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**Andrews University
Seventh-day Adventist Theological Seminary**

**SOCIOPOLITICAL STRUCTURE OF TRANSJORDANIAN
SOCIETIES DURING THE LATE BRONZE AND
IRON I AGES (ca. 1500-1000 B.C.)**

**A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy**

**by
Željko Gregor
May 1996**

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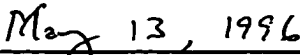
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ABSTRACT

**SOCIOPOLITICAL STRUCTURE OF TRANSJORDANIAN
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ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

Seventh-day Adventist Theological Seminary

**Title: SOCIOPOLITICAL STRUCTURE OF TRANSJORDANIAN SOCIETIES
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B.C.)**

Name of researcher: Željko Gregor

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Date completed: May 1996

According to the biblical account the Transjordanian region was occupied with somewhat organized societies during the time of the Exodus (ca. 15th century B.C.). Unfortunately, archaeological excavations could not confirm this account, and as result, the biblical data have been dismissed as unreliable and historically inaccurate.

The purpose of this study was to provide the most recent archaeological data as well as to reinterpret the old data to see whether or not the biblical account bears any historical value. For this reason, this dissertation provides evidence from three fields: archaeological, anthropological, and biblical.

In spite of Glueck's claim that Transjordan was virtually uninhabited during the Late Bronze Age (time of the Exodus), it is now evident that the region was occupied not only by nomads who lived in tents but by sedentary people who lived in permanent settlements. This fact is supported by numerous archaeological surveys that have been conducted in the region, in addition to several excavations during the past few decades. This new evidence suggests that the people who lived there were organized in tribal communities, where some segments of a tribe lived as nomads, or semi-nomads, while others chose to live in permanent settlements as agriculturalists or craft masters (pottery, metallurgy, art, etc.).

It was earlier argued that tribal polity as a society is not capable of providing such resistance as the Bible seems to suggest. Because of its flexibility in nature, the tribal society was not only able to survive in hostile conditions, shifting from nomadism to sedentary and vice versa, but to consolidate into large units to meet various challenges and opportunities and to create a formidable force to protect their families, settlements, and land.

The Bible speaks of kings of Ammon, Moab, and Edom, and their kingdoms with cities. Thus, the biblical text with its terminology (king, kingdom, city) regarding the period in question needs to be reexamined. According to the literary evidence these terms are not restricted to

urbanized societies with strong centralized governments, but are applicable to tribal societies as well. Therefore, the biblical account does not require strong monarchs with empires as their kingdoms, supported by strong, fortified cities, but allows the existence of tribal kingdoms with small settlements with a king (chief) at its head. In addition, the Egyptian evidence does not picture the people of Transjordan living in a state-level society, but rather supports the model of tribalism.

To my Wife and my Son

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CHAPTER I

INTRODUCTION

Background to the Problem

The biblical account seems to suggest that at the time of the Exodus the people of Ammon, Moab, and even Edom were somewhat organized sociopolitical entities (Num 20:14-21; Num 22; Deut 2:1-8). This view, however, is at odds with the latest interpretations of archaeological data.

From the first half of this century to the early 70s it has been assumed that Transjordan suffered an extensive gap in settlement throughout most of the second millennium B.C. This assumption was the result of several years of survey conducted by Nelson Glueck throughout the Transjordanian region (Glueck 1934a; 1934b; 1935; 1939). Thus, Glueck's hypothesis strongly suggested that the biblical account was misleading and inaccurate concerning the conquest of the Transjordanian kingdoms (Ammonites, Moabites, and Edomites) during the 15th century B.C.

During the early 1970s new archaeological data emerged as a result of many excavations conducted in the region. In addition to this, various archaeological survey

expeditions were launched to gather more evidence in order to better understand the economic, political, and social situation in Transjordan. Due to these recent discoveries, archaeologists have generally abandoned Glueck's hypothesis and accepted the fact that the region was occupied throughout the second millennium B.C. Nevertheless, even though the new evidence seems to support the biblical account in terms of occupation, archaeologists and other scholars still question its historicity. Their skepticism is based on the assumption that even though these regions were occupied by nomads (Albright 1957: 61, 62; 1960: 44; Landes 1961: 67, 68; Campbell and Wright 1969: 116) at that time, there were no strong, unified kingdoms to resist Israel's invasion.

According to their understanding, archaeological data at the present time strongly suggest that the settlements were small in size and certainly not fortified. The population was divided among the tribal entities. As such it would not be able to provide sufficient resistance to invading Israelites, as the Bible suggests. Most scholars agree that encounters between the Israelites and the indigenous peoples living in that region were not based on historical facts, but rather on folk stories and later tradition (Noth 1958; Alt 1966).

This assumption, however, was primarily based on their understanding of "king/kingdom" concepts. Martin Noth

simply speaks of "a united Moabite state with a king at the head," in addition to the Ammonites with an established "government headed by monarchs" (1951: 471). A. Alt seems to suggest the existence of "new states, encompassing entire territories" in the land of Moab (1940: 215). According to their reconstruction, the emergence of the Moabite and Ammonite states with established monarchies appeared during later periods (eighth century B.C.). Similarly, Ernst Knauf follows the same line of argument stating that the Edomite rulers (Gen 36:31-39) cannot be historical figures since the occupation is completely absent on the Edomite plateau during the Iron I period (1200-1000 B.C.) (1985: 245-253).

These conceptions of "king/kingdom" are based either on Western concepts of monarchies or on Mesopotamian and Egyptian civilization, demanding strong, centralized governments, urban society, and strong city-centers (Moret and Davy 1926). Since the archaeological record does not provide any evidence for such societies (during the time to which the Exodus is usually assigned), liberal scholars simply disregard the biblical text as inaccurate and historically invalid.

Due to the same misconception of these terms, another school (Albright) tried to defend the credibility and accuracy of the biblical account. William F. Albright, too, speaks about the kings of Edom, Moab, and Ammon with established monarchies assuming strong governments and city-

centers (1946: 221). To justify the biblical record, he states that the Edomites, Moabites, and Ammonites were protected by a beltline of fortresses (1949: 21). This assumption was based primarily on the results provided by Glueck's surveys of Transjordan. He, too, assumes that the kingdoms of Transjordan were not backward and they possessed a civilization that was developed and even flourished as those on the western side of Jordan (1940: 125, 126, 145). Further, he established a line of fortresses around all Transjordanian kingdoms (Ammon, Moab, Edom) (1940: 128, 130, 134, 139), forming a proposition that

these [Transjordanian kingdoms] were highly advanced, strongly organized, internally well integrated kingdoms. The land was dotted with well built stone villages and towns. The borders of their kingdoms, which can now be accurately fixed, were fortified by strong fortresses, built usually on eminences and commanding a view of each other. (1940: 128).

This scenario was created in order to demonstrate that at the time of Exodus (13th century B.C.) the Edomites, Moabites, and Ammonites were "well organized and well fortified, whose rulers could have given or withheld permission to go through their territories" (1940: 146, 147). Influenced by this line of arguments, A. H. van Zyl argues that the kingdom of Moab had already been established during the time of Exodus (13th century B.C.) (1960: 111, 112).

This misinterpretation of the archaeological material provided by Glueck's survey was a result of the

misunderstanding of "king/kingdom" concepts. Eagerness to protect the historicity of the biblical account, combined with insufficient archaeological evidence, at that time, and the lack of knowledge concerning the pottery chronology, led them to wrong conclusions concerning the structure of Transjordanian societies.

Both schools (liberal--Alt, Noth; and conservative --Albright, Glueck) offered misleading conclusions concerning the nature of the societies in Transjordan for the same reason. The assumption that "king/kingdom" concepts demand centralized governments with strong city-centers forced them to disregard the biblical text, since the archaeological record could not have confirmed the existence of such civilizations.

Neither of them should be blamed since ethnoarchaeological and anthropological studies were basically nonexistent and, as such, not known to them. Their assumptions were in harmony with the general understanding of these concepts (king/kingdom) at that time. According to Noah Webster, a king is an absolute monarch who possesses the power of government without control over all the nation (1890: 640). In addition, the term "king" contains the idea of "one who is invested with supreme authority over a nation" (Hunter and Morris 1897: 2805), and one who is a "sovereign ruler of independent state" (Murray 1901: 704; Little 1937: 1086; Funk and Wagnalls 1955: 1354).

The term "kingdom" applies to "undivided territory under the dominion of a king or monarch" (Webster 1890: 640), "a monarchical state or government" (Murray 1901: 706), or to a "territory, people, state, or realm ruled by a king or queen; a monarchy" (Funk and Wagnalls 1955: 1354). Further, the Bible dictionaries and encyclopedias seem to follow the same line of argument, connecting the term "king" to a ruler of a city-state and nations (Hastings 1909: 840; Orr 1939: 1799; Douglas 1962: 692). These definitions had a significant impact on the scholars mentioned above in creating hypotheses concerning the societies of Transjordan and the interpretation of biblical and archaeological data.

Statement of the Problem and Hypothesis

Rejection of the biblical data is largely based on the presupposition that a tribally organized society cannot provide a unified entity in the time of oppression. However, this study proposes that scholars have failed to recognize the dynamic nature of kin-based (tribal) societies (LaBianca and Younker 1995), which can, under various circumstances, quickly decompose into small social units, or consolidate into large ones to meet various challenges and opportunities (Rowton 1976c: 230-240).

An additional problem with current scholarly views is a misunderstanding of the political significance of certain biblical terms, such as ממלכה "kingdom" and/or מלך "king" (Culver 1980: 507), אלוף "chief, elder," and עיר "city,

town," etc. (Frick 1977), as well as potential sociological terms, such as שבט, מטה "tribe," משפחה "clan," בית אב "father's house," בית "family," and עם, גוי "people" (Wolf 1964a: 287-295; 1964b: 45-49; Wright 1992: 761-769; 1979). These terms have been greatly misunderstood by much of current scholarship, which tends to interpret these terms with modern concepts. Basically, in connection with some of these terms, a centralized system of government supported by an organized bureaucracy is assumed. An immediate assumption has been made that these terms imply a system of complex centralization. Failure to understand the power and nature of tribal society has led to a false conception and understanding of the biblical data.

The aim of this study is to examine the literary evidence provided by both biblical and non-biblical related literature, in order to establish the nature of the societies in Transjordan. Furthermore, archaeological data provided by field excavations, and by surveys in the regions of Edom, Moab, and Ammon, will be utilized to establish the density of population, the nature of settlement patterns, as well as the sociopolitical status of these peoples. These will then be analyzed in the context of modern anthropological concepts, such as nation, kingdom, ethnicity and ethnic identity, tribe and tribalism.

Methodology

Archaeological Data

The major portion of this study is dedicated to archaeological evidence accumulated through decades. First of all, survey expeditions are carefully analyzed in order to better grasp the overall situation in the regions of Ammon, Moab, and Edom. After this enterprise, the material culture of the excavated sites is examined. Only those that relate to the Late Bronze and Iron I Ages are presented in greater detail. The main purpose for this step is to establish the density of the settlements, their nature and pattern, which are based on excavated material.

This archaeological record is re-analyzed for a better understanding of the societal structure in the region. In this regard Colin Renfrew has listed about 20 correlates that serve as identifiers for social structure, but he calls for caution since "they are discernable only in favorable circumstances" (1972). These 20 correlates were reduced to five by Frank Frick (1985: 88-97). Generally, these might be arranged in two categories, as suggested by A. Joffe (1993: 17, 18): (1) a formal, quantitative or statistical methodology, which is more descriptive, focusing on several key variables (site location, site size, period of occupation, and material culture), and (2) a contextual methodology dealing with human characteristics of system organization and function (central place theory, the rank-

size rule, and various ecological approaches). Joffe stressed, however, that this approach is oversimplistic, emphasizing the fact that understanding the social, political, and economic structure of a society cannot be safely determined merely by given correlates. Due to the complexity of the issues, reinterpretation of the material provided by archaeological surveys and excavations should bring a clearer picture of the societies in Transjordan. This includes burial practices, trade network based on storage facilities, subsistence economy based on agricultural availability, and food production.

Anthropological Concepts

The second part of this study deals with anthropological questions concerning the ethnicity and ethnic identity and other social organizational terms: tribes, tribalism, state, etc. This serves as a basis for a better understanding of the bonds and origin of a certain group. Cultural traits (common customs, language, religion, race), sense of historical continuity, territory, and common ancestry, as ethnic identifiers, are compared with the biblical tradition concerning the origin of Transjordanian peoples. In this light, the concept of "ethnogenesis," as proposed by George Mendenhall (1973) and Norman Gottwald (1979)--that these peoples originated as a result of social changes and political pressures, and has nothing to do with

common ancestry--is evaluated for applicability to the origins of the Ammonites, Moabites, and Edomites.

