authority.

The nineteenth century witnessed an intensification of livestock and African captive raiding throughout southern Africa. For instance, Griqua captive raiders and cattle raiders attacked Xhosa villages in 1805, Zulu homesteads in 1821, and Ndebele communities in 1828 and displaced Free State Sotho-Tswana communities by the 1820–30s (Cobbing 1988). These early decades of the nineteenth century also saw Boers invading and occupying the southern highveld and the Free State and forming the South African Republic in 1836 (Etherington 1991a).

These events suggest looking beyond declining access to exotic commodities by the Zulu as the cause of the Mfecane/Difaqane. Hall (1990, 125) points out that although the Zulu and Xhosa polities generally prevented fissioning and at times successfully contested European colonial penetration, there is little evidence for class formation like that found at Great Zimbabwe.

It is possible that the transition to military polities and from useless to useful exports like cattle and people during the nineteenth century was based on a demand for firepower. Unlike earlier wealth forms that maintained and lubricated ruling-class alliances, European weapons could be used by competing Africans and Europeans. European hegemony was facilitated by providing collaborating African polities with the advantages of firearms, horses, and alliances for augmenting their slave- and cattle-raiding capabilities, further accelerating and entrenching African dependence. European agents sought to instigate and aggravate internal African rivalries and to deceive, disrupt, and destabilize African polities (Cobbing 1988).

The plunder of African communities by Europeans and their African agents, combined with European settler competition for land, food, and labor resources, placed a premium on militarized polities. This resulted in famine and displacement for those communities and individuals without military protection. People were forced to move into areas that were simultaneously part of their traditional homelands and part of the newly emerging landscapes perceived as marginal by European settlers.

Thus the late-eighteenth-century rapid proliferation and coalescence of military polities was one manifestation of African resistance to European penetration. These polities were forged of different African people who superimposed firearms onto preexisting structures like the *Amabutho* during the Mfecane/Difaqane.

Europeans transformed the landscapes they found with various new forms of materials, like guns, forts, and horses. These material cultural forms were manipulated by Europeans and Africans alike, and African cultural landscapes became part of a specialized periphery of a new larger totality, whose centers of gravity were elsewhere and whose commercial activity was rooted in class-based commodity production and consumer demands in Europe. The peripheralization was based on the expropriation of indigenous raw materials, food resources, land, and human labor for a colonial plantation economy rooted in racial exclusion (Cruz-Uribe and Schrire 1991). From the beginning, however, these local and global transformations engendered forms of African resistance and contestation that must be reflected in the material world and cultural landscapes of southern Africa.

A COMPARATIVE ARCHAEOLOGICAL LOOK AT SOUTHERN AFRICA

The results of looking at the archaeological data suggest that ecological, demographic, and trade processes appear to have little validity as monocausal explanations of the Mfecane/Difaqane. The archaeological and ethnohistorical evidence reveals certain trends that indicate that the historical processes responsible for the Mfecane/ Difaqane were much more complex and certainly involved Europeans. Furthermore, this evidence indicates that processes affecting southeastern Africa had effects in Zululand opposite to those in the Free State and the eastern and western Transvaal. For example, all demographic analyses point out that the post-eighteenth century Zulu population was about 50 times larger than in the fifteenth through eighteenth-centuries, with a 33 percent increase in the number of sites. These increases were associated with population decreases in the Free State and the eastern Transvaal and a corresponding 34 percent decrease in the number of sites. A comparative analysis of the Free State and eastern and western Transvaal with Zululand reveals the inverse pattern more clearly.

The Free State shows no evidence of agropastoral settlement until about AD 1300 when numerous stone-walled livestock enclosures and settlement units appear (Hall 1990). Maggs (1976a, 330) has defined four types of Free State settlements based on different architectural features and has tentatively identified specific groups with each type.

