



A • M • E • R • I • C • A • N
A N T H R O P O L O G I C A L
A S S O C I A T I O N

Archeological and Historical Approaches to Complex Societies: The Islamic States of Medieval Morocco

Author(s): James L. Boone, J. Emlen Myers, Charles L. Redman

Source: *American Anthropologist*, New Series, Vol. 92, No. 3 (Sep., 1990), pp. 630-646

Published by: [Blackwell Publishing](#) on behalf of the [American Anthropological Association](#)

Stable URL: <http://www.jstor.org/stable/680339>

Accessed: 22/08/2011 18:26

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Blackwell Publishing and American Anthropological Association are collaborating with JSTOR to digitize, preserve and extend access to *American Anthropologist*.

<http://www.jstor.org>

JAMES L. BOONE
University of New Mexico

J. EMLÉN MYERS
Smithsonian Institution

CHARLES L. REDMAN
Arizona State University

Archeological and Historical Approaches to Complex Societies: The Islamic States of Medieval Morocco

The study of complex societies, especially those with documentary sources, provides an unparalleled opportunity for the archeologist to contribute to an understanding both of the past and of contemporary society. We argue that available documentary sources for early North African state societies can be effectively combined with anthropological insight to formulate interpretive models to derive more meaning from the archeological record. The illustration we provide comes from early Islamic North Africa. We postulate that during the Medieval period two widely different sociopolitical contexts existed, giving rise to diverse urban patterns. Most importantly, we argue that the second of these patterns represents a widespread situation that is inadequately treated in the literature.

IT IS WIDELY ACKNOWLEDGED by both archeologists and historians that by working together they can provide each other with substantial benefits. These benefits range from dates for specific events and discovery of important monuments to details of individual households and the source of a specific material product. Successful examples of this interaction abound in the literature of historical archeology in North America (Hume 1969; South 1977) and medieval archeology in Europe (Biddick 1984; Redman 1989). Many of these examples focus on specific insights provided by texts or specific discoveries by archeologists that illuminate issues in texts. It should be recognized, however, that the investigations of many historic-period societies do not lead to the discovery of new texts, and many settlements are not the subjects of specific historic descriptions. Hence, for much of historic period archeology, the field research design and the actual analysis of the material may not be affected by the fact that some people knew how to write at that time.

This article focuses on a more general type of synergistic benefit: the formulation of a model of the sociopolitical context in order to give more behavioral meaning to the archeological discoveries. In return, the archeologist can evaluate whether the historically constructed model is valid in general and sufficient in detail. We go one step further, by examining the historical record through a perspective on entrepreneurship suggested by ethnographer Fredrik Barth.

Anthropological Perspectives on Urban Development

Along with the state, the city has been the significant unit of analysis for investigations of complex society. A state consists of a set of political relationships among individuals

JAMES L. BOONE is Assistant Professor, Department of Anthropology, University of New Mexico, Albuquerque, NM 87131.
J. EMLÉN MYERS is Visiting Scientist, Conservation Analytical Laboratory, Smithsonian Institution, Washington, DC 20560.
CHARLES L. REDMAN is Professor, Department of Anthropology, Arizona State University, Tempe, AZ 85287.

and groups and is thus relatively abstract. Cities and the series of associated traits are much easier to identify. They are concrete entities with definable boundaries, and physically measurable attributes. While it is necessary to consider both cities and states, cities and related settlements are more commonly the target of archeological investigations, while historical summaries often most directly treat states and their dynastic leadership. This disciplinary bias cannot be allowed to obscure the distinct nature and role of cities versus state structures in the emergence of complex society.

To derive from historical developments a model of urban development, it is useful to consider some general factors in the growth of cities. Cities develop and persist where large numbers of people are attracted to the same location at the same time. Life in urban centers carries with it certain obvious costs, or disadvantages, principal among which are increased exposure to disease and unhealthful conditions and increased competition for space and resources. It follows that any explanation for the formation and development of cities must include a consideration of the benefits or opportunities that individuals might enjoy in such settlements. This is especially so in the case of most preindustrial cities, where we expect mortality was so high that population size had to be maintained by constant in-migration. If in-migration ceased, such settlements would begin to shrink in size.

While a number of possible advantages to urban life in preindustrial states might be adduced, access to elite social life and the advantages of an urban economy might reasonably be cited as the major attraction of urban life. Thus, it can be argued that explanations of preindustrial urban development and continuity might profitably focus on the issue of how and why urban centers offer continuing sources of economic opportunity.

Fredrik Barth (1962, 1967) has argued that entrepreneurial activity clusters along barriers or discontinuities between discrete spheres of economic activity involving the circulation of goods and services, taking advantage of the scarce means by which these barriers can be breached (see also Adams 1974:243).

Barth's view of "economic spheres," of course, was purely conceptual; they were not conceived of as having existence "on the ground" or in a geographic sense. Hence, our task is to explain why at least some of these discontinuities or barriers between spheres of economic activity became concentrated in, or tied to, a specific point in geographic space.

In the medieval Maghreb, we suggest, two very different sociopolitical contexts existed within the Medieval period and gave rise to distinctive states and urban systems. The earlier context (Idrisid period) appears to have paralleled other well-known situations, such as Mesopotamia and central Mexico, where agricultural production and the ability to centralize surplus were key elements in emerging urbanism. Trade and military activity were evident in Idrisid Morocco but were secondary when compared to control of productive agricultural territory. As is detailed later, this form of state society gave rise to a hierarchical urban settlement pattern with political centers being located in the important agricultural zones.

We believe that a second, and strongly contrastive, context existed during the following medieval dynasties (Almoravid, Almohad, and Marinid). Records indicate to us that control of long-distance trade, particularly that of sub-Saharan gold, became the primary force behind statehood and that centralization of agricultural produce became secondary. The primacy of long-distance trade also gave new importance to the role of military campaigns of conquest. The majority of this article focuses on the articulation of this second sociopolitical context because it is not widely recognized in the literature, yet we believe it may represent a major portion of the early states studied by archeologists. Under these new conditions we believe there emerged three principal discontinuities in the flow of goods and services sufficient to foster the growth of aggregations of entrepreneurial activity that could stimulate urban growth. Two of these discontinuities developed in specific geographical locations, while the third was associated with emergent cities, wherever they were. The first is the geographically intermediate position that the Maghreb held

between the gold-producing regions of sub-Saharan West Africa and the centers of mercantile activity in the Mediterranean basin. This discontinuity fostered the rise of the dynastic administrative capitals of interior Morocco that were concerned with facilitating long-distance trade. The second is at the geographic periphery of the dynastic empires: the Mediterranean and Atlantic coast to the north and the northern edge of the Sahara to the south. Urban centers that developed here were involved in a variety of transshipment activities. The third discontinuity is that which developed between the city and its hinterland, the discontinuity between the urban and rural economy. Many cities founded originally as centers to facilitate long-distance trade began to offer services and goods to their hinterlands.