In addition, various issues with regard to tribalism are addressed. Social and political structures of a tribal entity are examined to determine whether or not tribes survived in Transjordan through many centuries and even until today. Did the structure of a tribal society and its flexibility enable it to shift from nomadic to sedentary, and the other way around, whenever political and environmental conditions were favorable, without losing its identity? Other related questions are addressed: Who/What influenced the society to shift from tribal to a supra-tribal or sedentary society? How did these operate and to what degree did they need centralization, if any, in order to survive?

Excavated remains of fauna (bones) and flora (various seeds, mainly barley and/or wheat) indicate the nature of the society that occupied the site at a desired period of time. Examination of these remains may produce evidence to understand when the society shifted from sedentary to nomadism and vice versa.

Analyses of Biblical Terms

The key biblical passages that pertain to the Transjordanian peoples (Gen 36; Deut 2; Num 20) are examined in some detail, especially the nature of the list of Edomite kings, with its application. In particular, attention is

given to key biblical terms used to describe the origin and identity of the peoples of Transjordan during this period. Detailed exegesis is undertaken when necessary for more accurate interpretation of the text. To achieve these objectives, in addition to the MT, the LXX with all its variants and the Samaritan Pentateuch are considered wherever applicable.

The main purpose for such an approach is to seek the biblical understanding of political, economic, and social situations in Transjordan between 1500-1000 B.C. Correlation of biblical texts (Gen 36; Exod 15:15; Num 20:14-21; 31:8; Deut 2:1-9; Josh 13:21) establishes the facts that lead toward a better understanding of the terms מלך (king), ממלכה (kingdom), אלוף (elder, chief), and בני (sons of, descendants) in addition to the meaning of עמון, מואב, and אדום. In all, the Bible itself contributes greatly toward an understanding of the political, social, and cultural conditions in Transjordan in the periods under discussion.

Extra-Biblical Data

In addition to biblical evidence, other non-biblical literature, mainly documents from Egypt and Mari (Malamat 1962: 143-150; 1967: 129-138; 1968: 163-173) are taken into consideration. Special attention is paid to a number of various inscriptions: Topographical List (Tuthmose III, 15th century B.C.), Lists of Soleb (Amenhotep III, 14th

century B.C.), Amarna correspondence (Amenhotep IV, 14th century B.C.), Er-Rataba Stele (Ramesses II, 13th century B.C.), Papyrus Anastasi VI (Merneptah, 13th century B.C.), and Papyrus Harris I (Ramesses III, 12th century B.C.).

These documents provide evidence of how the Egyptians viewed Transjordanian peoples, which creates a better understanding of the sociopolitical conditions in that region.

When all the data are combined--archaeological, anthropological, and literary (Egyptian documents and the Bible)--conclusions can be drawn concerning the political, economical, and social structures of society in Transjordan during Late Bronze and Iron I Ages. According to the available material it is possible that the biblical and extra-biblical (archaeological/anthropological) data are coherent.

Literature Review

Archaeological Studies in Transjordan

Through many years of surveying, Glueck gathered evidence for his claim that Transjordan suffered almost total absence of population from the end of the Early Bronze Age to the beginning of the Early Iron Age, ca. 2000-1000 (Glueck 1933: 18; 1934a: 14-22, 81-83; 1934b: 16; 1935: 124-139; 1937a: 22-23, 28-29; 1937b: 20-21; 1939: 251-269; 1940: 15-16, 21, 114-115, 125-157; 1942: 22-24; 1946: 57-58; 1951: 423).

This hypothesis, however, was sharply criticized by many scholars and archaeologists (Harding 1953: 14; 1958: 11, 12; 1967: 32-34, 63; Ma'ayeh 1960a: 115; Dajani 1964: 101; 1966b: 49; Ward and Martin 1964: 19-20; Kenyon 1966: 64; Dornemann 1970: 8, 48, 49; Franken 1970: 7-9; Mittmann 1970: 221, n. 32; Franken and Power 1971: 119-123; Zayadine 1973a: 18-21; Thompson 1974a: 192-194; 1974b: 63-70; Dever and Clark 1977: 90; Bimson 1981: 64-68). As a result, Glueck himself was persuaded to modify his position (Glueck 1970: 139-142, 157). This modification was seen as a decline in population rather than a gap, and has been accepted by current scholarship (Kafafi 1977: vii-x, 73, 464; Pinkerton 1979a: 70-73; Miller 1979a: 51; 1982: 172; Kautz 1981: 31-34; Mattingly 1983: 260).

Since the early 70s many excavations have been conducted in the region, bringing forward new evidence supporting the fact that Transjordan had been occupied during the Middle and Late Bronze Ages (Harding 1958: 10-12; 1967: 32-34, 63; Dornemann 1970: 39-63; Ward 1972: 54, 55; Sapin 1974: 558-565; Bimson 1981: 61-68). In addition to Umm ad-Dananir (McGovern 1979; 1980; 1981a; 1981b; 1981c; 1981d; 1982a; 1982b; 1983; 1986; 1987; 1989a; 1989b; McGovern, Harbottle, and Wnuk 1982: 8-12), excavations from Amman (Harding and Isserlin 1953: 14-22; Dajani 1966b: 48-52; Ward 1966: 5-18; 1964: 47-55; G. R. H. Wright 1966: 350-357; Hennessey 1966: 152-162; Zayadine 1973b: 19, 20; Hankey

1974a: 131-159; 1974b: 160-178; Herr 1976a: 109-112; Bennett 1979a: 159), Tell Safut (Ma'ayeh 1960a: 115), Sahab (Dajani 1970: 29-34; Horn 1971: 103-106; Ibrahim 1972: 23-36; 1974: 55-62), Madeba (Harding and Isserlin 1953: 27-33), Hesban (Beegle 1971: 597-581; Waterhouse and Ibach 1975: 217-233; Geraty 1976: 42; Ibach 1976: 119-126; 1978a: 201-213; 1978b: 215-222; Boraas and Geraty 1978: 1, 2), Amman Airport Structure (Harding 1958; Herr 1976a; 1983a; 1983b), Tell el-Umeiri (Geraty 1985; Geraty et al. 1986; 1988; 1989; 1990a; 1990b; Herr et al. 1990; 1991; Younker et al. 1990; 1993), Tell Jalul (Younker et al. 1993), and Tell Balu'a (Worschech and Ninow 1994) have contributed greatly to our understanding of the occupational conditions in Transjordan.

Recent survey expeditions at Wadi el-Hasa

(MacDonald 1980b: 166-183; 1982a: 58, 59; 1982b: 35-52; 1982c: 58-59; 1983: 18-28; 1984: 113-128; 1988; 1992b: 113-142) examined more than 1,000 sites. Between 1978 and 1982 three survey seasons, covering the region between Wadi Mujib and Wadi Hesa, launched by Emory University, had resulted in the evaluation of 585 sites, in which a significant amount of Late Bronze pottery was discovered (Miller 1979a: 43-52; 1979b: 79-92; 1982: 169-173; Pinkerton 1979b: 4-7; Kautz 1981: 27-35).

Anthropological Studies

In addition to the invasion model, which usually may have had roots in Anatolia and Northern Syria, Mendenhall forwarded the idea that future Transjordanians may have derived just from across the river Jordan. According to him, they too were the result of a "peasants' revolt," which in turn was a product of socio-economic collapse toward the end of Late Bronze Age (Mendenhall 1973: 167, 168).

This proposition has been modified and new elements added by Gottwald. He suggested that a lower class of Canaanites rebelled against the urban centers and fled to uninhabited highlands of Canaan and Transjordan. In that way they established new ethnic identities (Gottwald 1979: 429, 433).

Based on his excavation at Umm ad-Dananir, Patrick E. McGovern proposed that the society of Ammon was highly urbanized during the Late Bronze Age and was controlled by city-states, similar to those on the other side of Jordan. Furthermore, the emergence of monarchies in Transjordan was the result of the collapse of these developed city-states (McGovern 1986).

Following the results of his survey in central Moab, Maxwell Miller seems to depart completely from migration/invasion proposals or urban collapse. According to him, the origin of the Moabites is to be recognized in

the pre-existing population that occupied the highland plateau of Transjordan (Miller 1992a; 1992b).

The newest proposal concerning the societies in Transjordan was offered by Oystein LaBianca and Randall Younker (1995: 400-415). Following their argument, indigenous peoples of the region did not immigrate from anywhere but rather originated there. They were tribally organized entities that were able to switch from range-tied tribalism (which is usually associated with pasturage and herding) to land-tied tribalism (associated with agriculture and permanent settlements).

Biblical Studies

It has been suggested that there is very little evidence, if any, to determine the social and political situation in the region prior to 10th/11th century B.C. (Bienkowski 1992a: 1). After modification of his gap hypothesis, Glueck suggested that Ammonites, Moabites, and Edomites migrated into the region toward the end of the Late Bronze Age (Glueck 1970: 153). This, nevertheless, was in harmony with the then-popular "wave" hypothesis suggesting that cultural and political changes caused periodic migrations and invasions (Noth 1958: 154; Landes 1956: 31-35; Luke 1965; Alt 1966: 215).

John Bartlett rejected the idea that Edomites were the result of migration or invasion caused by sociopolitical conditions. He combines archaeological arguments with

linguistic, emphasizing that all Transjordanian peoples (Ammonites, Moabites, and Edomites) spoke a local variant of Northwest Semitic, but not Aramaic. Thus the emergence of these peoples should be seen in indigenous population who developed due to improving economic circumstances (1989: 61-65).

On the other hand, Udo Worschech and Ernest A. Knauf seem to follow the German tradition set by A. Alt (1940: 215) and Martin Noth (1960: 154). Following this tradition they attempt to argue that the main ingredients to the Transjordanian societies were immigrants who migrated there from elsewhere and merged with the indigenous population. Worschech proposed the hypothesis that the land of Moab was occupied by sedentary Emites who lived alongside the nomadic Shasu during the end of Late Bronze Age. The region was infiltrated by another nomadic group known as Shatu during the transition of the Late Bronze and Iron I Ages (ca. 1200 B.C.). The Shatu merged with nomadic Shasu and then displaced the sedentary Emites, maintaining a semi-nomadic way of life (Worschech 1990).

According to Knauf, a breakdown of the economic system in the land of Canaan caused Horite tribes to migrate into the Edomite territory, maintaining agricultural life and starting the process of sedentarization. This was evidenced by agricultural settlements that emerged only in the areas where agriculture was plausible. In this process,

Esauites, who were indigenous people, joined in establishing similar settlements around the sedentarized Horite tribes. Later the Esauites assumed a leading role in forming the Edomite state (Knauf 1992: 49).

Limitations

Due to its complexity, this study considers only three major ethnic groups of Transjordan, i.e., Ammonites, Moabites, and Edomites. Further limitations have been imposed upon their history; only the period from 1500-1000 B.C. is taken into consideration.

Since the earliest writing, so far discovered in this region, is dated to the eighth century B.C., there are no extrabiblical records to be examined here, apart from a few Egyptian inscriptions dated to the New Kingdom (18th, 19th, and 20th dynasties).

Although the sites in the region are numerous, very few have been thoroughly excavated, and findings from even fewer are published, which causes further limitation to this study.

Summary

According to the archaeological data at our disposal, the gap hypothesis launched by Glueck and supported by the scholars of his time is without support. Even though occupation was in decline in the Late Bronze and Iron I Ages, new archaeological evidence seems to suggest continuity rather than discontinuity in Transjordan.

However, these settlements are interpreted by scholars as the property of various disunited tribal polities. As such, they were not able to stand against the invading Israelites at the time of the Exodus. Once more, the Bible has been rejected as a reliable historical document.

A more careful interpretation of the biblical passages must be combined with the clearer understanding of the political, social, and cultural structure of the tribal societies in Transjordan to determine whether or not the biblical and archaeological data are in harmony with each other.

CHAPTER II

ARCHAEOLOGICAL EVIDENCE

Since the 1970s there has been a new trend in archaeology as a science. Before this period, archaeology had been concerned with the stratigraphy, history of occupations, and destructions. In addition to this, today there is a concern among archaeologists about anthropological issues as well (the ancient's standard of life, their diet, clothing, customs, and structure of the society in which they lived). Because of its complexity, an understanding the social structure in Transjordan demands consideration of all the available archaeological data.