The earliest sites are the southwestern, fourteenth- to nineteenthcentury Type R settlements along the Riet River. Larger Type R settlement sites had rock engravings, rock gongs, and stone-lined burial pits with exotic grave goods. This circumstantial evidence suggests involvement in European commercial relations and differential social status. Yet wild game, lithics, and undecorated grasstempered pottery suggest pastroforagers. The evidence of at least one burnt dwelling and the site's eighteenth-century abandonment could suggest changing regional power relations.

Both the late-fifteenth-century northeastern Free State Type N sites and the eastern Type V sites date from the sixteenth century. Type N settlement units are characterized by surrounding perimeter walls enclosing the entire settlement unit and are generally situated at higher elevations (Hall 1990, 49–50;Maggs 1976a, 321–22).Earlier sites are larger, more dispersed than later sites, and concentrated on hilltops (Maggs 1971,1976a, 1976b). At least one of these Type N sites, Klipriversberg, became fortified and contained European commodities.

During the late sixteenth century, many new Type V settlements were constructed between and superimposed onto older Type Ns that continued to be occupied or reoccupied. By the early seventeenth century, Type V sites became the most widely distributed type on the southern highveld, and by the eighteenth century they were abandoned.

Makgwareng, a late-eighteenth through early-nineteenth-century Type V site, contained ostrich eggshell beads, iron spear points, and cattle and horse remains. The settlement seems to have been "suddenly and violently abandoned" as evidenced by the remains of several stores of iron tools, clusters of spear points around a homestead entrance, and a human jaw bone in the cattle enclosure entrance (Hall1990).

Type Z sites are densely packed settlements in the drier northwestern Free State and date from the late fifteenth through the nineteenth centuries. During the sixteenth and seventeenth centuries, new Type Zs emerge between older ones.

In sum, southern highveld settlements began to aggregate after the fifteenth century, exhibiting differences between elite northwestern sites with European commodities and primary producer eastern sites. There were four early sites with elite cattle-culling patterns: a fort, an iron-producing site, and two royal residences. The one iron-producing site that remained occupied during both periods changed from an elite to a primary producer–cullingpattern. This might suggest a loss of power for those residing at the iron-production site. Furthermore, most elite sites were abandoned by the eighteenth century, and the number of forts increased.

The archaeological evidence of regional primacy and greater kinds and amounts of European goods, especially European weapons and horses, tends to support the documentary record that Free State polities were involved in long-distance exchange relations with Europeans at the Cape, both before and after the Mfecane/Difaqane. Before the Mfecane/Difaqane, eastern Transvaal production sites contain the most glass beads. After the Mfecane/Difaqane, Free State royal residences and a fort with "abundant" amounts of glass beads contained the most beads. Free State faunal assemblages exhibit mostly primary producer cattle-culling patterns with wild game providing a significant portion of the diets (Maggs 1975,449-54 in Plug and Brown 1982, 120).

Zululand settlement transformations are the opposite of those in the Free State. Archaeological settlement studies from Zululand indicate a large-scale expansion of Type B stone-walled settlements into the southeastern grasslands near dolerite outcrops between the sixteenth and eighteenth centuries. These areas were unoccupied by agropastoralists earlier (Hall 1981; Hall and Maggs 1979). Type B sites are architecturally dissimilar to traditional "central cattle pattern" settlements and exhibit primary producer cattle-culling patterns and an absence of European commodities (Hall 1984c, 1990; Hall and Mack 1983).

My analyses show more royal residences and military sites in Zululand than in any other region; two of three early royal residences in Zululand had primary producer cattle-culling patterns. A fortified Type B site had an elite cattle-culling pattern and evidence of earthwork ditches and sinuous cattle passages protecting against cattle raiding. These early-period patterns suggest the continued importance of military individuals and a concern with cattle raiding in Zululand.

The later Zululand sites consisted of two royal residences with elite cattle-culling patterns. These later royal residences yield older cattle (for military shields?) and a differential distribution of higherand lower-status body parts (Plug and Brown 1982; Plug and Roodt 1990). Central enclosure sizes and presumably the number of cattle increased significantly during the later periods at the royal residences. The increasing court size and increasing numbers of cattle suggest the growing importance of royal residences after the eighteenth century.