Historical Overview of the Medieval Maghreb

It was during the 8th century that a political movement instigated by Idris b. Abdallah (Moulay Idris) led to the formation of the first major Islamic state in medieval Morocco. Idris was an Arab political refugee who had fled Iraq following his family's loss of power under the new Abbasid caliphate (material on the Idrisids was synthesized from Laroui 1977 and Brignon et al. 1967). Idris was installed as the leader of the Arawba tribe, sedentary agricultural Berbers who controlled the city of Oualili, or Volubilis, a former Roman provincial capital located in one of the most fertile agricultural regions of Morocco. The subsequent founding of Fez under the Idrisids and the expansion of their area of political domination were part of a sociopolitical transformation that involved the combining of local political and social organization with a tradition of Islamic urbanism of the Middle East. Moulay Idris was able to transform the tribe's necessity of uniting to defend its territories against outside attack into a political opportunity for himself, while the tribal elders apparently valued the religious legitimacy that Idris, as a descendant of the Prophet, offered their struggle against the Abbasid hegemony.

The territory of the Idrisid state, which reached its maximum under Idris II in the 9th century, was limited primarily to the most fertile agricultural regions of Morocco north of the Middle Atlas (see Figure 1). Within these areas, princes of the Idrisid dynasty founded political capitals including Fez, Nakur, Basra, and Tamdout. While commerce with the sub-Saharan region did exist at this time, the major source of revenue for the state appears to have been in taxes and tribute from tribal agriculturalists.

Stratification among the tribal producers is known to have varied considerably. Produce from these groups entered the cities in trade for urban-produced craft items that were imported or made locally. Rural exchange among herders and orchard and grain agriculturalists existed independent of urban control, and while the cities did possess more desirable craft products based on borrowing from the Persian and Byzantine traditions (Glick 1979), there is no reason to believe that urban centers had a monopoly on critical craft products or over rural production in general. Thus, one of the notable features of Moroccan agricultural production was that there were no really successful large-scale attempts at alienating farmers or herders from their land in favor of a system of seigneurial control. Tribal groups were displaced, to be sure, but this was always accomplished by other tribal groups. When taxes on agricultural communities were collected by the state, they were taken through a council of sheiks for the group as a whole but never, apparently, by plot or individual.

Upon the death of Idris II, the territories of the Idrisid state were divided among seven of his sons, each receiving a portion of the small empire. Their power focused around major established urban centers in each of the regions, which seem to have corresponded to major naturally partitioned agricultural regions of northern Morocco (see Figure 1). There was periodic internecine warfare among these polities in the succeeding generations of leadership, although none of them accomplished a lasting advantage over the others. Idrisid attempts to gain control over the southern trade entrepôts, which lay outside of the productive agricultural regions, were unsuccessful.

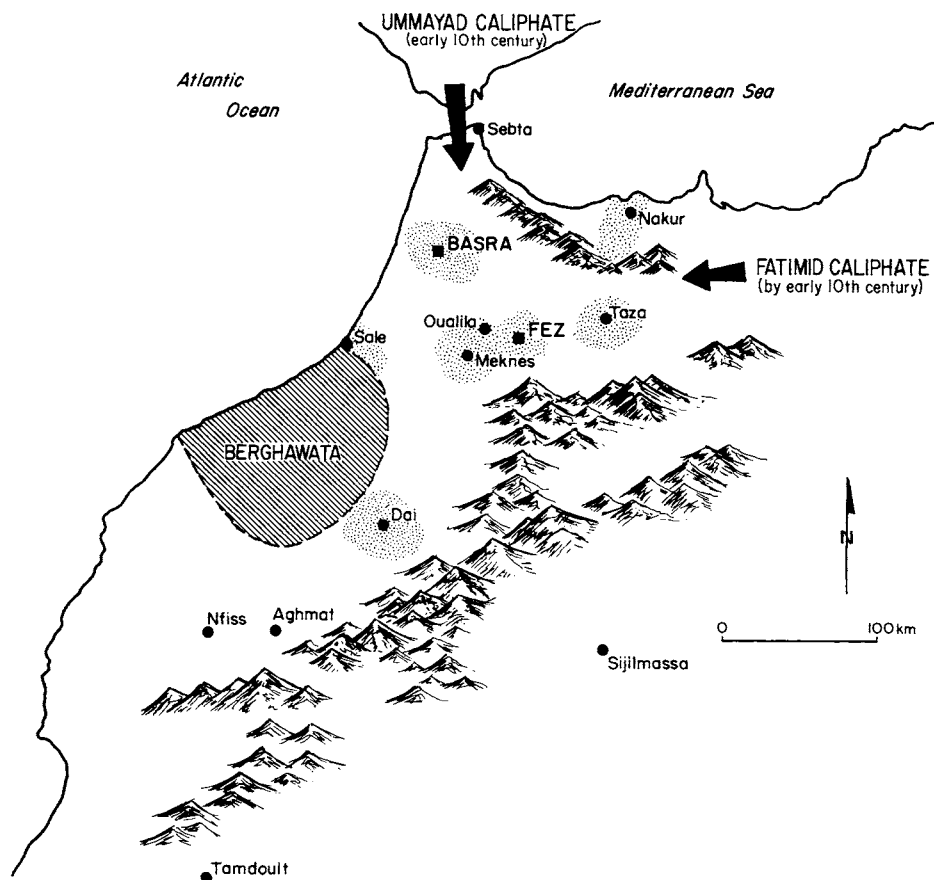


Figure 1

Map of Idrisid Morocco following the division of the empire among Idris II's seven sons. Stippled areas indicate probable foci of Idrisid control centering around provincial capitals. Solid dots indicate cities of Classical or pre-Islamic Berber origin, squares indicate cities founded during the Idrisid period.

The Development of Trade-Based Empires in the Northern Maghreb

Of primary importance among the many commodities traded and transshipped in the medieval Maghreb was gold dust, or *tibar* (Lacoste 1974; Messier 1974), which came from West Africa below the Sahara, an area then referred to as the Sudan. Gold was important as a medium of exchange with the Orient, and was taken through Central Asia and traded for spices, silk, porcelain, and other luxury commodities (Goitein 1970). The earliest Arab writers who talk about the southern Maghreb mention it in connection with its proximity to the gold wealth of the Sudan (Ibn Hawkal 1964).

Several important trade routes of export and exchange for this gold were to develop in the 9th through the 13th centuries. The most direct route was the one going east across the desert to Egypt, bypassing the Maghreb entirely. In the mid-9th century, these eastward routes were diverted northward through Morocco up to the Mediterranean, resulting in a significant increase in the flow of trade through the region (see Figure 2). Ibn Hawkal, writing in A.D. 937, states that the more direct eastward route was abandoned because of an increase in sandstorms and attacks by raiders. During the period that followed, a number of new political centers grew up around major nodes in this expanding