The archaeology of Transjordan has achieved tremendous results in the last few decades (Dornemann 1983; Sauer 1986: 1-26), which have brought more light to our understanding of the society of the region and its structure. By now, numerous surveys have been conducted in the region, and new excavated material demands our attention. To this respect, the archaeological evidence plays a crucial role in understanding the social structure of a given society in general and the people of Transjordan in particular.

The goal of this chapter is to present all the available surveyed material that would serve as bases for our understanding of density and patterns of the settlements. This is necessary in order to grasp hierarchy as well as heterarchy in relation to the settlements (these terms are discussed in chapter 3). Thus, correlation between bigger and smaller sites is crucial (hierarchy), as well as association among the sites of the same size (heterarchy).

Furthermore, the excavated material plays a decisive role in supporting the quest for our understanding of the sociopolitical structure of the society in Transjordan. This material provides the evidence to comprehend whether or not the region developed a sophisticated trade network that should be evidenced in the storage facilities and imported pottery vessels. In addition to this, the architectural remains should bring more light to discerning the societal structure by the existence of sophisticated structures (temples, palaces, stables, storage buildings, water systems).

First of all, based on the latest discoveries, it is now evident that Glueck's "gap theory" needs to be remodified. Following sharp criticism thereof, Glueck himself revised his position, admitting that the decline in sedentary settlements is no longer as radical as he had earlier assumed (1970: 140, 141). Regardless of his

revision, "the real curiosity is that Glueck's hypothesis was ever taken so seriously--as literally true--in the first place" (Thompson 1974a: 66). Similar attitudes led many scholars to abandon Glueck's hypothesis altogether and call for the idea that Transjordan was, more or less, urbanized throughout the periods in question (Dornemann 1970: 8, 48, 49; Franken 1970: 7-9; Mittmann 1970: 221, n. 32; Franken and Power 1971: 119-123; Zayadine 1973a: 18-21; Thompson 1974a: 192-194; 1974b: 63-70; Dever and Clark 1977: 90; Bimson 1981: 64-68).

This position was seriously questioned, however, and it was suggested that the region was far from urbanized. Indeed, in the view of some scholars, Glueck's "gap theory" needs a slight modification but not complete abandonment (Kafafi 1977: vii-x, 73, 464; Aharoni 1979: 102; Pinkerton 1979a: 70-73; Miller 1979a: 51; 1982: 172; Kautz 1981: 31-34; Mattingly 1983: 260; Sauer 1986: 1-26).

According to the archaeological data, it has been established that the northern region of Transjordan was sedentarized (McGovern 1986; Geraty et al. 1990a: 59-88; 1990b: 145-176; Ibach 1987), while the same cannot be said for the southern regions (Knauf 1992: 47-54). Following the current archaeological data, it appears that Transjordan was going through a transition from non-sedentary to sedentary occupation during the Late Bronze and Iron I Ages.

Despite the fact that the archaeological data are limited, because of the little published material, a re-evaluation of the archaeological material is necessary in order to understand the nature of the existing settlements. In addition, new interpretation of the accumulated evidence will bring more light toward our understanding of the social structure in Transjordan.

In the end, this chapter explores the possibilities concerning the sociopolitical structure of the society, and it concludes that the indicators for an urban (state) society are weak or they do not exist at all. Contrary to this, there is sufficient evidence to suggest that the society of Transjordan during the period in question (the Late Bronze and Iron I Ages) was tribal.

Geographical Setting of Ammon, Moab, and Edom Territorial Borders

It is generally assumed that Transjordan (this applies to the region east of Jordan, Dead Sea, and Wadi Araba, but not north of Wadi Zarga) was divided into three regions: those of Ammon, Moab, and Edom. While the region of Edom was never disputed, the same may not be said for the other two. With regard to Moab, it was proposed that the region covered the territory between Wadi el-Hesa (the biblical River Zered), to the south, and Wadi el-Mujib (the biblical River Arnon), to the north. During the course of history the northern border might have extended over the

Wadi el-Mujib to Wadi Hesban (Thompson 1980: 1014; Kautz 1986: 389; Grohman 1989). The concensus of present scholarship, however, seems to be that the northernmost border of Moab was Wadi Hesban most of the time. Only during the time of aggressive oppression might the border have moved south to Wadi el-Mujib (Miller 1992a: 883).

Regarding the Ammonite borders, scholars are as divided now as they were decades ago. One possible reason for disagreement may have been the fact that this region suffered more sociopolitical changes than any other in Transjordan.

After his survey, Glueck suggested that the Ammonite region stretched between Nahal Yabbok to the west and the desert to the east (1939: 246, 247). Later, it was proposed that the towers built in the Ammonite area marked a defense line of the region (Landes 1961: 69; Kletter 1991: 33-50). According to Kletter's views, the towers were compact, well defined, and could easily defend the existing kingdom. Apparently, "the same borders defined the kingdom of Ammon for a long period (Kletter 1991: 43).

Following the epigraphic and ceramic evidence, Herr suggested that the boundaries of Ammon should be reconsidered for, at least, the time of the Iron II Age period. Thus the border of the Ammonite kingdom was the Madaba-Jalul region to the south, Wadi Zarqa to the north,

the desert to the east, and the Jordan River to the west (Herr 1992: 175).

In addition, Hübner indicated that the southern border of the Ammonite territory was probably north of Hesban, al-'Al, Khirbet Masuh, and Umm el-'Amed, or south of al-Yadude, Tell Jawa, and Sahab (1992: 141). The northern border was Wadi Zarqa (1992: 11, 139, n. 4), while the western one was the upper part of Wadi al Bahhat, or Wadi al Sir (1992: 142), with the possibility that the Baq'ah Valley belonged to the Ammonites (1992: 146).

The latest idea concerning the borders of the Ammonites was launched by Randall Younker, who suggested that the region, at least during the time of Sihon, was circled by Wadi Zarqa to the north, east, and partly to the west. He pointed out that Wadi Zarqa does not begin at Rabbath-Ammon but rather "runs all the way to the Hannutiya [and] pushes the western border out" (1994b: 62).

The fact is that the extent of the boundaries between the regions changed many times through the course of history (Vyhmeister 1968: 158-177). Only during the time of tension were the borders between the regions more definable. Other than that, the boundaries between these peoples were flexible enough to allow cultural, economic, and political fluidity. Thus the definition of their exact borders of the territories is almost impossible. The regions in which the archaeological data are examined, however, are based on a

general trend rather than on the exact and fixed borders. For the Ammonite region, the "maximal" view of the borders is considered (i.e., the sites within the territory between Wadi Zarga to the north and east, the Jordan Valley to the west, and Wadi Hesban to the south). For the Moabite region, the sites that are located between Wadi Hesban to the north and Wadi el-Hesa to the south are examined. Edomite sites considered are those situated south of Wadi el-Hesa.

Soil Formations

According to Buckman and Brady, there are four components in every soil: mineral materials, organic matter, water, and air (1969: 9). In spite of the fact that the growth of plants depends on all these, organic matter and water are the decisive factors in soil fertility and productivity.

Usually organic material would accumulate within the topsoil and serve as some sort of granulator, being a major source of three chemicals: phosphorus, sulphur, and nitrogen (Buckman and Brady 1969: 11). These are the substances that, together with water, plants would absorb through their root systems. Availability of these substances and their accumulation would determine the quality and fertility of the soil. The ratio of the three chemicals also determines which crops are most suitable for the soil.

According to the *Agricultural Atlas of Jordan*, there are several types of soil in the Transjordanian region (Howayej 1973). One of the most common types of soil that one finds in most of Transjordan is known as "Sierozem." This kind of soil is designated by the *Agricultural Atlas of Jordan* as "Gray Desert Soil." It is defined as

a zonal great soil group consisting of soils with pale-grayish A horizons grading into calcareous material at a depth of 1 foot or less, and formed in temperate to cool, arid climates under a vegetation of desert plants, short grass, and scattered brush. (Buckman and Brady 1969: 624)

A second type of soil that stretches in a marginal zone along the desert is called "Regosols." This belongs to a family of relatively young soils, located on deep, unconsolidated, soft mineral deposits. It is largely confined to areas of sand dunes, loess, and steeply sloping glacial drift (Buckman and Brady 1969: 623).

The third type of soil is designated as "Yellow/Brown Mediterranean soil," derived from the breakdown of soft limestone (nari). It occurs on a very wide range of non-calcareous rocks (Bridges 1970: 56-59; Limbrey 1975: 205) and is generally 40-60 cm in depth. This soil is found in the hilly country of the ancient Ammonites, the Madaba Plains of the Moabites, and it covers a restricted area of the Edomites. Its lime is differently presented in various places and varies from 0-20 percent (Amiran et al. 1970: II/3). The organic matter is above 3%, which signals good fertility. According to Buckman and

Brady, the organic matter in most soils is between 3 percent and 5 percent (1969: 11). The soil is productive and was used mainly for natural pasturage and afforestation.

The soil with the best quality in Transjordan is called "Terra Rosa," which is also known as "Red Mediterranean Soil." Its presence is evidenced mostly in the Madaba Plains and the Kerak Plateau, but is also found in northern Jordan. To a certain extent, it covers several square kilometers in the area that once belonged to ancient Edom, but is restricted to the northernmost part of the region, just south of Wadi el-Hasa.

It occurs on limestone and other calcareous rock formations (Limbrej 1975: 205). The color of this type of soil is deep red and it is very productive because its organic matter ranges between 3 percent and 8 percent. It derives from the composition of hard limestone and dolomite, and is shallow (less than 50 cm deep). Due to its shallowness, when located on hills, such soils could be productively cultivated only by the construction of terraces (Amiran et al. 1970: II/3).

This type of soil is most suitable for cereal cultivation, since cereals are much more demanding of soil fertility than root crops (fruit) are. Due to this fact, when combined with the factor of water availability, cereal cultivation is most probable on the land where this type of soil prevails.

According to the *Agricultural Atlas of Jordan*, the Moabite territory would have the biggest area covered by "Terra Rosa" soil. Then the territory of Ammon would follow. The Edomite territory would contain the smallest area of this type of productive soil. In spite of the fact that productivity of the soil is determined by its fertility, the availability of water supplied through rainfall would play a decisive role for crop raising and developing a certain region into an agricultural area.

Availability of Rain

Because Transjordan lacks any river that would contain enough water for irrigation (apart from the Jordan River which supplies enough water for irrigation of the Jordan Valley), its agricultural productivity relies heavily on dry farming with water provided by natural springs and rainfall. Concentrations of natural springs are reported in the vicinity of Petra, Buseira, Kerak, Madaba, and Amman. Nevertheless, the quantity of water provided by these springs is far from adequate for any irrigation activities. Therefore agricultural products must rely only on rainfall.

The rainfall availability in Transjordan is closely associated with atmospheric depressions from the Mediterranean (Shehadeh 1985: 30). Variability of precipitation depends on physiography of the landscape and its latitude. Consequently, rainfall decreases considerably

from west to east and from north to south. According to the *Agricultural Atlas of Jordan*, the region of Ammon is the best supplied by rainfall, where the average annual precipitation is 500 mm. The Moabite region would receive between 300 mm (Dibon) and 350 mm (Kerak), while the average rainfall for the region of Edom is between 100 mm (Petra) and 200 mm (Buseira).

The average rainfall during the wet years seems to be slightly different, where the Ammonite region would receive over 600 mm, the Moabite region should expect between 400 mm (Dibon) and 500 mm (Kerak), while the Edomite region would receive between 200 mm (Petra) and 400 mm (Buseira). During the dry years the picture is significantly different, when availability of water drastically drops. In such a year the Ammonite region would receive as little as 200 mm, the Moabite region between 100 mm and 125 mm, while the Edomite region could expect only between 75 mm and 100 mm. In addition, there are between 10 and 15 days when, during one year, precipitation exceeds 10 mm in Ammon, while in Moab and Edom there are only between 5 and 10 such days.

Due to the availability of rainfall and quality of soil, it is obvious that the land of Ammon would be the most suitable for agricultural activities, at the same time offering excellent pasturage for animals. The land of Moab

would also provide good conditions for crop production (provided that annual rainfall did not drop below 200 mm), while the land of Edom is mainly suitable for animal raising and limited crop production (only in the extreme north).