The largest sites for both periods were iron-producing sites. The number of furnaces and by implication the demand for iron weapons and tools increased until the late nineteenth century. With the onset of colonialism, these sites were abandoned. This circumstantial evidence could reflect iron production for local markets before the Mfecane/Difaqane and greater local demand and regional markets like the Free State after the eighteenth century. Oral traditions indicate that Free State populations acquired iron implements from Zululand iron-producing sources before the early decades of the nine-teenth century (Maggs 1982, 1984, 202).

Thus, substantial evidence for conflictual relations before the Mfecane/Difaqane can be found in the continuous presence of military elite in Zululand with elite cattle-culling patterns at fortified sites. Fortifications increase in Zululand after the eighteenth century. A similar inverted relation also existed between Zululand and the eastern Transvaal through time. The eastern Transvaal had the most metallurgical and primary producer settlements and despite its poor agropastoral environment, more cattle during both periods than any other area. The cattle were primarily at large specialized sites. Herd profiles in the early eastern Transvaal sites are mostly elite cattleculling patterns from a royal residence and two production sites. Preeighteenth-century metallurgical and production sites are found in the eastern Transvaal, and evidence of commercial relations with Europeans is found by the early eighteenth century. The only later site is the large production complex that continues to exhibit an elite cattle-culling pattern.

By the late eighteenth century, large metallurgical sites become larger, fortified, and defensively situated. Large settlements become more architecturally complex with cattle tracts, terracing, and different size livestock enclosures and are surrounded by smaller sites at lower elevations.

In summary, the archaeological evidence suggests that the eastern Transvaal and Free State sites show increasing evidence of settlement aggregation, social stratification, conflictual relations, and European commercial relations after the fifteenth century. By the eighteenth century these areas show evidence of fortification, elite and primary producer–site abandonment, and reduction or agglomeration of cattle at large specialized sites. Taken together, these patterns suggest conflictual relations and population dispersion in regions on the expanding European colonial frontier by the eighteenth century.

The documentary sources and oral texts speak of the dispersal of Free State and Transvaal groups sometime after the mid-eighteenth century. Not until the early decades of the nineteenth century did these communities begin to aggregate in these areas as people began to vacate their towns. Huffman (1984) attributes these transformations to events in Zululand in particular, not to European intrusion.

As I have stressed, the archaeological evidence from Zululand shows increases in precisely those categories that decreased in the Free State and eastern Transvaal. I contend that these patterns mean that people found life in those areas near European settlements dangerous and moved into Zululand, or that they were forcibly incorporated into the Zulu state as regional power shifted to Zululand after the start of the nineteenth century.

Besides the accumulation of wealth forms signifying power and authority, long-distance processes also involved access to European firepower, protection, and force. The analysis suggests that Zululand exhibited no European artifacts until after the Mfecane/Difaqane. The eastern and western Transvaal and the Free State showed commercial contact with Europeans before the Mfecane/Difagane.

Whatever the conditions in southeastern Africa during the preand post-Mfecane/Difaqane, they had the opposite effects on communities in Zululand, Swaziland, and western Transvaal and on those in the Free State and eastern Transvaal. Although evidence for conflictual relations is undeniable, the exact causes of this conflict cannot be definitively addressed with the present data.

Nonetheless, all analyses and results suggest that the Mfecane/ Difaqane as traditionally characterized in settler history is inadequate in explaining the post-fifteenth-century transformation in southern Africa. The transformation is better understood as a result of more complex global processes involving Europeans.

Last, I have argued that the context of colonialism and global power relations has resulted in bias not only in the historical record but also in the archaeological questions about the Mfecane/Difaqane. This bias becomes most apparent when identifying and formulating hypotheses accounting for the discrepancies between the archaeological and documentary records. As suggested by Leone and Potter (e.g., 1988a, 1988b) "ambiguities" in the different lines of evidence are places where power lies — power that has resulted in telling histones that affect social relations today. If this is the case, then how can we go about finding out what happened? What research is necessary to better understand post-fifteenth-century southern Africa?