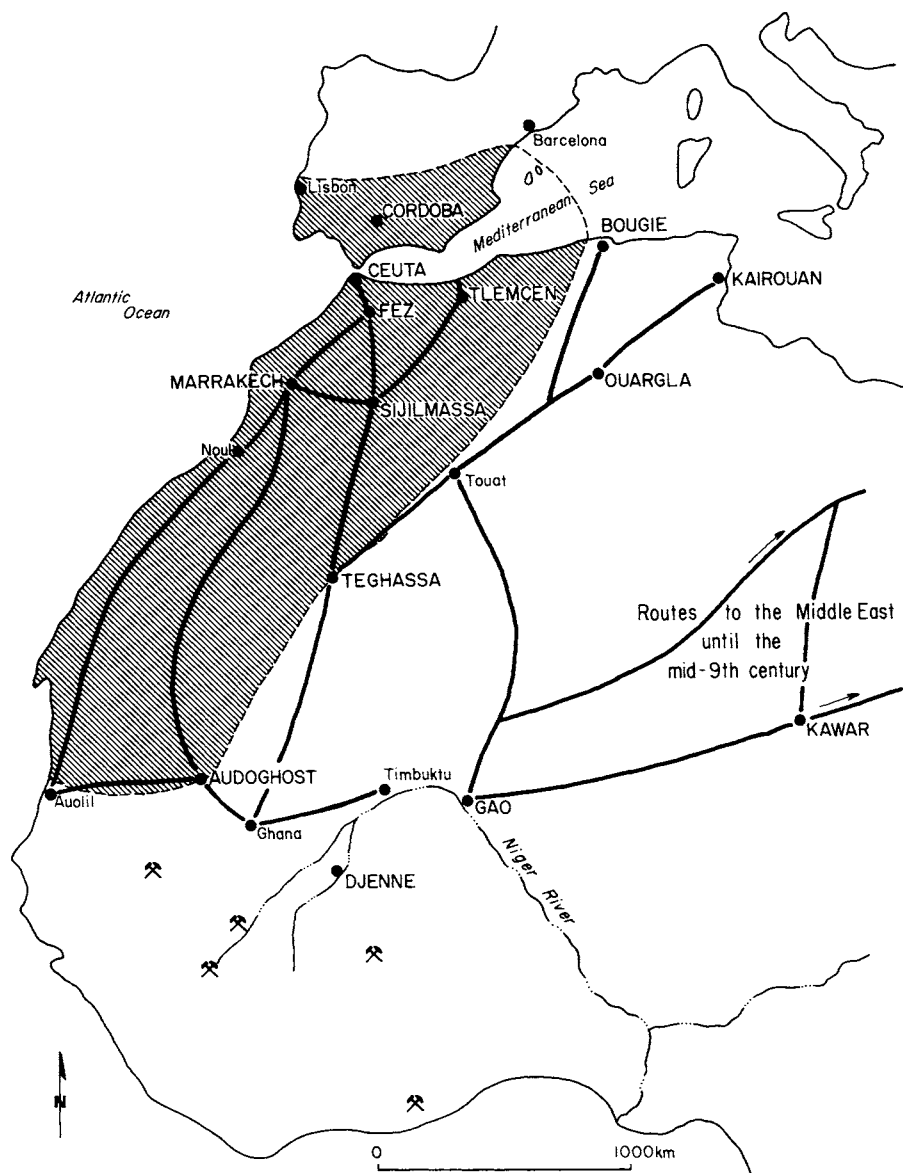


Figure 2

Map of West and Northwest Africa and southern Europe showing the extent of the Almoravid empire at its peak around A.D. 1090. Dark lines indicate principal caravan routes. Mining symbols indicate sources of gold dust in West Africa.

trade network. Aghmat, Sijilmasa, and Dai were the most important of these new centers. As part of this process, the former Idrisid cities of the north grew larger and more opulent as well. Foremost among these was Fez. At this point the basis of political power appears to have been shifting toward an emphasis on control of trade as opposed to extraction of surplus. Until the 11th century, however, no one political group was able to control more than a single link in the trade network.

However, during the 11th century, a religious reform movement began which had the ultimate result of placing the nomadic tribal interests in control of the urban centers themselves as well as the routes that linked them. This signaled the transformation to the second sociopolitical context we have proposed.

This political change began when Yahyah bin Ibrahim, a tribal leader of the western Sahara Lemtuna confederation, founded an alliance with a religious scholar named Yasin around the common goal of religious reform (material on the Almoravids synthesized from Ibn Khaldun 1925, Lévi-Provençal 1957, and Norris 1971). Their crusade began at Audoghost, the major caravan entrepôt in the southwest Sahara. Their movement quickly resorted to violent means and after 15 years of military and religious campaigning the Almoravids controlled the western Sahara and the city of Sijilmassa, a hub of caravan trade on the Sahara's northern edge. With the Saharan routes under their control, the Almoravids undertook military operations against the independent principalities that had established themselves to the north in Morocco after the waning of the Idrisid empire. In the years that followed the seizure of Sijilmassa, the Almoravids captured or destroyed most of the urban centers in northwest Africa. In 1086, the Almoravid armies crossed to Spain, and by the year 1090 their empire included the western Sahara, Morocco, half of Algeria, and all of Muslim Spain including Valencia, Granada, Cordoba, Seville, and Lisbon. This empire was administered by the Almoravid Amir from the newly constructed capital at Marrakech.

This dynastically organized movement controlled nearly all of the major centers of trade and commerce of northwest Africa and southern Spain for almost a hundred years. No political movement before the Almoravids had come near to doing this. The initial military success of the Almoravids, under the leadership of Lemtuna Yahyah ibn Ibrahim and Ibn Yasin, was attributable to a fusion of religious and military ideology that revolved around the principles of (1) austerity in personal dress, (2) rejection of imported luxury goods, and (3) refraining from blood feuding. The ethic of pious self-denial served both to differentiate the Almoravids from their opponents, who were clearly indulging themselves in urban luxury, and to limit all unnecessary consumption that might divert resources from investment in military preparedness.

One of the keys to understanding Almoravid government is a knowledge of where and how state revenues were gathered and what this meant in terms of potential support and opposition to Almoravid administration in the politically and economically diverse regions of their territory. The key source of revenue, as has already been discussed, was gold. The Almoravids, however, never controlled the sub-Saharan gold at its source. This meant that the production of goods for trade with the gold producers south of the Sahara was essential to the flow of Almoravid revenues.

It is known that the Almoravids struck large quantities of Sudanese gold coins at six different Maghrebi mints (Messier 1974). The six Almoravid mints—Nul Lamta, Tlemcen, Aghmat, Marrakech, Fez, and Sijilmassa—represent four geographically critical points of connection between the Mediterranean basin and the Sahara, as well as the seats of important Almoravid governorships and the capital itself at Marrakech. This suggests that the revenues to support local governorships and their garrisons were received locally as the gold shipments passed through, rather than being distributed centrally through Marrakech. The gold revenues would have been derived as payment for the transport and protection of trade items—shared profits on a joint venture, not a tax. Thus, the gold, obtained and struck into coins, provided the wealth of the Amir and his governors, a pay source for mercenaries and war materials, and possibly a means of buying political alliance and solving blood feuds nonviolently when other legal means failed.

With gold as the principal revenue, the main political and military concerns of the Almoravids would have been to defend the routes of trade against external threat and to block the emergence of competing local elites.

While the Almoravids formed and maintained strong alliances based on mutual aid with merchants involved in the gold trade, there was apparently no such potential for

alliance with the tribal agricultural polities. The Almoravid administration was poorly developed on the local level. It might be said that their revenue system called for a narrower, "low overhead" administration. Also, these smaller independent polities maintained their own military forces, which, unlike the merchants and traders, would have made them militarily self-sufficient. The obvious alternative to bringing these potential rivals into the Almoravid empire on a subservient basis was to destroy them militarily. This is clearly the strategy that was undertaken in the breadbasket areas of northern Morocco. Figure 3 shows the number of pre-Almoravid settlements that were destroyed or reduced during Almoravid expansion. This policy of destruction may have been a significant factor in promoting a shift from sedentary agriculture to pastoralism in some areas of the Maghreb (a historical change that is a major topic of debate among historians [Laroui 1977:150–151]).