Crop Production

In addition to various vegetables and fruit trees, cereal production was the most important agricultural product from ancient times in the Middle East in general, and Transjordan in particular. The best known and the most commonly produced cereals in this region are wheat and barley. For a high yield of wheat, an annual rainfall of 500-700mm would be required (Renfrew 1973: 65), although it can be cultivated in regions where annual rainfall is above 225mm, provided that the growing season is longer than 90 days (Liphschitz and Waisel 1973: 36). In addition, the distribution of rainfall plays a crucial role in the production of wheat, because too much rain in one time and too little in another would certainly reduce the yield (Renfrew 1973: 65).

Since wheat exhausts the soil more than any other cereal, the best results are gained when it grows in "stiff clay loams which are well drained" (Borowski 1987: 89). Furthermore, concentration of proteins in the wheat grain demands an adequate quantity of nitrate, which existence is guaranteed only in the soils that could hold and preserve water (Renfrew 1973: 66).

In addition to wheat, production of barley is the most common cereal cultivated in the Middle East. It grows best in well-drained, fertile soils and does not tolerate sandy soils. To a certain extent it tolerates saline and alkaline conditions, but is sensitive to acidity in the soil, just as other cereals are. Because barley tolerates the presence of alkaline it can grow in soils that are derived from chalk and limestone. This enables barley to be cultivated in areas where other cereals would not survive (Renfrew 1973: 80-81).

Because barley is a short-season crop, it can be cultivated in places of high altitudes and latitudes, and when the rainfall is low (Harlan 1972: 239). Barley seems to have been the main crop wherever rainfall agriculture was pushed to its absolute limits (Flannery 1973: 61). These growing abilities of barley are suitable for the environmental conditions and climate of Transjordan.

The cultivation of barley is more suitable in Transjordan than wheat, due to the annual precipitation and soil quality. Nevertheless the risk factor must not be ignored, since variability of annual rainfall is significantly different for various regions. Any amount of annual rainfall that is less than 200mm would drastically decrease the yield of the crop.

Accordingly it appears that rainfall in the land of the Ammonites would supply farmers with a dependable

quantity of water even in a dry year. The same cannot be assumed for the land of Moab and even less for Edom. Agricultural activities in Moab and Edom were at great risk, when two or three subsequent dry years would bring devastating consequences to farmers. In addition to this risk, the timing of rainfall is of utmost importance, since enough rain, but at the wrong time, brings little or no relief.

As a result, permanent attachments to the land for food production were most risky in the land of Edom, less in Moab, and least in Ammon. Food production becomes a major victim of environmental hazards and, therefore, under the stress of economy, people in these regions would shift from agricultural activities to nomadism as a means of food subsistence (Gellner 1973: 7). In this respect, the shift is most likely to occur in the land of Edom first, followed by the land of Moab, and lastly in the land of Ammon. Whenever environmental conditions (rainfall) became favorable, the shift from nomadism to sedentary would first develop in the land of Ammon, then in the land of Moab, and last in Edom.

Issues Concerning Settlement-Pattern Analysis

Evidence of material culture accumulated through numerous archaeological surveys and excavations has shed more light to the settlement patterns in Transjordan than was previously available, which has resulted in a better

understanding of the social complexity of the region. This understanding is based mainly upon the development, distribution and changes in ceramic styles as well as in the architectural design of individual units and communities. Lately, floral and faunal data are being successfully implemented as a type of information to understand patterns of agricultural/pastoral activities and the diet.

All this information, however, requires some degree of critical awareness of the accumulated data. For this reason, it is necessary to review cautiously the techniques and assumptions by which various conclusions are derived. Through the process of evaluation, the data have been interpreted or implied from their static and fragmentary components of the ancient societies into a dynamic picture of the sociopolitical and economic systems. Flannery made important statements that the settlement patterns as recovered are different from living settlement systems of the ancient past (1976: 162-163). Therefore, the settlement patterns should not be treated as isomorphs of the past cultural systems (Price 1982: 728) or as a static phenomenon (Binford 1975: 251). Rather, they should be treated "as macro-artifact, subject to many of the same processes of distortion and abstraction as other artifacts" (Joffe 1993: 4).

Discovering and understanding the settlement patterns in Transjordan were mainly due to the data that

were recovered through the course of the last two centuries by a wide array of surveyors and methods. The resulting information was derived basically from 19th-century explorers, topographic researchers, and lately from carefully designed modern surveys. In considering this type of data, it is necessary to evaluate the survey design and execution, formation processes in addition to the interpretation of the material. In this context it is discussed whether the recovered data are meaningful in relation to the entire settlement record of the Transjordanian region.

During the last two decades, significant attention has been directed toward methodology and design, especially to the questions addressing sampling and representatives (Judge et al. 1975; Plog 1976; Plog et al. 1978; Ammerman 1981; Lewarch and O'Brien 1981; Nance 1983; Wandsnider and Camilli 1992). A number of concepts or variables need to be considered when techniques and goals have been selected for a systematic exposition of survey design, as suggested by Schiffer, Sullivan and Klinger (1978). These are: obtrusiveness, "the probability that particular archaeological materials can be discovered by a specific technique"; visibility, "the variability in the extent to which an observer can detect the presence of archaeological materials at or below a given place"; and accessibility, "the constraints on observer mobility" (Schiffer et al.

1978: 6-9). In order to implement these variables, unit size and shape, sampling scheme, stratification within the study area, sample size and fraction, and intensity of the sites need to be considered (1978: 10-14).

Wandsnider and Camilli went a step further, suggesting that the width of transect, speed and number of passes along the transect, size color and density of artifacts, precision of measurement of artifacts, methods and precision of documentation, ground cover, boredom, and weather need to be included as variables for a meaningful and successful survey (1992). This would require an explicit statement of survey goals and methodology used during the survey with the same magnitude as the archaeological work itself. These would be prerequisites for accurate evaluation of the selected representatives, which would result in an adequate publication to permit a possible reevaluation as archaeological methodology improves in the course of time.

Unfortunately, the majority of the surveys conducted in Transjordan do not satisfy these variables. This includes the inadequacy of the publication of recent surveys. Rapid population growth, the mechanization of agriculture, and the widespread destruction of archaeological sites are alarming and demands more systematic approaches where all the variables are included for a better understanding of the settlement pattern in the

region. With the exception of Glueck (1934a; 1934b; 1935; 1939), Miller (1991), and MacDonald (1988; 1992a; 1992b), the other surveys are only partially published in various journals or not published at all.

In addition to the methodology employed for surveying the region, other issues need to be addressed here. Natural erosion and alluviation of certain areas, together with modern building activities, are major elements that endanger the existence of many sites of critical importance for understanding the settlement patterns. Alluviation that deposited a significant amount of topsoil over certain areas and the stripping high grounds of soil and small sites is well documented in the literature (Vita-Finzi 1969; Kirby and Kirby 1976; Beaumont 1985; Rosen 1986; Thornes 1987). Some sites were completely unknown or their significance unnoticed before they were revealed by construction or other modern building activities. (One typical example is Tell Jawa. The importance of this site was noticed only when a bulldozer revealed the casemate city walls dated to the Iron Age.)

Agricultural activities that require plowing--conducted through last several centuries, especially in the Madaba region--completely destroyed many small settlements, which prohibited the Jalul Survey Team from recording any site of importance around Tell Jalul. It has been documented in other regions that sometimes entire tells have

been leveled and their debris scattered over several kilometers (Coleman and D'Annibale 1985: 149; Esse 1991: 133-135). These natural formation processes and other human activities make the understanding of the local and regional settlement pattern incomplete or misleading.

The number of pottery sherds collected from the surface of a tell plays a significant role in estimating the settlement pattern of a region. Apart from the surveys conducted by Miller, MacDonald, Hesban Survey, and the Madaba Plains Project, there is no account of sherds collected from various sites by surveyors. It has been documented that even if the surveyors give an accurate account of the sherds, the sherds currently visible on the surface represent a sketchy picture of the ceramic corpus (Ammerman and Feldman 1978; Hirth 1978; Hodder and Malone 1984; Ammerman 1985). This is due mainly to the human activities such as plowing and building activities, in some cases, or through extensive sherding that has been conducted through centuries by many visitors, travelers, private collectors, and surveyors who cleaned the surface considerably.

Due to all these elements that cause difficulties in establishing the settlement pattern, excavations on a large and small scale are necessary for an accurate establishment of the settlement layers, which will serve as a control for testing the accuracy of the surveyed findings.

The material provided by extensive surveys, combined with excavated data wherever possible, produces a more accurate picture of settlements for any given period.

Interpretation of settlement patterns has been dependent on anthropological studies of chiefdoms (intermediary stage of society between tribe and state), which were thought to generate levels-of-control hierarchy in social inequality that were visible in the archaeological record (Service 1962: 143-177). As a result these variables, or archaeological attributes, could be identified and fill in the gaps of a discontinuous and incomplete settlement record (Wright 1977; 1984: 41-44; Earle 1987). In this process a series of attributes were put forth that reflected social forms, such as the notion that a state society has at least three levels in its decision-making hierarchy (Johnson 1972: 769-773; Wagstaff 1986).

From this, two standard approaches emerged concerning the understanding of archaeological settlement patterns. First, the formal approach can be seen through quantitative or statistical methods. By this approach, descriptive information is generated in settlement pattern theory where it is focused on several key variables (site location, site size, periods of occupations). Second, contextual approaches were concerned and packaged with specific inferences about human organization and function. The best-known representative to this approach is central

place theory with all its variations (rank-size rule, various ecological approaches).

Lately, these methods have been challenged by Joffe, who has pointed out that settlement patterns cannot be defined simply by a set of given correlates (1993: 17, 18). He calls for a synthetic approach wherein social concepts need to be reinterpreted as presented by the archaeological record (1993: 18). Therefore, the categories of evidence are evaluated as to their quality and meaning, the theories are assessed according to their utility, and then the resulting product is presented. Only by this design can a complex society be defined where model building and theory building are synchronized.

To accomplish this it is essential that sites within regions are both excavated and surveyed. This is because excavated sites without regional surveys are without context and, therefore, isolated points, and surveys without excavated sites are merely point patterns without connections.

The archaeology of Transjordan is still in the process of development and the excavations of many major sites are still in progress (Tell el-Umeiri, Tell Jalul, Tell el-Balu'), but most of the regions are fairly well surveyed. Therefore, it is safe to suggest that sufficient material exists to propose, at least tentatively, the nature

of the societies in the Transjordanian region during the Late Bronze and Iron Ages.

Following Joffe (1993), numbers, size, and percentages represented in this chapter are meant to characterize trends but not precision; therefore the percentages are rounded off.

Early Surveys

The Transjordanian region has been the target of many historians and travelers alike since earliest times. Josephus provided an impressive amount of information concerning quite a number of sites, laying the groundwork for further investigation (Wars I.8.7). Later, at the close of the third century, the historian Eusebius visited the region and recorded a list of ancient sites (1904). More intense and systematic surveys, however, were not conducted prior to the 19th century, when organized expeditions were sent to explore the region.

The first traveler who penetrated the area and recorded the accounts of his journey was Ulrich Seetzen, who entered the region in 1805 and published his findings in 1810. Basically, he followed the old Roman road, the *Via Nova Traiana*, from north to south, recording and describing the sites on his way. He was followed by Ludwig Burckhardt who traveled through the region during the summer of 1812. On his way to Egypt, he provided useful information concerning the principal settlements along the route he

followed (Burckhardt 1983). Charles Irby and James Mangies revisited the region in 1818, traveling from south to north, and were protected by armed guards along the way (Irby and Mangies 1823). Exploration of the Dead Sea was conducted by W. F. Lynch, who crossed to Transjordan in 1848, and explored the eastern side of the sea, where he barely escaped capture (Lynch 1848). Due to the hostility of the region, most of the travelers only observed and made quick notes concerning the sites they encountered on their journey; there was not enough security to thoroughly investigate the ruins.

However, this was not the case for Felician de Saulcy, who conducted an expedition early in 1851. It was he who discovered a stele in Rujm el-'Abd, now known as the Shihan Stele. de Saulcy was later detained and escorted to Kerak castle, where he was eventually released after a satisfactory payment had been made (de Saulcy 1853-4). During 1858 and 1864, Albert Luc de Luynes visited the region without leaving any significant records for further study (de Luynes 1871-76). In 1863-64 and in 1872 the area was examined by H. B. Tristram, who provided information concerning its geology and natural history (Tristram 1866; 1873). Later, C. Mauss and H. Sauvaire approached the region in 1866 with the same importance as Luynes above (Mauss and Sauvaire 1867).