PROSPECTS FOR AN ARCHAEOLOGY OF IMPACT

This section is concerned with the ways in which historical archaeology can contribute to the theoretical and historical discourses about questions of capitalist penetration, colonialism, domination, and resistance in post-fifteenth-century southern Africa. I present some possibilities for an agenda for subsequent research topics with questions and archaeological implications based on certain data deemed important for the different interpretations. My goal is to present different ways that anthropologists might use archaeological methods for collecting, interpreting, and analyzing data to contribute to a better understanding of issues of power. I use questions from the contrastive case, that of African captive and cattle raiding, to direct future research strategies that can shed more light on this particular historical case.

Long-Distance Processes: Core-Periphery Relations

Although core-periphery relations leave archaeological traces that can affect data, there have been relatively few archaeological studies of these relations. This is due partly to the difficulty in situating such studies in an archaeological survey of comparatively small areas and partly to problems with recognition. One must look for such landscapes to recognize them; one must be cognizant that one is looking at only a sector of a global system.

Two expected theoretical configurations of peripheral-colonial cultural landscapes are dendritic patterns and regional primate patterns (Blanton 1976; Crumley 1976; Johnson 1977,1982; Kelly 1976; Paynter 1982; Smith 1976a, 1976b; Wright and Kus 1979).

Several areas exhibited characteristics of dendritic systems and regional primacy. Early and late Swaziland and late western Transvaal sites show larger numbers of smaller sites oriented toward a significantly larger elite site. Only early Free State sites had evidence for long-distance trade networks. This could indicate the exclusion of larger African or European sites, in southern Mozambique, Cape frontiers, or elsewhere. These patterns beg the question of the location of these entrepots.

Archaeological surveys and/or excavations of African and European entrepots, near Delagoa Bay, Natal, and the like, straddling coastal exchange corridors, can provide opportunities for data collection for studying processes of European penetration. Archaeological research in Natal has focused on African sites and has ignored early colonial sites like trading posts, missions, and European farmsteads, and little has been done in the Delagoa Bay area.

Future research must also examine European settlements and structures at these entrepots and elsewhere. My settlement maps indicate an increasing proliferation of European forts, initially located in coastal communities and later inland. This pattern raises questions about the spatial distribution of other European settlement types.

Resistance and Contestation

African captive and cattle raiding involved both local and external resistance and contestation. A Eurocentric perception of enslavement and domination masks the faces and muffles the voices of resistance by active social agents. Archaeological considerations of how landscapes, identities, and objects were transformed to contest Western penetration and to organize resistance have generally been excluded from explanations of the African past.

Resistance and contestation are always more than a collection of individual acts. They range from open defiance and armed confrontation to passive resistance to other forms of noncooperation that limits and impedes domination. They involve minor acts of sabotage to harass captors and colonists like theft, feigning illness, work slowdowns, deception, desertion, evasion of census/taxation, purposeful laziness (i.e, "shucking and jiving"), and ineptitude (Davis 1971; Patterson and Gailey 1987; Scott 1990). They also entail major acts like cattle theft, burnings, fighting, poisonings, escaping, providing havens for escaped captives, and, of course, insurrection, insurgency, and armed warfare. These conscious strategies send unequivocal messages about African dissatisfaction and willingness and ability to resist.

The presence of European and African forts themselves, along with the looting of European towns and farmsteads, attests to the hostile environment of the colonial encounter. I contend that the proliferation of military polities is reflective of resistance to Western incursion as warfare reinforced the leadership and promoted specialized military groups.