While this conflict with sedentary agriculture can be seen as caused by different practical requirements of the two types of administration, it can also be viewed as a conflict between two ideologies concerning the production of wealth. Local production of agri-

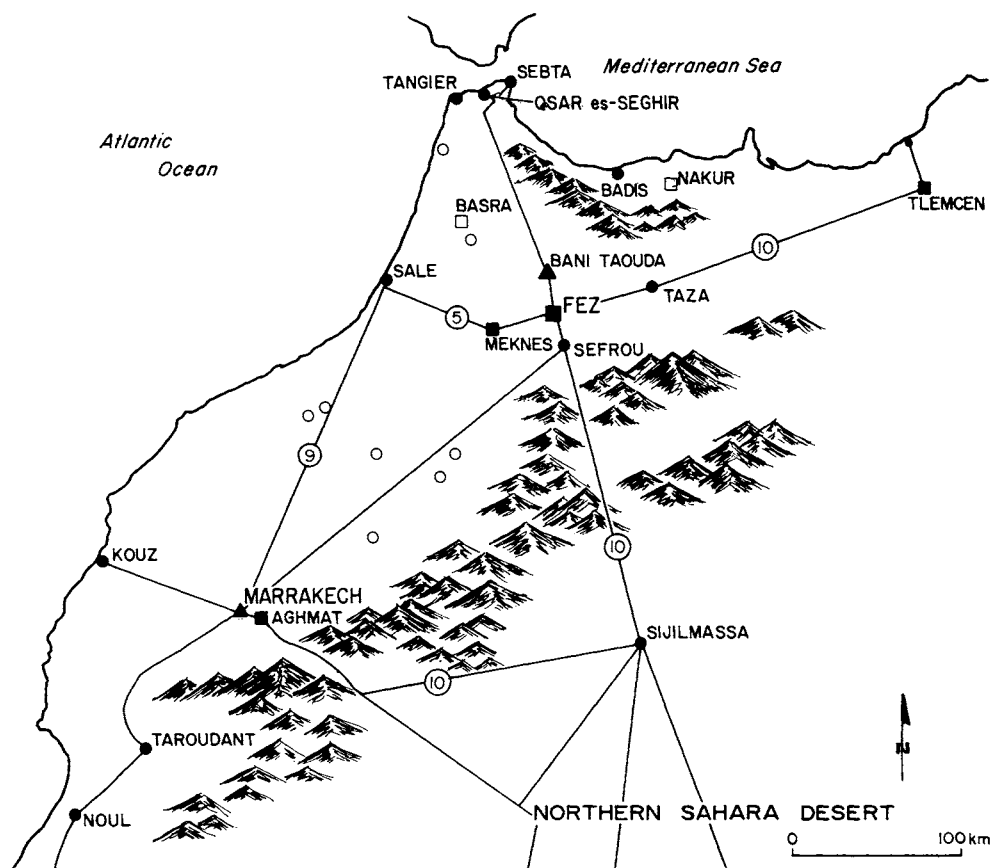


Figure 3

Map of Morocco during the Almoravid period. Solid dots indicate cities of Classical or pre-Islamic origin, squares indicate Idrisid cities, and triangles indicate cities founded by the Almoravids. Hollow circles and squares indicate Berber and Idrisid cities that were destroyed or reduced during the Almoravid expansion. Dark lines indicate principal trade routes; numbers within circles along the routes indicate approximate travel time in days between cities.

cultural surplus required a degree of economic stratification that seemed to violate egalitarian principles that were then central to mainstream Islam. Almoravids were, on the other hand, able to rely on the proceeds of long-distance trade, which allowed the internal liberties prescribed by fundamentalist Islam. Here the difference was not so much a question of the impiety of wealth itself, but of the impiety of wealth gained by taxes on other Muslims.

In this way, the Almoravids were able to transform the diverse Moroccan tribal and urban political landscape into a broadly based, though infrastructurally simple, theocratic state.

But Almoravid opposition to taxes and a centralized judicial system proved incompatible with the task of maintaining the state, once its political boundaries had ceased to grow. Without the supplement of the booty from conquest, the proceeds of the gold trade, which was organized and protected by the Almoravid military, were insufficient as a source of revenue. The Almoravids were forced to repudiate their reforms by reversing their position on taxes and seizing control of the judicial apparatus in order to suppress legal opposition to the reversal. These economic expediencies led to internal weakness, because of a loss of popular support, and ultimately to a rapid and complete collapse of the state under politically organized pressure for a return to the original reforms of the movement.

In the four centuries that followed, two dynastic movements would gain control of the Maghreb. In each case, dynastic power focused on the caravan trade between West Africa and the Mediterranean, although each succeeding dynasty differed in administrative emphasis. The succeeding Almohads (ca. A.D. 1130–1258), for example, were able to institute a relatively successful system of taxation within the empire for about fifty years. The following Marinids (ca. A.D. 1258–1498) placed a new emphasis on the tight control of coastal entrepôts and on the marine transshipment of goods (Myers 1984:249–252). This may have been in part the result of the fact that Marinid control never successfully extended across the Strait of Gibraltar into Spain, as had the Almohad and Almoravid empires.

Detailing the Model

Most models emerge from an interactive process between one's theoretical perspective and examination of empirical data. Having reviewed both our theoretical perspective and an overview of the historical record, we are ready to provide some detail to the constructs formulated in our model to explain the second sociopolitical context in medieval Morocco and then to examine how it stands up to data we have since collected.

Dynastic Capitals of the Interior

A fundamental economic role of the Maghrebian dynastic empires was to serve as intermediaries between two urbanized regions separated geographically, culturally, and technologically: sub-Saharan West Africa and the Mediterranean basin (Braudel 1972:172–188; Brignon et al. 1967; Geertz 1979:129–130; Lacoste 1974; Stambouli and Zghal 1976). Gold, spices, ivory, and slaves flowed upward from the Sudan in return for textiles, salt, metal wares, and military equipment from the Mediterranean. The medieval North African state constituted a political and economic center of gravity between these two regions, and its expansion was due not so much to a concern for territory itself, but to a concern with control of the gold routes as far as possible (Lacoste 1974:3). The immense territorial expansion of these states arose from their strategic situation, in which it was more feasible to pacify the lands through which the trade routes passed than it was to protect only the routes themselves. This form of state formation can be viewed as largely distinct, at least in its ontogeny, from state formation that is concerned with the direct control of territorial-based production (e.g., crop agriculture), which is typical of the feudal states of Western Europe, the early dynastic city-states of Mesopotamia, as well as the earlier Idrisid state in the Maghreb.

The founders of the Almoravid and succeeding dynastic states may be considered religious-political entrepreneurs who were able to transform local tribal circumstances into a more broadly based and strongly integrated administrative system. Dynastic rulers were concerned with maintaining the flow of trade through the interior capitals. The Maghrebian dynastic capitals of Fez and, later, Marrakech were initially founded as the fortified household compounds of the ruling family and the military and administrative entourage that was needed to protect its interests.