Interest in Transjordan was significantly increased when F. A. Klein discovered the famous Mesha Stele in August 1868. Since he was a missionary to the Bedouin tribes, he revisited the region in 1872 and 1880 (Klein 1869; 1880). Because of the discovery of the Mesha Stele, the Palestine Exploration Fund sponsored two expeditions to Transjordan in 1870, led by E. H. Palmer and C. F. T. Drake (Palmer 1871a; 1871b).

The first attempt to map Palestine was undertaken by the American Palestine Exploration Society in 1872. Two expeditions were launched, the first led by John A. Paine and Edgar Z. Steever, the second conducted by Selah Merrill in 1875-77. However, neither provided satisfactory results (Merrill 1881; Moulton 1928: 55-69). The third attempt to map the region was conducted by C. R. Conder, who tried to continue the work of his predecessors. Due to the limitation of his permit, he was able to map only about 500 square miles, the area from Wadi Zarqa Ma'in to Wadi Nimrim Shu'eib (Conder 1882b: 7-15, 69-112; 1882a; 1889).

More than a decade later, in 1895, Charles Doughty and Grey Hill would revisit the region. Their reports, however, added nothing significant to what was already known (Hill 1896). Some clarification concerning the position of Wadi el-Mujib's branches was suggested by F. J. Bliss who visited the region in 1895 (Bliss 1895: 203-234). Three excursions (1895, 1897, 1898) were made by Rudolf Brünnow

and Alfred von Domaszewski, who studied the Roman road and fortification systems in the region (Brünnow and Domaszewski 1904-1909). Between 1896 and 1902, Alois Musil conducted several more journeys and provided a 1:300,000 scale map, which still contained some distortions (Musil 1907-8).

The last three travelers who visited the region in the 19th century were H. Vincent (1898), C. W. Wilson (1899), and A. Hornstein (1898). During the first five years of the 20th century four explorers paid visits to Transjordan: L. Gautier (1901), W. Libby and F. E. Hoskins (1905), and George Adam Smith (1904-5).

Apart from a brief expedition in 1924, conducted by W. F. Albright, interest in the region seemed to decrease from 1905 to 1930 (Albright 1924: 1-12). In addition, there were few excavations on a small scale conducted by Albright (1926: 13-74). By then most of the confusion on the topography of the region had been cleared up. Some of the major ruins had been photographed and mapped for future travelers; these photos and maps provided important information for future research.

The importance of the discoveries of the Mesha Stele (1868) and the Balu'ah Stele (1930) triggered a new expedition under the auspices of the American Schools of Oriental Research, together with the Transjordan Department of Antiquities. This was launched in late 1932 and led by Nelson Glueck, who concluded the first expedition in 1933.

In addition, two more expeditions were followed in 1934 and 1937 (Glueck 1934a; 1934b; 1935; 1939). During the first two expeditions, Glueck explored Edomite and Moabite territories, recording about 300 sites. The third expedition covered mostly the territory of ancient Ammon, but Glueck also returned to the regions he had covered during the first two expeditions. In his final reports he published each expedition separately, providing numbers for each site. Since the Edomite and Moabite regions were visited twice, he did not synchronize their site numbers. In this way some sites appear under two different numbers, thus misleading the reader and creating some confusion. Nevertheless, Glueck's three expeditions recorded about 500 sites.

During previous expeditions, explorers had been concerned about mapping, photographing, and recording only those ruins visible on the surface. Glueck, however, pioneered a new survey approach. Specifically, the examination of pottery sherds collected from the surface brought a new aspect to the survey as a whole. This approach required a more systematic exploration of a region. It enabled the surveyors to suggest, with more accuracy the time when the site was occupied, and thus to establish the settlement pattern of the whole region. Thus, Glueck's work became well-known, not so much because of his systematic recording of the sites, but rather because of the

introduction of this method, through which he was able to suggest occupational periods for all of Transjordan.

After Glueck, surveying as a discipline advanced tremendously. Full-scale surveys during the second half of the 20th century were supported by the most sophisticated equipment (i.e., lasers, advanced computer-imaging systems, and ground-penetrating radar) (Levy 1995: 44-51). All these innovations are now being used so that a better and more accurate understanding of the settlement patterns may be achieved.

Because of this more systematic approach and the complexity of the work, surveyors are now concentrating mostly on smaller areas, rather than exploring wide regions wherein many of the important sites that might play a decisive role in establishing the sociocultural and political conditions of that region might be missed. Inasmuch as archaeological activities increased during the second part of this century, the sub-regions of Transjordan are hereafter be dealt with separately.

Ammonite Territory

In addition to Glueck's survey, which marked a new era in systematic site examination, there are several major projects (Baq'ah Valley Survey, Hesban Survey, MPP Survey) that have been conducted in the Ammonite region.

Obviously, many more surveys have been conducted in the Ammonite region during the past several decades, but

many of them did not reveal any material culture related to the Late Bronze and Iron I Ages, and as such they are not considered in this study.

Recent Surveys in the Region

There has been an extraordinary effort among archaeologists to clarify the occupational activities of the ancient people in the Ammonite region. Consequently, it is now possible to compare density, types, and size of the settlements within the region. The data allow us to compare the regions among themselves to understand the distribution of the sites, intensity of the occupation, and relationship among the regions, as well as to generate ideas about the probable social structures of the population settled within the territory of Ammon during the Late Bronze period.

Baq'ah Valley Survey

During the winter of 1975-76 several pieces of Late Bronze pottery appeared on the black market in Amman. When the authorities traced the pottery to the Baq'ah Valley, a team was formed to examine the region and to conduct the survey in the area. (See fig. 1.)

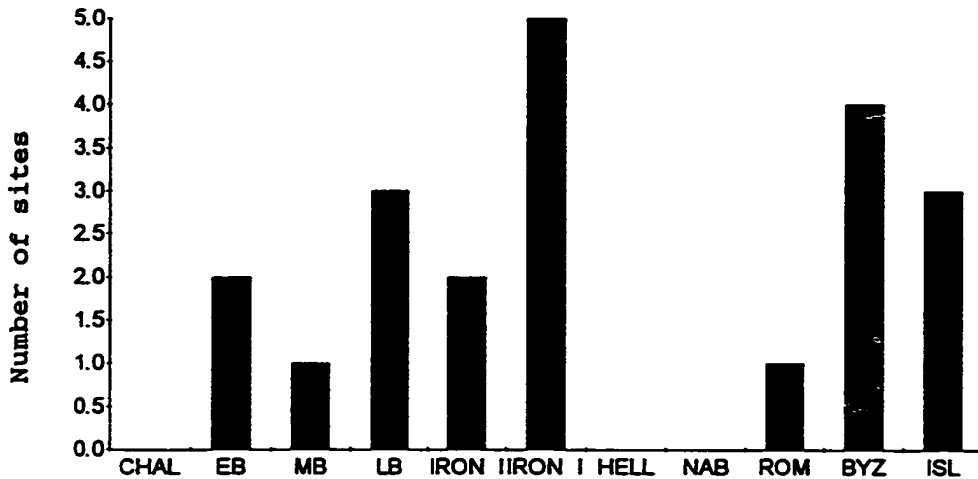


Figure 1. Baq'ah Valley survey: Sites.

During the summer of 1977, an expedition was launched to investigate the Baq'ah Valley, just north of Amman, under the auspices of the University Museum, University of Pennsylvania; American Center of Oriental Research (ACOR); and the Jordanian Department of Antiquities. Appointed director of this expedition was Patrick E. McGovern (1980: 55-67; 1981b: 356-357; 1983: 105-141; 1989a: 123-136).

This team has located and mapped seven sites and collected more than 500 sherds. According to the surveyors, three sites revealed the presence of Late Bronze material, which is about 43 percent of all the sites surveyed in the region.

Looking at the statistics of the surveyed material, the following periods and percentages are suggested: Early Bronze Age two sites (28%); Middle Bronze II one site (14%); Late Bronze three sites (43%); Iron I two sites (28%); Iron II two sites (28%); Iron II/Persian five sites (71%); Roman period one site (14%); Byzantine period four sites (57%); and Islamic periods three sites (43%). It is evident that only two periods are better represented than the Late Bronze period (Iron II and Byzantine), while the Islamic periods are in the same category as the Late Bronze period.

In addition to the sites, the surveyors examined 33 caves situated in the region. Apparently, ten caves did not produce any material that would determine the time of their use. Whether they had been robbed and cleared out, or had never been used for human necessities, is difficult to determine. From the collected material, the Middle Bronze Age was represented by 2 caves (9%); Late Bronze Age by 19 (83%); Roman period by 4 (17%); Byzantine period also by 4 (17%); and Islamic period by 2 (9%) (McGovern 1989b: 25-44). Evidently, most of the caves yielded material from the Late Bronze Age, a fact suggesting that the region went through a major occupational phase during that period. (See fig. 2.)

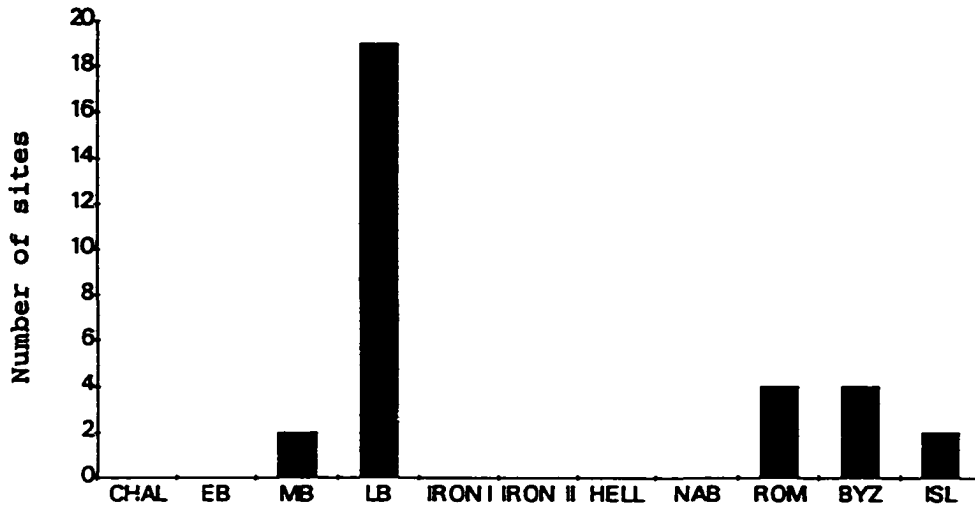


Figure 2. Baq'ah Valley survey: Caves.

Hesban Survey (HS)

After two seasons of excavation at Tell Hesban, a team of surveyors led by S. Horn and sponsored by Andrews University was formed in order to establish the settlement pattern of a ten km radius around the tell. The first season of surveying was conducted in the summer of 1973; the others during 1974 and 1976 (Ibach 1976; 1978a; 1978b; 1987). (See fig. 3.) During these three seasons, 148 sites

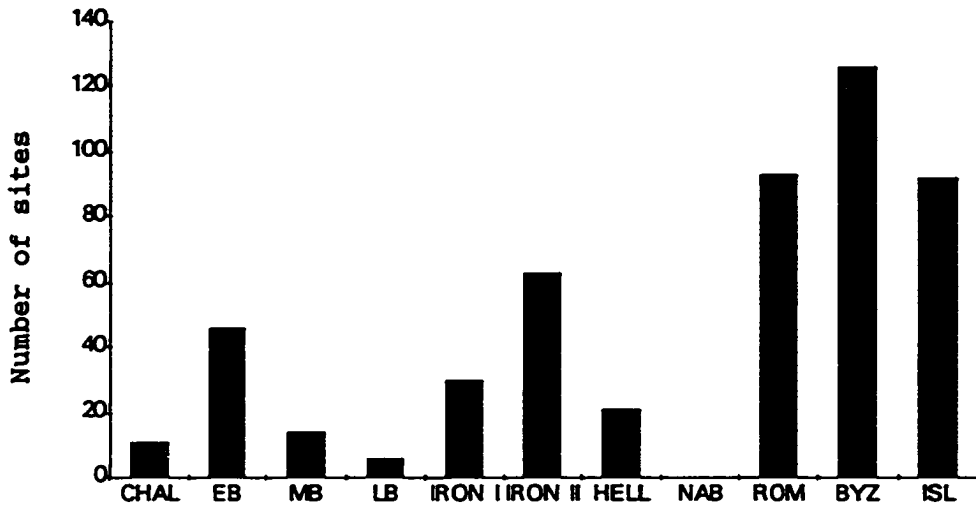


Figure 3. Hesban survey.

were recorded and described (Ibach 1987). From the collected material, the surveyors suggested that the Chalcolithic period is represented by 11 sites (7%); Early Bronze Age by 46 sites (31%); Middle Bronze Age by 14 sites (9%); Late Bronze Age by 6 sites (4%); Iron I Age by 30 sites (20%); Iron II Age by 63 sites (43%); Hellenistic period by 21 sites (14%); Roman period by 93 sites (63%); Byzantine period by 126 sites (85%); and Islamic periods by 92 sites (62%).