Armed Confrontation

Armed confrontation and military specialization are key characteristics globally defining the colonial encounter. Armed confrontation in southern Africa occurred between Africans over forced incorporation and between Africans and Europeans over colonization. The archaeological evidence indicates that fortified African settlements, conflictual relations, and European contact were manifested long before the Mfecane/Difaqane in areas outside Zululand, and only in post-Mfecane/Difaqane Zululand are sites large military towns with specialized areas for royalty (Parkington and Cronin 1979; Plug and Roodt 1990; Watson and Watson 1990).

Biohistorical evidence of armed confrontation includes data from burials and battlefields, revealing African and European individuals injured or slain in combat from gunshots or spear thrusts. One must remember that both Africans and Europeans used firearms, and there were many intra-European conflicts on the frontier as well. I know of no study of battlefields or African skeletal remains concerned with those questions. A review or reanalysis of published materials on burials with such questions in mind should prove productive.

Firearms and Spears

Theoretically, because all Africans, including captive and cattle raiders, were ultimately supplied by mainland European gun makers, we should be able to use weapons and related material objects to relatively date archaeological sites and as reflections of armed conflict. European military uniform paraphernalia, horses, and horse and wagon equipment could also signify the sites of European agents. Locally made gun flints and arms repairs could indicate resistance and should be sought in sites occupied by African populations (Schrire and Deacon 1989, 109).

The eastern and western Transvaal and Free State have evidence of these categories of European goods during both periods. Evers (1979, 34) recovered pieces of muzzle-loading guns from the Mapoch site, a stone-walled African fort destroyed by Europeans in 1883 in the eastern Transvaal. Kgopolwe Hill, a nineteenth-century royal village, yielded military uniform buttons and a gun muzzle and barrel (Evers and Van der Merwe 1987,90-91), and Oudepost 1 has yielded cannonballs, gun flints, and evidence of burning and sacking by the Ju/'hoansi (Schrire 1988).

Despite the historically known frequency and scale of warfare, archaeological excavations have so far recovered relatively few examples of European or African metal weaponry at sites in proportion to the known historic incidence of warfare. The documentary record indicates that Africans reused and/or refashioned iron materials and removed their projectiles and European weapons at the conclusion of battles (Edgerton 1988; Shaw and Van Warmelo 1974, 112). British soldiers also collected firearms from dead Africans (Edgerton 1988,78 and 95). The more necessary an imported, difficult-to-acquire technology is, the more it is curated. Guns are almost always highly curated and do not get discarded until they are hopelessly beyond repair.

SUMMARY AND CONCLUSIONS

These brief sketches are intended only to indicate research approaches needed to investigate questions of colonialism. My efforts to

test single-variable hypotheses have led me to reconsider the problem of Zulu state formation and the Mfecane/Difaqane in terms of colonialism and multiple-variable hypotheses and to propose the approaches and methods outlined above.

Global, local, and regional scales of analysis are essential to understand the complex post-fifteenth-century transformations in southern African-European historical dynamics involving ethnicity creation, domination resistance, acquiescence, and collaboration by both Africans and Europeans. Crucial to understanding these historical global processes are the roles of African captives in both African and European societies as they shifted to contribute to the accumulation of wealth and power for the few.

This book has illustrated that archaeology has an important role to play in the recovery of the past of southern Africa. Most historical studies, no matter how self-critical, are always faced with the problem of the Eurocentric and white supremacist biases of the documents. Adding an admittedly problematic source of information, archaeological sites, points out areas of contrast, in part because of the problems of the documents, and calls for renewed investigations of documentary and material records. For the archaeologist, the most immediate task is to survey and excavate sites in what are today blank spots on the map, especially the eastern Cape, Lesotho, and perhaps most important for questions of impact, southern Mozambique. This book also argues that discovering more sites is not enough. Archaeologists need to be more attentive to issues of power, issues about how power was exercised in African and European communities and how it was resisted, internally and externally. Research designs with these goals in mind could then be joined to the archaeological and historical research on colonialism being undertaken at the Cape and elsewhere to provide a fuller picture of the impact on all aspects of society when Europeans came to plunder southeastern Africa.

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