The fundamental function of the state, centered in these newly founded capitals, was to extend its sphere of influence to include as much of the trade network as possible. This was accomplished by accumulating a surplus, through the exaction of taxes and tribute, with which to raise an army and construct fortifications at crucial points in the network. This was further accomplished by redirecting the pattern of blood feuds and tribal warfare to the periphery of the empire through the institution of the *jihad* and by transposing an overarching and integrative currency of belief over the diverse tribal mosaic. Thus, the conduct and spread of Islam played a major role in bringing a scattered number of autonomous and often mutually hostile tribes into the framework of a broadly based theocratic state. As we have seen, however, such theocratic states have inherent limits and tend to be unstable once they have ceased to expand.

Urbanism on the Geographic Periphery: The Coastal Entrepôts

North Africa has been described as an island, with the Sahara on its southern coast and the Mediterranean and Atlantic on its north and west coasts. Around this coast or periphery arose a distinct pattern of urban activity also concerned with trans-Saharan trade, but in a much different capacity. For the purposes of this discussion we will concentrate mainly on the northern periphery in Morocco, the area where we have conducted archeological investigations (see Figure 4). While the North African states developed from the role of controlling the caravan trade across the Maghreb, this trade was instigated by diverse mercantile enterprises at each end of the network. The commercial go-betweens in these coastal settlements dealt in a diversity of commercial ties and personal loyalties that extended outside the sphere of influence and beyond the primary concern of the interior states. Their activities were of an entirely different sort from that of ensuring long-range protection of trade routes; theirs were the more immediate concerns of record keeping, packing, temporary storage of goods during the conversion of overland to maritime transport, building and repairing of ships, and so forth. In this important sense, the coastal entrepôts were peripheral to the state not only geographically, but economically and politically, and this fact seems to have led these entrepôts to oscillate between affiliation with one or another competing state and out-and-out autonomy (e.g., the case of Ceuta; see Latham 1972:268ff.). In fact, total domination by a conservative interior state actually worked against the functioning of a coastal city as an entrepôt; the rigidity of the state ideology prevented the flexibility necessary to carry on successfully the diverse transactions required in commercial activities subject to personal loyalties that cut across political boundaries. Such would have been particularly true where non-Muslims were concerned. Hence, although an interior state may have had a significant role in providing capital to a coastal entrepôt, such as for the construction of defensive walls, except for the question of military protection, these entrepôts probably functioned best when only loosely aligned with the state or totally independent of it.

The Urban-Rural Discontinuity: The Development of an Urban Periphery

The aggregation of population that accompanied the initial development of interior dynastic capitals often gave rise to a third discontinuity; that between the urban and rural economic spheres. Anthropologists have often focused on the "continuum" that existed between a city and its hinterland. It is also useful to recognize the widely divergent economic opportunities that exist in these settings. This discontinuity provided opportunity

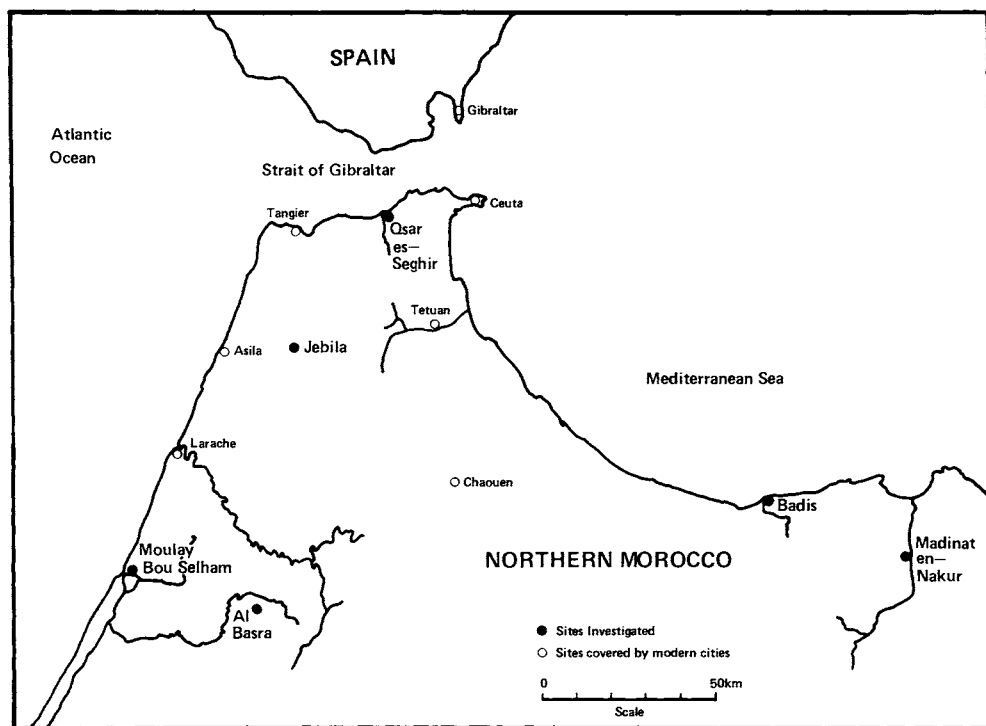


Figure 4
Map of northern Morocco showing locations of sites investigated archeologically.

for a new range of entrepreneurial activities, resulting in the growth of a class of individuals who made their living in services, crafts, and local retail.

The growth of these secondary activities and the more diversified political loyalties they entailed constituted the development of a new kind of "periphery." These activities and political ties were in fact analogous to those activities that make the coastal entrepôts "peripheral" to the interests of the interior states. With the increase in activities concerned with transaction between the urban and rural economy, the urban center may take on a second important function, one quite distinct from the political circumstances that fostered its formation originally. The growth in population associated with the development of an urban periphery would be due to the influx of people from the countryside seeking economic advantages in an urban setting. Among these immigrants, knowledge of rural economic processes and exposure to the urban economy would form the basis for the proliferation of entrepreneurial activity. Kin ties between urban immigrants and families remaining in the countryside would lead to a substantial volume of small-scale trading activities further influencing the development of urban-rural integrative activities.

We expect that these kinds of activities developed in some urban centers soon after the establishment of an administrative center, whereas in others the character of the dynastic power structure may have delayed the development or prevented it from happening at all. We hypothesize that substantial integration with the rural economy and associated mercantile activities were largely independent of the state bureaucracy; cities that developed this local integrative function were more likely to survive and even grow during periods of dynastic realignment or collapse.

Textually Derived Settlement Pattern Changes

In the absence of documentary records, scholars have relied on archeologically determined rank-size relationships of settlements for inferring changes in political and economic organization (Johnson 1980). The transition between the Idrisid and Almoravid periods in Morocco is of special interest to archeologists because its history offers insight into the processes that lay behind a major regional settlement system transformation. The Idrisid system of wealth extraction and administration resulted in a pattern of settlement that included a number of large and medium-sized cities of political and commercial importance throughout the agriculturally productive regions of Morocco. The transition to Almoravid hegemony, as has been discussed, involved the destruction of a number of cities and towns in Morocco, some of which never grew back to their former size. The ultimate result of the Almoravids' northward expansion along the trade routes was that two inordinately large cities, Marrakech and Fez, came to dominate Morocco's economic and political landscape. The peripatetic court of the Almoravid Amir substituted for many of the political functions of second-order centers by making yearly treks to various parts of the empire to exercise his unique military and political prerogatives.