Obviously, the Hesban region was flourishing during the Byzantine period, with 85 percent of the sites, while the region was almost totally unsettled during the Late

Bronze Age, with only 4 percent of the sites. Nonetheless, this does not exclude the possibility that the region was settled by nomads with seasonal settlements who, after departing, left very little evidence (if any) of their habitation.

Madaba Plains Project (MPP) Survey

When the excavation of Tell Hesban had been completed, Andrews University sponsored a new project, known as the Madaba Plains Project, in 1984. The main objective was to excavate Tell el-Umeiri, a major site, with several smaller projects added in the course of time (i.e., excavation of Dreijat, Tell Jawa, and Khirbet el Hajjar). Simultaneously, a team was organized to conduct a regional survey within a radius of 5 km around Tell el-Umeiri.

After four seasons the survey was completed, and the work of the first two had been published (Boling 1989: 98-188; Younker 1991: 269-334). During the first three seasons, the surveyors recorded 126 sites located within the survey region.

According to the published reports, the team discovered 15 sites from the Early Bronze Age (12%); only 2 sites from the Middle Bronze Age (2%); 3 sites from the Late Bronze Age (2.5%); 13 sites from the Iron I Age (10%); 47 sites from the Iron II Age (37%); 4 sites from the Hellenistic period (3.5%); 47 sites from the Roman period

(37%); 72 sites from the Byzantine period (57%); and 34 sites from the Islamic periods (30%). (See fig. 4.)

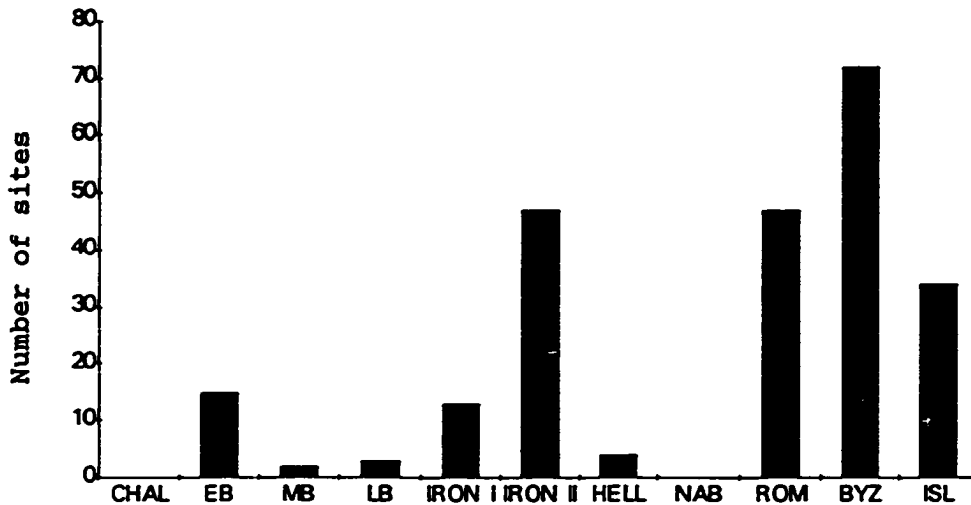


Figure 4. Madaba Plains Project survey.

While the Iron I Age is fairly well represented, permanent settlements during the Late Bronze Age seem to be in decline.

'Ain Ghazal Survey

When a Neolithic site was discovered at 'Ain Ghazal in the early 80s, four seasons of excavations were organized (Simmons and Kafafi 1988: 27). After these excavations had been completed, the excavators decided to explore the area adjacent to the site. Thus in 1987, a team was formed under the sponsorship of the Institute of Archaeology and

Anthropology, Yarmouk University, to meet this objective. The survey was conducted under the leadership of Alan H. Simmons and Zeidan Kafafi (1988: 27-39; Kafafi and Simmons 1989: 13-16).

The surveyors recorded 108 sites located in the vicinity of the 'Ain Ghazal settlement. Apart from lithic sites, they recorded 4 sites containing Chalcolithic material (4%) (see fig. 5); 4 Early Bronze Age sites (4%);

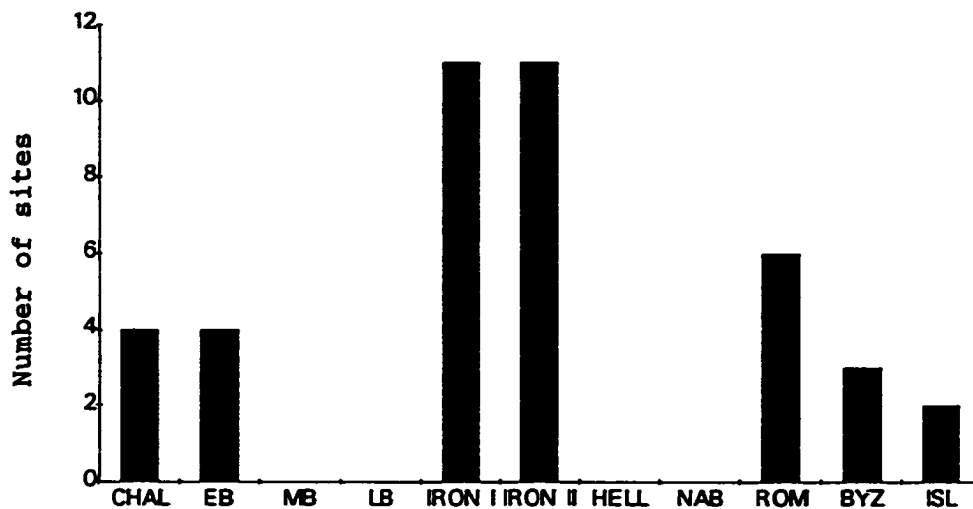


Figure 5. 'Ain Ghazal survey.

11 Iron I and II sites (10%); 6 Roman sites (6%); 3 Byzantine period sites (3%); and 2 Islamic period sites (2%) (Simmons and Kafafi 1988: 27-39; Kafafi and Simmons 1989: 13-16). Apart from this information, location and names of the sites were never indicated in the reports.

Archaeological Survey of Greater Amman (ASGA)

The Archaeological Survey of Greater Amman was conducted by Abdul Sami' Abu Dayyah, Joseph A. Greene, Ibrahim Haj Hassan, and Emsaytif Suleiman during the summer of 1988. The project was sponsored by the Department of Antiquities of Jordan and by ACOR (Sami *et al.* 1991: 361-395). After the task was completed, the surveyors reported 222 sites located around the ancient Ammonite capital (Sami *et al.* 1991: 361-395).

According to the reports, the following data have been established (see fig. 6). While the Chalcolithic period was represented by only 1 site (0.5%), evidence of settlement during the Early Bronze Age was established on 6

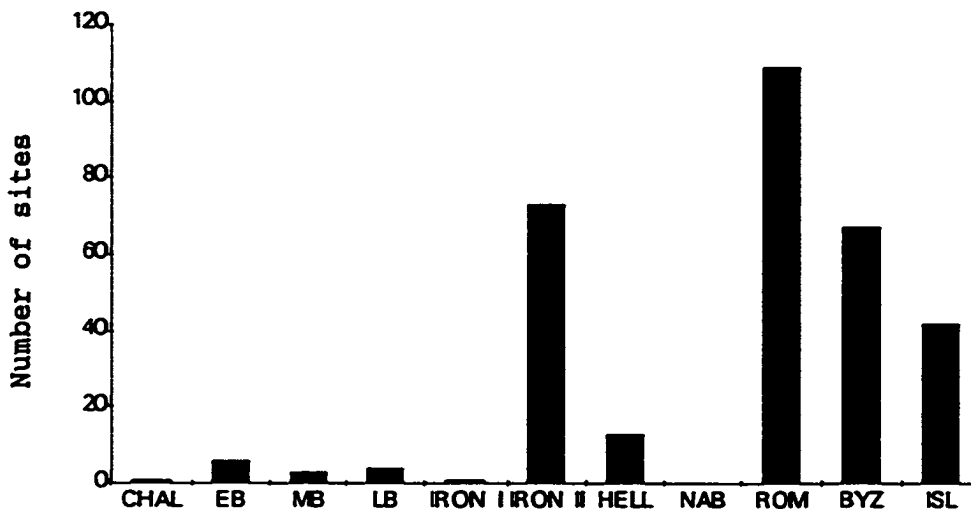


Figure 6. Archaeological survey of Greater Amman.

sites (3%). Middle Bronze Age pottery sherds were found on 3 sites (1.5%); Late Bronze Age on 4 sites (2%); Iron I Age only on 1 site (0.5%); Iron II Age on 73 sites (33%); Hellenistic period on 13 sites (6%); Roman period on 109 sites (49%); Byzantine period on 67 sites (30%); and Islamic period on 42 sites (19%).

Wadi Shu'eib Survey

During the same year (1988) another survey was being conducted at Wadi Shu'eib, under the auspices of the Department of Antiquities and directed by Katherine Wright, Robert Schick, and Robin Brown (1989: 345-350). Three goals were set: to establish the settlement history of the Wadi; to evaluate the Wadi as a possible trade route between Jordan Valley and the Transjordanian Plateau; and to explore the foundations of settlements during the Neolithic and Chalcolithic periods (Wright et al. 1989: 345-350). After the work was completed, the survey reported 21 sites. In addition to the lithic periods, the surveyors found 1 site with Early Bronze Age material (5%); 3 Late Bronze Age sites (14%); 5 Roman sites (24%); 3 Byzantine sites (14%); and 2 Islamic period sites (9.5%). (See fig. 7.)



Figure 7. Wadi Shu'eib survey.

Telul Edh Dhahab Survey

Under the auspices of the Center for Jordanian Studies at Yarmouk University, two seasons of survey in the vicinity of Telul Edh Dhahab (Gordon and Villiers 1983: 275-289) were conducted by Robert L. Gordon and Linda E. Villiers during the summer of 1982. The surveyors discovered 32 sites that were occupied from the lithic periods to the present. Based on the ceramic finds they assigned 15 sites to the Chalcolithic period (47%); Early Bronze Age by 15 sites (47%); Iron I Age by 11 sites (34%); Iron II Age by 1 site (3%); Hellenistic period by 13 sites (41%); Roman period by 16 sites (50%); Byzantine period by

15 sites (47%); and Islamic periods by 8 sites (25%). (See fig. 8.)

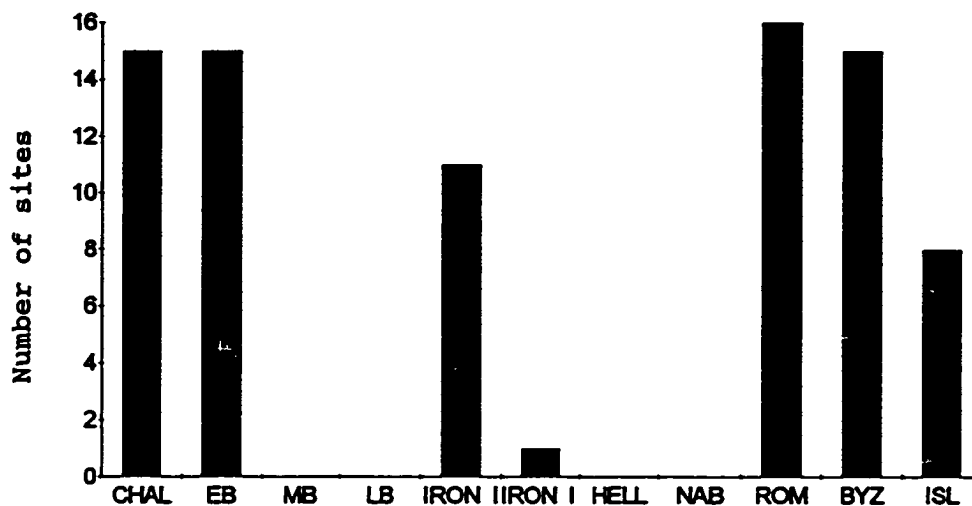


Figure 8. Telul Edh Dhahab survey.

Er-Rumman Survey

After two seasons of excavations at Abu Thawwab, a team of surveyors, sponsored by the Department of Antiquities and Yarmouk University, was organized to examine the area in the vicinity of the site in order to collect new data for a better understanding of the density of neolithic settlements. Therefore, in the early summer of 1985, Gordon and Knauf conducted the Er-Rumman Survey which is named after a site just 1 km west of Abu Thawwab. During the

several weeks of surveying, they recorded 59 sites. (See fig. 9.) According to the surveyors' report, evidence for

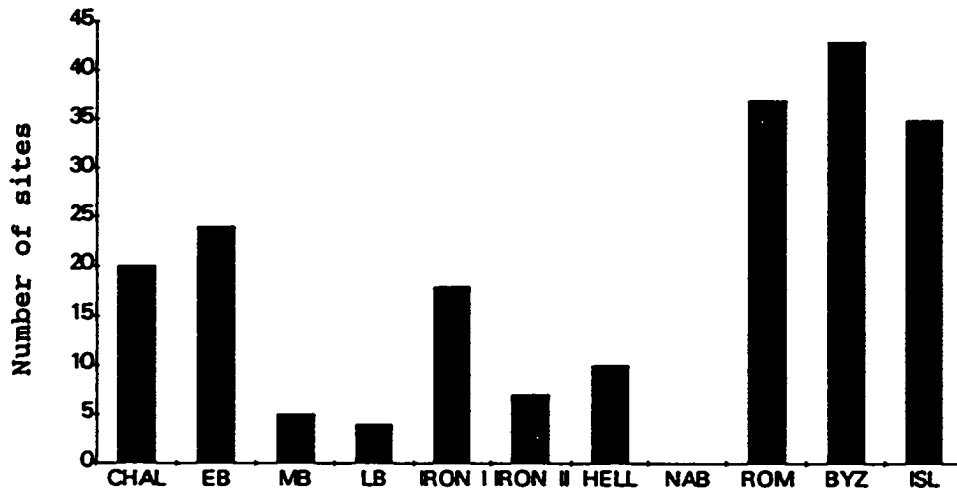


Figure 9. Er-Rumman survey.

the Chalcolithic period was found at 20 sites (34%); the Early Bronze Age at 24 sites (41%); the Middle Bronze Age at 5 sites (8.5%); the Late Bronze Age at 4 sites (7%); the Iron I Age at 18 sites (31%); the Iron II Age at 7 sites (12%); the Hellenistic period at 10 sites (17%); the Roman period at 37 sites (63%); the Byzantine period at 43 sites (73%); and the Islamic periods at 35 sites (59%).

Data Analysis

Due to the diversity of topography, the various surveys encountered and recorded different numbers of

settlements. Some periods, therefore, have a higher percentage rate in certain regions than in others (as seen above). These percentages might falsely suggest that the Late Bronze and Iron I Ages have a higher number of sites in some regions than they really have. In spite of the fact that the percentage rate in the Baq'ah Valley survey for the Late Bronze Age is high (43%), in reality there are only three sites that witnessed occupation during that period. The situation is similar for the Iron I Age, which is represented by 28 percent in the same region, and consists only of two sites. Nevertheless, observation of the data collected from all the surveys should establish the real density of the settlements in the surveyed regions. This will provide a correct ratio among the archaeological periods and bring harmony between the number of the sites and the percentage rates.

There are 756 sites in Ammon discovered by eight surveys. According to the statistics provided by the surveyors, there are 51 sites that revealed presence of occupation during the Chalcolithic period (7%). There is an increase in the settlements during the Early Bronze Age. The surveyors discovered occupational evidence for this period at 113 sites, which is 15 percent. After Early Bronze period there is a decrease in settlements during the Middle Bronze Age, and only 27 sites (4%) were discovered. The situation is a little better during the Late Bronze Age,

for which 42 sites were discovered, representing 6 percent. The sites rapidly increase in number during Iron I Age, which is represented by 86 sites (11%); and Iron II Age, by 207 sites (27%). There is a decline in sites during the Hellenistic period, which is represented by only 48 sites (6%). The settlements seem to increase in number again during the rest of the periods, in which the Roman period is represented by 318 sites (42%); the Byzantine period by 337 sites (45%); and the Islamic periods by 220 sites, which is about 29 percent of all the sites discovered. (See fig. 10.)

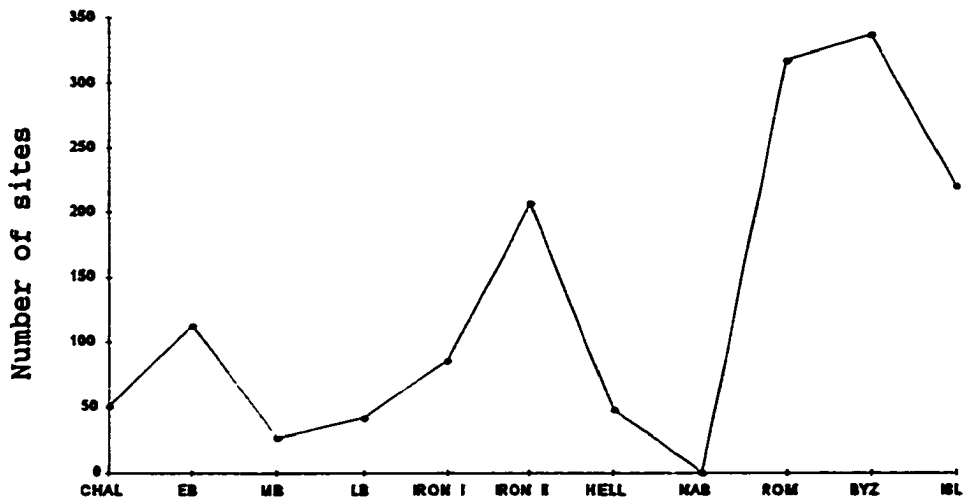


Figure 10. Density of all the sites in Ammon.

Since the calculation of the percentages includes only surveys that reveal the presence of Late Bronze and

Iron I material, the ratio might have been slightly different if all the surveys had been included. In addition to surveys that encountered the same sites (MPP and HS surveys), some incorporate sites outside the realm of Ammonite territory. Regardless of these discrepancies, the interest of this study is the density and dispersion of Late Bronze and Iron I settlements in the Ammonite territory, where the most accurate ratio is given in accordance with reports published prior to 1994.

Examination of the sites that expose the presence of Late Bronze and Iron I occupational activities reveals data that show the percentage and density of the sites in various regions. Accordingly, there are 42 sites recorded that uncover the evidence for Late Bronze, and 86 that reveal presence of Iron I material. The ratio for Late Bronze sites would manifest that the Baq'ah Valley region contains 22 sites (about 52%), while MPP, and Wadi Shu'eib regions produced evidence for only 3 sites each (7%). Considering the Iron I period, it is evident that the HS survey discovered the majority of the sites (30), which is 35%, and the ASGA survey only 1 (1%). (See table 1.)

Wadi er-Rumman registered 4 Late Bronze sites in the region (10%), while the settlements seem to increase in number during the Iron I period, when 18 sites were occupied (21%). As distinguished from Wadi er-Rumman, the ASGA region recorded 4 sites in the Late Bronze period (10%),

TABLE 1

DENSITY OF SITES BY DIFFERENT SURVEYS

SITES	LATE BRONZE AGE		IRON I AGE	
	#	%	#	%
Er-Rumman Survey	4	10	18	21
Archaeological Surv. of greater Amman	4	10	1	1
Madaba Plains Project Survey	3	7	13	15
Hesban Survey	6	14	30	35
Baq'ah Valley Survey	22	52	2	2
Wadi Shu'eib Survey	3	7	0	0
Telul edh Dhahab Survey	0	0	11	13
'Ain Ghazal Survey	0	0	11	13
Total	42	100	86	100

while during Iron I, there is a decrease in settlements, only 1 site revealing the presence of Iron I material culture (1%). A similar situation happened in the Baq'ah Valley and Wadi Shu'eib, where settlements decreased in number from the Late Bronze to Iron I periods. In all the other surveys the situation is reversed, when settlements increased rather than decreased during the Iron I period. In addition, the edh Dhahab and the 'Ain Ghazal region did not record any presence of Late Bronze occupational

activities, while Iron I was represented by 11, about 13% of all the sites. Otherwise, the Wadi Shu'eib region witnessed some presence of Late Bronze sites, but had no evidence for any Iron I activity in the same area. (See fig. 11.)

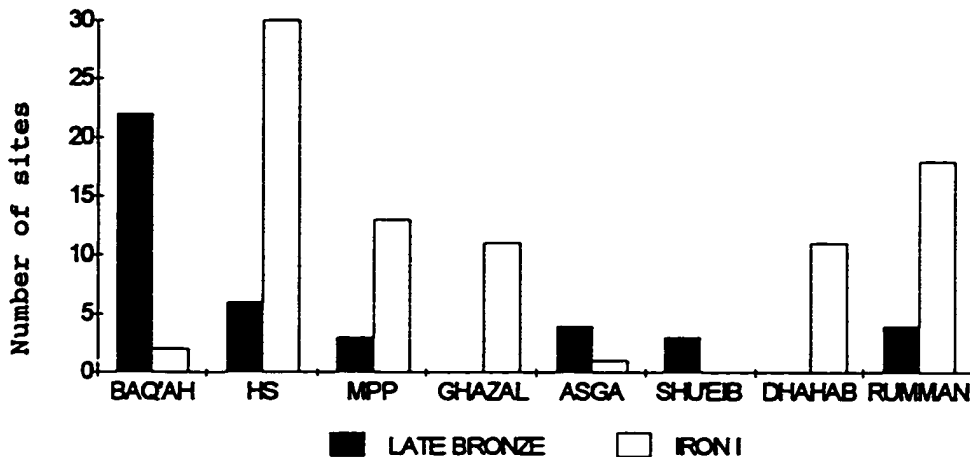


Figure 11. Density of Late Bronze and Iron I sites by the regions.

Evidently, sites discovered and described by Glueck were not included in the calculations above. In addition, some site might have been visited and described by more than one team of surveyors and counted twice, as already mentioned above. (The complete list of surveyed sites on Ammonite territory producing Late Bronze and Iron I material is provided in Appendix 1.) Accordingly, there are 16 sites in the territory of Ammon representing the Late Bronze, and

112 representing the Iron I periods. Following the data provided by the surveyors, the sites that are designated as "ruins" are the most numerous (45), which is about 37 percent of all the sites (see table 2).

TABLE 2
DISTRIBUTION OF SITES ACCORDING TO THE TYPES AND PERIODS

Type	#	%	Late Bronze	%	Iron I	%
Tell	21	17	8	6.5	16	13
Ruins	45	37	2	1.5	43	35
Fortress	3	2	0	0.0	3	2
Tower	6	5	1	1.0	5	4
Building	21	17	2	1.5	19	15
Scatter	25	20	3	2.5	22	18
Cave	3	2	0	0.0	3	2
Total	124	100	16	13.0	111	89

("Ruins" are those that would have more than one building discernable from the surface. Sites designated as "fortress" would belong to the same category. These are usually small in size, and multilayer settlements are absent.) Some of the sites are designated as "scatter" (25, or 20%), some as "building" (21, or 17%), and some as "tell" (21, or 17%). (Scatter is a wide, or small area that

contains only pottery sherds, with no evidence of an ancient tell or ruins; sites designated as "building" are ruins with only one building discernable on the surface. Tower would belong to the same category. These sites are very small in size. "Tells" are mounds that represent multilayer occupational settlements, and usually are quite sizeable.)

Since there are only 16 sites (13%) representing Late Bronze and 112 (89%) representing Iron I period, the ratio among the types of the sites is to be expected to appear in a similar manner. In spite of the fact that all types are of importance, their significance may not be equally prominent. Therefore, the sites designated as "tells" are the most vital for this study, since they contain the evidence of probable permanent settlements. Table 3 demonstrates the ratio among the periods according to the types. It is evident that the number of sites designated as a tell are only 16, while during the Late Bronze period there were 8 tell sites. Therefore, the increase in tells during the Iron I is not as radical as was to be expected.