Some documentary data on the changes in settlement size and distribution that occurred during and after the expansion of the Almoravid trade empire are available. These figures are taken from a study of the economy of the Maghreb during the Medieval period by Vitorino Magalhaes Godinho (1947:131-140), an economic historian of the Annales school. His figures, in turn, are based on settlement size estimates (usually given as the number of hearths) given by various Maghrebi chroniclers from the 11th through the 16th centuries. The figures appear to have been based on rounded estimates rather than careful census taking: thus, Godinho has presented the data in terms of frequency distributions of city size classes rather than separate figures for each city. Numbers of inhabitants were taken by multiplying the number of hearths by five, which Godinho took to be the average family size during that period. The figures are presented in Table 1.

It is important to note that while the two largest cities, Marrakech and Fez, are shown only as "more than 100,000," they were actually much larger than that. Chroniclers of the 12th and 13th centuries say that both cities had between 400,000 and 500,000 inhabitants, but Godinho is probably correct in viewing these estimates as exaggerated. The Rawd al-Quirtas (early 14th century, Ibn Abi Zar 1964) indicates that during the reign of Al-Mansur (Almohad dynasty), Fez contained 89,236 households, which may not convert to the 450,000 inhabitants produced by a multiplication of five, but it certainly reflects a city much larger than 100,000. In any case, the two largest cities in Morocco were at least three times larger than the next-largest city class of 25,000-50,000.

Table 1
Frequency distributions of settlement size classes of medieval Maghrebian cities by time period.

Number of inhabitants	Number of settlements			
	A.D. 1060-1217	A.D. 1270-1350	A.D. 1400-1415	A.D. 1470-1510
More than 100,000	2	2	2	2
50,000-100,000	0	0	0	0
25,000-50,000	8	— ^a	4	3
10,000-25,000	15	46 ^a	15	14
2,000-10,000	28	— ^a	25	26
Total	53	48	46	45

^aSeparate class data not available.

Also apparent in Table 1 is a drop, albeit slight, in the number of urban-sized settlements in the region through time. Significantly, the biggest drop is in the 25,000–50,000 or middle-range population class, which decreases by half during the peak Dynastic period (the Almohad dynasty). Historically, the decrease in the number of settlements was due to the destruction of some middle-sized cities during the Almoravid and Almohad dynasties. We would suggest that the change occurred as a result of a shift that occurred in the political economy of the Maghrebian states between the Idrisid period (A.D. 800–1000) and the Dynastic period, encompassing the Almoravid, Almohad, and Marinid dynasties (ca. A.D. 1050–1400).

The Idrisid period was characterized by a predominantly agrarian-based political organization and a predominantly sedentary hinterland. The political-territorial structure of the Idrisid state reflected its agrarian focus. After the death of Idris II, for example, the empire was divided among his seven sons, in the manner (at least in the general form) of the Carolingian empire after the death of Charlemagne. The sons then became the semi-independent rulers of the seven principalities that resulted and established themselves in the respective provincial capitals. This kind of arrangement would not have made sense if the state had been organized along the lines of the later Almoravid and Almohad dynasties, that is, as trade-based states. The Idrisid state was thus a system in which the land and the populace itself were valuable enough to warrant exploiting and protecting.

As was pointed out in the previous section on Almoravid expansion, the trade-based polities of the peak Dynastic period (ca. A.D. 1050–1400) were more concerned with the protection of trade across the Maghreb and drew their resources from the extraction of taxes and booty taken along their rapidly expanding frontiers. There appears to have been a decrease in the sedentary population during this period. As shown in Table 1, the number of second-ranking urban centers dropped by half during this period.

Unfortunately, good settlement size figures for the earlier period are lacking, and what we see in Table 1 may only represent the tail end of a more radical shift in settlement size distribution. During this period, Marrakech was not yet founded, and Fez must have been much smaller, as it had not yet begun, for example, to receive refugees in full force from the Christian Reconquista in Andalusia. At the same time, Basra, an interior capital, was probably at its peak size (2,000 hearths or 10,000–15,000 inhabitants; see Eustache 1955), as was *Madinat en-Nakur*, another provincial capital, although it was probably smaller. Both of these urban centers were destroyed or greatly reduced during and after the expansion of the Almoravids. We have no data on other provincial capitals at this point, but there is at least the suggestion of a tendency toward a more regularly hierarchical distribution of settlement size during this period, although Fez was still much larger than the other settlements.

Archeological Field Investigations

Several aspects of our model stand out in contrast to the more widely held views of urban formation. Our basic premise is that urban centers formed around three fundamental discontinuities that existed in the Moroccan political and economic environment during the second Medieval period. We argue that the nature of the political and economic opportunities inherent in the discontinuity determined, in many ways, the range of activities that would arise at particular centers and in the system as a whole. The classification was not meant, however, to suggest that subsequent urban development was fixed entirely by geographic location or spatial juxtaposition. Instead we suggest that urban centers developed along several alternate trajectories (Figure 5).

At the outset, these trajectories represent urban centers of distinct character, ranging from one extreme—of cities with rather narrow sets of political and military activities concerned primarily with the protection and maintenance of long-distance trade—to the other extreme—of cities characterized by diverse productive and mercantile activities.

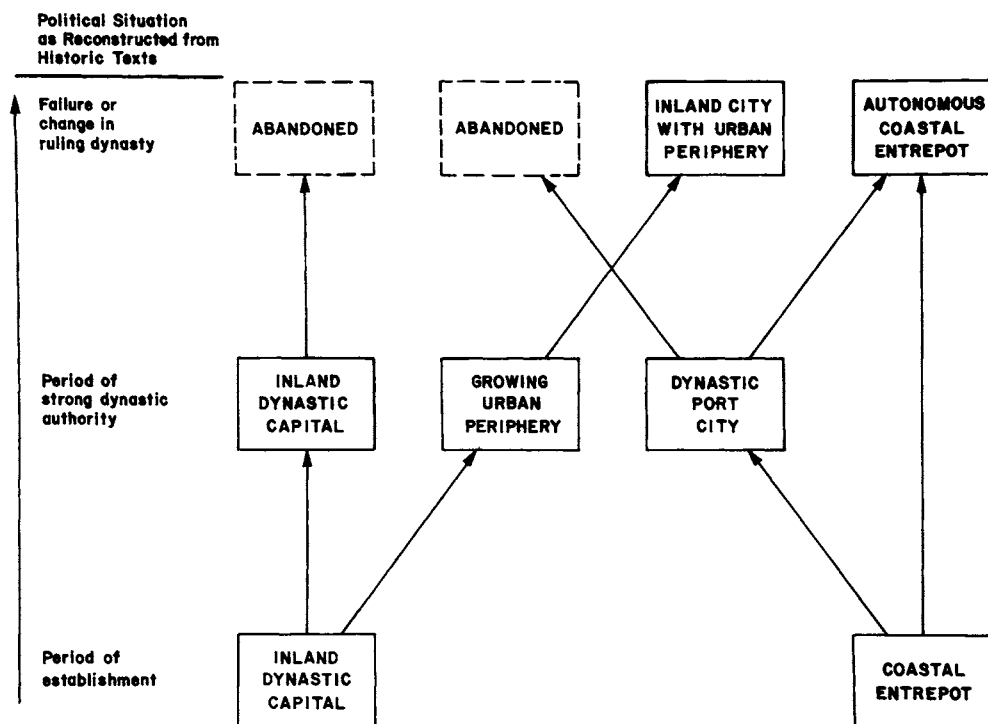


Figure 5
Interpretive model of the development of medieval urban centers in Morocco.

The nature of the local and regional political and economic conditions was a strong factor in determining which trajectory a city's development would follow. Under strong dynasties, the mercantile activities in coastal entrepôts could be stifled to the point where the withdrawal of dynastic support could lead to complete abandonment. However, other entrepôts whose mercantile activities were sufficiently strong could outlive periods of dynastic involvement.

Starting from the other extreme, some dynastic capitals appear to have taken on additional mercantile and productive activities in order to service their immediate hinterland. The growth of these activities, which we refer to as an urban periphery, made some dynastic capitals more like entrepôts and enhanced their long-term survival. Interestingly, neither dynastic capitals nor coastal entrepôts rely principally on a system of successively smaller centers for accumulating agrarian surplus or distributing urban goods; hence the settlement pattern we find reflects "primate" distributions of urban centers that are much larger than surrounding communities.

The formulation of this model has led our own research to the field, where we collected archeological information that would help verify or refine a largely historical and ethnographic model. Archeological field excavations were directed toward collecting data to monitor the trajectories of change at selected urban sites in northern Morocco (Redman 1983). Four sites, two inland capitals and two coastal entrepôts, were tested. These include Qsar es-Seghir, Basra, Madinat en-Nakur, and Badis (see Figure 4).

Qsar es-Seghir was a small fortified town on the Strait of Gibraltar, located midway between Tangier and Ceuta (see Redman 1986). Although there are textual references to its role in the Arab invasion of Spain as early as A.D. 711 (Ibn Abi Zar 1972), the earliest substantial remains date from the Almohad period. Its early occupation is characterized

by substantial imperial investment as reflected in the construction and decoration of the central institutions and fortifications. City walls and monumental gates date to A.D. 1287, during the reign of the Marinid ruler Abu Ya'qub Yusef (Ibn Abi Zar 1972:407). This dynastic interest seems to have waned during the 14th and 15th centuries, yet it is during this time that the population of Qsar es-Seghir grew to its maximum size. We explain this as being a response to its increased economic role both in supplying Muslim Granada and in preying on Christian shipping through the Strait of Gibraltar. Overall, the architectural evidence indicates a relatively small area covered by the settlement (less than 3 hectares) yet a very dense distribution of buildings, resulting in an estimate of over one thousand inhabitants (Redman and Anzalone 1980). There is also a broad distribution of traded goods in all sectors of the site. When examining the artifactual inventory recovered from Qsar es-Seghir, one is impressed by the diversity of categories of materials found and the variability within each category. This is a reflection of the wide-ranging trade that the city participated in due to its strategic location. Another interesting pattern is the relatively low proportion of hand-built ceramics, indicating a reliance on an intensified, urban ceramic productive facility for even their basic commodities. (For a discussion of this trade in relation to ceramic production, see Myers 1984; Myers and Blackman 1986.)

Basra was an important Idrisid regional capital during the 9th century. It was named after the well-known port city of Iraq, the original homeland of Moulay Idris. The city was captured by the Fatimid dynasty, which was then situated in modern-day Algeria and Tunisia (Figure 1), and was eventually burned and abandoned under their orders. It was partially rebuilt afterward, but by the end of the Almoravid period, it had again become abandoned and was never again the site of an urban center. The site of Basra is clearly the largest and most urbanized of those we have investigated. The area enclosed by the city walls is a roughly rectangular area about 625 m by 500 m, constituting an area of about 30 ha. From our field testing program it appears that although the fortification wall encloses an enormous area, the buildings themselves are widely scattered. We also believe that the settlement may be divided into distinct sectors, each with its characteristic activities. The ceramic inventory appears highly standardized, reflecting the local urban ceramic industry and the absence of numerous external sources of supply. As at Qsar es-Seghir, the proportion of hand-built wares is very low, reflecting minimal reliance on the surrounding countryside for these goods. Unlike Qsar es-Seghir, there are fewer ceramics from other urban producing centers, indicating that trade in these goods was limited to a small section of the population (Benco 1987).

Madinat en-Nakur was the capital of the first Arab kingdom in Morocco, founded in the 8th century during the first Arab "invasion" of the Maghreb. It was located on the Nakur River about 20 km from the sea, at the head of a wide agricultural valley. Nakur remained a regional capital under the Idrisid dynasty, but was destroyed during the Almoravid expansion late in the 11th century. Thus, the site is roughly contemporary with Basra and shares some of the general similarities in the ceramic inventory. However, the Nakur material has a much larger proportion of hand-built wares, suggesting a strong connection with a rural, unintensified industry, yet at the same time has a large proportion of traded wares indicating more connection with other cities (Redman 1983). Also like Basra, the area covered by the settlement at Nakur is quite large, but our field testing once again indicates that the buildings were widely spaced.

Badis was founded by the Idrisids to be the primary port for their capital of Fez (al-Bakri 1965). It was situated on the Mediterranean below a pass through the Rif Mountains, and may have been planned as a terminus for the trans-Saharan trade, effectively bypassing Ceuta and Tangier, port cities on the Strait, which made themselves politically independent of the interior dynastic rulers. It continued to serve as a port under succeeding Moroccan dynasties, until it was captured by the Castillians, whereupon it ceased to be an important port and was soon abandoned and never reoccupied. Badis covers a larger area than Qsar es-Seghir, but less than either of the inland capitals we investigated.

Once again our field testing showed the buildings to be more densely packed than at the capitals, but less so than at Qsar es-Seghir. The ceramic inventory most closely parallels that from Qsar es-Seghir, with ample tradewares and many form categories, reflecting the diversity of economic activities using ceramics at the site. However, there is a major difference in that the people of Badis used far more hand-built ceramics, indicating a closer reliance on the villages of the surrounding countryside than would be predicted by our model (Redman 1983). This is not surprising, given the Badis location in the Rif Mountains, isolated from other population centers. Aberrations such as this provide insight into how our model could be refined and made more complete in future formulations.

Discussion

The primary conclusion we have reached from our historical and archeological investigations is that northern Morocco was the scene of two very distinct urban patterns during the Medieval period. We believe that these contrasting urban patterns were the result of changes in both local and external factors and that parallel examples can be found in many other parts of the world and time periods. The fundamental distinction was related to the major source of state surplus being based on the concentrating of agricultural production during the earlier Idrisid dynasty and being derived from control of long-distance trade through their territory during the succeeding Almoravid and Almohad dynasties. Each of these situations gave rise to different urban patterns, the first resembling a multi-tiered hierarchy of settlement size, the second adhering to a more primate pattern of size distribution. The second pattern is particularly interesting in that it allows for the formation of a territorial, expansive state structure without major urban concentrations of population. Our model also posits that this second trajectory promotes the growth of two distinct urban forms, inland capitals and coastal entrepôts, each with characteristic features. We believe that the model we derived is realistic and that it has widespread applicability, yet we recognize it as a simplification focusing on limited numbers of idealized factors. It is through our archeological investigations that we have begun to uncover the detailed reality of the situation and to reveal additional factors that we had not yet predicted.

The archeological evaluation of our model is preliminary in nature. It is clear, however, that even at this point we can conclude that differences in the ceramic assemblages and building patterns excavated by our project do provide relevant insights, partly reflecting the changing economic and political context of Morocco as posited in our model and partly revealing the differences in the natures of the communities themselves. The results have supported some of the implications we have posited, such as the greater diversity of activities in coastal entrepôts, and have also indicated areas that need to be investigated further, such as the effect of communities being located in geographically more isolated regions.

If there is value to our model of urbanism and its relation to state society, then it should also be apparent that such value is derived from the use of both archeological and historical data from our study area. Each discipline has contributed something that the other could not have. Contrasting political histories of North African dynastic states could not have been seen in the archeological record of the urban settlements excavated. Likewise, without investigation of the material remains, it would have been impossible to have an accurate picture of the economies of the North African urban centers. Yet we do not believe that the utility of our findings should be limited to North Africa or to societies where historical records exist. We would argue that our model has direct relevance for examining trajectories toward state society in any historic or protohistoric settings where the conditions of our model can be identified archeologically.

Acknowledgments. Earlier versions of ideas represented in this article appear in Boone and Redman 1982 and Myers and Boone 1982, and were presented at a School of American Research seminar.

These ideas have been further developed and woven together into the more comprehensive treatment presented here. The model of Moroccan urbanism and the fieldwork that examined it were the result of the combined efforts of the staff of our Moroccan-American archeological field project sponsored by the Smithsonian Foreign Currency Program and the National Science Foundation and directed by Charles L. Redman. We were aided in all areas of our endeavors by cooperating Moroccan officials, particularly Mme. Joudia Hassar Benslimane, Chief of the Archeological Service.

References Cited

- Adams, Robert McC.
1974 Anthropological Perspectives on Ancient Trade. *Current Anthropology* 15:239–258.
- al-Bakri
1965 *Description de l'Afrique Septentrionale*. Baron de Slane, trans. 3rd edition. Paris: Adrien-Maisonneuve.
- Barth, Fredrik
1962 The Role of the Entrepreneur in Social Change in Northern Norway. Bergen: Universitetsforlaget.
1967 Economic Spheres in Darfur. In *Themes in Economic Anthropology*. R. Firth, ed. Pp. 149–174. London: Tavistock.
- Benco, Nancy L.
1987 Organization and Technology of Pottery Production in Early Medieval Morocco. BAR International Series, 341. Oxford: BAR.
- Biddick, Kathleen, ed.
1984 *Archaeological Approaches to Medieval Europe*. Studies in Medieval Culture, 18. Kalamazoo: Medieval Institute Publications, Western Michigan University.
- Boone, James L., and C. L. Redman
1982 Alternate Pathways to Urbanism in the Medieval Maghreb. *Comparative Urban Research* 9:28–38.
- Braudel, Ferdinand
1972 *The Mediterranean and the Mediterranean World in the Age of Phillip II*, Vol. 1. New York: Harper and Row.
- Brignon, Jean, et al.
1967 *Histoire de Maroc*. Casablanca: Hatier.
- Eustache, Daniel
1955 El-Basra, Capital Idrissite, et sa Port. *Hesperis* 42:217–238.
- Geertz, Clifford
1979 Suq—the Bazaar Economy in Sefrou. In *Meaning and Order in Moroccan Society*. C. Geertz, H. Geertz, and L. Rosen. Cambridge: Cambridge University Press.
- Glick, Thomas
1979 *Islamic and Christian Spain in the Early Middle Ages*. Princeton, NJ: Princeton University Press.
- Godinho, Vitorino Magalhaes
1947 *Historia Economics e Social da Expansao Portuguesa, Primeira Tomo: Marrocos*. Lisbon: Terra Editora.
- Goitein, S. D.
1970 Mediterranean Trade in the 11th Century: Some Facts and Problems. In *Studies in Economic History of the Middle East*. M. A. Cook, ed. London: Oxford University Press.
- Hume, Ivor Noël
1969 *Historical Archaeology*. New York: Alfred A. Knopf.
- Ibn Abi Zar
1964 *Rawd al-Qirtas*. A. Huici Miranda, trans. Valencia.
1972 *Anis al-Mutrib bi Rawd al-Cirtas*. Rabat.
- Ibn Hawkal
1964 *Configuration de la Terre (Kitab sarat al-ard)*. J. H. Kramer and G. Wiet, trans. Beirut: Commission Internationale par la Traduction de Chefs d'Oeuvre.
- Ibn Khaldun
1925–56 *Histoire des Berberes*. Baron de Slane, trans. Paris: Geuthner.

Johnson, Gregory A.

- 1980 Rank-Size Convexity and System Integration: A View from Archaeology. *Economic Geography* 36:234–247.

Lacoste, Y.

- 1974 The General Characteristics and Fundamental Structures of Medieval North African Society. *Economy and Society* 3:1–17.

Laroui, Abdullah

- 1977 *The History of the Maghreb: An Interpretive Essay*. Princeton, NJ: Princeton University Press.

Latham, J. D.

- 1972 The Rise of the Azafids in Ceuta: In Memoriam S. M. Stern. *Israel Oriental Studies* 2:263–287.

Lévi-Provençal, E.

- 1957 La Fondation de Marrakech. In *Mélanges Historique Archéologique de l'Occident Muslin: Hommage à George Marcais*.

Messier, Ronald F.

- 1974 West Africa and the Gold Currency of the Mediterranean Basin. *Journal of Economic and Social History of the Orient* 17:166–181.

Myers, J. Emlen

- 1984 The Political Economy of Ceramic Production: A Study of the Islamic Commonware Pottery of Medieval Qsar es-Seghir. Unpublished Ph.D. dissertation, SUNY-Binghamton.

Myers, J. Emlen, and M. James Blackman

- 1986 Conical Plates of the Hispano-Moresque Tradition from Islamic Qsar es-Seghir. In *La Ceramica Medievale nel Mediterraneo Occidentale*. Pp. 55–68. Firenze: All'Insegna del Giglio.

Myers, J. Emlen, and J. L. Boone

- 1982 Archaic States of Medieval Morocco: Resource Competition and Territorial Organization. Paper presented at the 47th Annual Meetings of the Society for American Archaeology.

Norris, Frank T.

- 1971 New Evidence on the Life of Abdullah ibn Yasin and the Origins of the Almoravid Movement. *Journal of African History* 12:2.

Redman, C. L.

- 1983 Comparative Urbanism in the Islamic Far West. *World Archaeology* 14:355–377.

- 1986 *Qsar es-Seghir: An Archaeological View of Medieval Life*. New York: Academic Press.

- 1989 [ed.] *Medieval Archaeology*. Binghamton, NY: Medieval and Renaissance Texts and Studies.

Redman, C. L., and R. Anzalone

- 1980 Discovering Architectural Patterning at a Complex Site. *American Antiquity* 45:284–290.

South, Stanley

- 1977 *Method and Theory in Historical Archeology*. New York: Academic Press.

Stambouli, F., and A. Zghal

- 1976 Urban Life in Pre-Colonial North Africa. *British Journal of Sociology* 27:1–20.