Archaeological Excavations in the Region

In recent years the region has undergone several archaeological excavations. In addition to the major sites, such as Tell Hesban, Tell el-Umeiri, Amman Citadel, Umm ad-Dananir, Tell Safut, and Sahab, many other minor sites are to be considered (such as Rujm el-Henu, Rujm al-Malfuf,

Jebel al-Hawayah). Further, modern building activities have revealed ancient remains at some sites, and as a result,

TABLE 3
DISTRIBUTION OF LATE BRONZE AND IRON I SITES

Type	Late Bronze Sites		Iron I Sites		Total	
	#	%	#	%	#	%
Tell	8	38	16	76	21	100
Ruins	2	4	43	96	45	100
Fortress	0	0	3	100	3	100
Tower	1	17	5	83	6	100
Building	2	10	19	90	21	100
Scatter	3	12	22	88	25	100
Cave	0	0	3	100	3	100

emergency salvage excavations were conducted that revealed the presence of Late Bronze and Iron I Age material (such as Tell Jawa).

Late Bronze Age in the Ammonite Region

Due to the limited techniques and knowledge concerning pottery typology, Glueck concluded that there were no Late Bronze settlements in the region. Nevertheless, most (if not all) of the archaeologists have abandoned the idea of an occupational gap in Transjordan

during the second millennium B.C. Numerous surveys, in addition to recent excavations, have brought more light to understanding the settlement patterns during the periods in question. It is now evident that the Ammonite region was, indeed, populated and that there was no gap in occupation during the second millennium B.C. (for the list of the sites, see Appendix 1).

So far the archaeological excavations have revealed Late Bronze Age material at 12 sites, from which one is temple (?), three are caves (tombs), and eight are tells. Although the material found in caves is meaningful, the material excavated from tells is most important for establishing the history of occupations.

In observing the excavated material from these eight tells it is evident that three of them revealed only scattered, unstratified pottery sherds dated to the Late Bronze Age. One of the remaining five (Tell Safut) revealed a stratified layer that was dated to the same period, while four (Umm ad-Dananir, Rujm el-Henu, Tell el-`Umeiri, and Sahab) revealed architectural remains. Their number is again reduced to three since the architecture from Tell el-`Umeiri is related only to a revetment or terrace wall on the northern slopes of the tell. Therefore, the sociopolitical structure of the society in Ammon is primarily based on the archaeological surveys and excavated

material, mainly from Umm ad-Dananir, Sahab, and Rujm el-Henu.

**Sociopolitical Structure of
Ammonite Society in Late
Bronze Age**

In the last few decades, the region witnessed many archaeological activities, and some are still in process (such as the excavations at Tell el-Umeiri and Tell Jawa). However, apart from scattered preliminary reports, there is very little of published material available for studying. The only exceptions to this are the fully published excavation from Umm ad-Dananir, and excavations from Tell Hesban and Tell el-Umeiri, published only to some extent.

The only attempt made to establish a sociopolitical pattern of society in Ammonite territory was that of McGovern (1986: 335-344), based on the discoveries produced by his excavation of Khirbet Umm ad-Dananir. In addition, he discovered numerous burial caves in the vicinity, containing as many as hundreds of skeletons. A rich pottery assemblage, combined with the size of the caves, influenced McGovern to compare similar discoveries in Cisjordan, and to conclude that the site represents a city-state society (1986: 336).

Furthermore, he sees the sedentarization of the region in the fact that he discovered significant remains of "bread and emmer wheat" (McGovern 1986: 336). Agricultural activities of such proportion, combined with the presence of large mammal bones (mostly cattle), is a determinative

factor that favors urbanized society rather than nomadic or semi-nomadic society. In addition to the production of wheat, the cultivation of fruit trees is evidenced by the discovery of a wooden beam made from an olive tree.

The strategic location of the site was carefully chosen so that inhabitants could have easy access to a perennial spring and yet easily defend themselves. Furthermore, the city was encompassed by a thick city wall built of sizeable boulders. It had a commanding view over the valley, controlling the access through the southern branch of Wadi Umm ad-Dananir. It encircled the area of 2.5 hectares, thus providing a habitat for about 1,000 people.

The excavators discovered a certain amount of imported pottery (mostly Mycenaean and Cypriot) and other objects (mostly Egyptian scarabs and cylinder seals). Therefore, it was suggested that Umm ad-Dananir served as an important center, being used by traders to supply the Ammonite mainland with imported products (McGovern 1986: 200, 201, 337).

Furthermore, a square structure ("Quadratbau") was discovered outside the city premises, similar to the Amman Airport Structure; it was interpreted as a cultic center. Due to the location, the structure is associated with the Fosse Temple at Lachish. A dedicatory pit, filled with offertory objects and bones, seems to suggest that the purpose for this building was of strictly cultic character.

Using the evidence produced by the excavation of the site and burial caves in its vicinity, McGovern proposed that it was a highly urbanized city-state "dependent to some extent on a larger city-state," thinking of Amman itself. It was an urban center, carefully located to control imported goods through the Baq'ah Valley into the Ammonite heartland. Administration of the city was heavily supported by the cultivation of the fields in its vicinity. Due to the presence of a perennial spring, the city was not only supplied by fresh water the year around but was able to support large mammals (cattle). In return, the cattle were used for meat and milk production, as well as for tilling the soil and cultivating the crops. Consequently, he concludes that the Ammonite society was far from nomadic or semi-nomadic, but rather a highly centralized urban center or city-state (McGovern 1986: 335-339).

Thus McGovern attempts to interpret the society of Transjordan (or at least Ammonite territory) and Cisjordan by bringing them into a harmony, suggesting that there is enough evidence provided by his excavation for such a model. However, to what extent did the city-state network expand to Transjordan? Is Umm ad-Dananir a reflection of the same system? To answer these questions it would be necessary to re-examine the data presented by McGovern.

According to the report, it is evident that the cattle bones are represented only by less than 1 percent of

all those discovered. Obviously, the presence of cattle bones is an important component representing urbanized society, but the percentage should demand a considerably higher rate. In addition, the mere presence of cattle bones on a single site does not prove that the region was sedentarized (unfortunately, lack of published material cripples the final ratio on bones percentage for Late Bronze period). Furthermore, the fact that nomads and semi-nomads usually tend some cattle should not be ignored (LaBianca 1990).

Considering botanical data, the excavators failed to confirm that any grape or fruit tree production was present around the site, which is a major component in an urbanized system of life. The only exception to this is a carbonated olive beam to indicate the presence of olive trees. First, the mere presence of a beam does not support the idea that the olive tree was cultivated for crop harvesting. In this respect, the excavator failed to produce any evidence, such as olive presses, for oil production, and its export during the time of occupation in question. Second, the cultivation of olive trees was present throughout the history of Transjordan and as such should not be considered as a hallmark of urbanized society. In addition, production of wheat and emmer among the nomadic or semi-nomadic societies is fairly well documented (Hole 1978: 158; Prag 1985: 83).

McGovern has estimated the population of Umm ad-Dananir to ca. 1,000 people, giving a density of about 400 per hectare. His estimate is based on the study of Yigal Shiloh (1980: 25-35), which is considered to be too high. Amnon Ben-Tor suggested that the maximum population per dunam (1/10 of a hectare) should not exceed 30 (1992: 85). This estimate would suggest that the population of Umm ad-Dananir was about 750, at the most. According to recent ethnographic and anthropological data provided by Steve Falconer and L. E. Stager (Falconer 1987: 58-70; Stager 1985: 1-35), a more accurate range for the size of population would be between 100 and 250 per hectare, which is more or less in accord with Ben-Tor's estimate.

Development of trade was seen as a major component for a highly urbanized society, and has been recognized in the presence of imported goods (i.e., pottery). In several caves and among the debris of the Late Bronze period, McGovern reported the presence of Mycenaean and Cypriot ware (1986: 337). In addition, there were several Egyptian scarabs and cylinder seals. According to the reports, there were only 13 sherds representing the importing activities found in the caves. Among those, there were 5 Mycenaean, 6 Cypriot ring bases, 1 Cypriot milk bowl, and 1 local imitation (Koehl 1986: 194-201). Obviously, the percentage rate is too small to represent heavy trade activities in the city. Furthermore, McGovern himself admits that "most of

the finds from the burial caves and settlement site were probably manufactured locally" (1986: 336, 337). As far as scarabs and seals are concerned, they, too, are of local imitation, reflecting the influence from Egypt and Syro-Palestine (1986: 337).

Presence of the "Quadratbau" structure in the vicinity of Umm ad-Dananir was emphasized as evidence for an urbanized society of the city-state (McGovern 1987: 132). It was interpreted as a developed cultic center (1986: 336) for the populace living in the city. Further, a comparison was drawn between this and the Amman Airport structure in order to establish a relation between those two, and common use as well (1987: 128-134).

Nevertheless, the scholars today hardly agree on the usage of the Amman Airport structure. Interestingly, one of the suggestions is that the Amman Airport structure was used as a cultic place for a tribal league. Since there are no settlement sites in the vicinity of the building, it was suggested that there were nomadic encampments around it (McGovern 1987: 132). It is evident that both structures have more than one element in common (size, shape, orientation, arrangement of rooms and courtyard, altar [?], etc.). In addition to those two "Quadratbau" structures, there is a third at El-Mabrak, about 4 km southeast from the Amman Airport. This, however, lacks the altar in the

courtyard, and has been suggested as being used strictly for domestic purposes (Yassine 1983a: 493).

While one of the plausible options for the Amman Airport structure was a cultic place, the one at Umm ad-Dananir was more likely used for something else. It might have been designed and built as a cultic center, but hardly ever used for this purpose. In spite of the fact that the building had a free-standing structure, which design might have been an altar, there is no evidence of anything having been burned on it (McGovern 1987: 130). In addition to this, there was a fireplace in the courtyard and a tabun fragment found in the dedicatory pit (McGovern 1986: 63), which might indicate some kind of domestic facility. In all, the function of the Amman Airport structure is far from certain, and the Umm ad-Dananir building certainly belongs to the same category.

Moreover, if Umm ad-Dananir represents a city-state similar to those located in Cisjordan, then it is reasonable that the sociopolitical and economical situations should be of a similar character. The discoveries of the (Tell el-) Amarna letters revealed that city-states in Palestine underwent turbulent changes during the Late Bronze Age (Mazar 1990: 233, 234; Gonen 1992: 212-215). However, Umm ad-Dananir was virtually unmentioned in the letters. The probable cause for this should be seen in the different

sociopolitical and economical structure of society in the whole region in general, and Umm ad-Dananir in particular.

In addition, McGovern's arguments are based only on the material culture excavated at Umm ad-Dananir. Nevertheless, there are 12 excavated sites in the Ammonite region that revealed evidence of human activities and settlements during the Late Bronze Age. Nevertheless, reports indicate that 9 of them are tells (Amman Airport structure and Rujm el-Henu East included), while only 3 are caves or burial sites. While 5 of the tells revealed architectural remains suggesting settlement activities, 3 sites provided only pottery without any sequential layers that would represent the period. Only 1 site produced pottery within a layer of settlement representing the Late Bronze Age. Furthermore, among the 5 sites that reveal any sign of architectural activities are Tell el-Umeiri and Rujm el-Henu East, revealing only a revetment wall and a single building, respectively. Thus, only 3 sites present solid evidence of a walled settlement, suggesting some kind of community being permanently settled.

It has already been noticed that the available evidence produced by excavations is inconclusive. However, according to the excavated material culture, McGovern seems to be wrong on all grounds in suggesting that Umm ad-Dananir is a city-state, and that the Ammonite region, during the Late Bronze Age, was urbanized, similar to that in Cisjordan

during the same period. All the evidence seems to point toward the fact that the Ammonite region had characteristics of a nomadic or semi-nomadic society incorporated with small settlements, rather than being urbanized.

Iron I Age in Ammonite Territory

According to the reports provided by the excavations performed in Ammonite territory, it is evident that the number in the settlements occupied during the Iron I Age did not increase at all. While there are some settlements that ceased to be occupied, there are others that began with occupation in Iron I Age, after having been vacant in previous periods. Nevertheless, most of the "tell" sites seem to continue with the occupation from the Late Bronze Age to Iron I Age. Following the reports, the archaeologists are more and more convinced that there was no destruction and interruption of the settlement between those two periods (McGovern 1986: 338-344; Herr in press). Continuity in culture and the sociopolitical and economical infrastructure seem to be the same.

Sociopolitical Structure of Ammonite Society in Iron I Age

As a result of numerous surveys of the Ammonite territory, it is now evident that there was an increase in settlements during the Iron I period (as seen above in figs. 10 and 11). The percentage is even higher considering the

fact that some of the surveys mentioned above encountered the same sites, and that some went outside the traditional borders of the Ammonite kingdom. Thus, as seen in Appendix 1, there are 126 surveyed and 17 excavated sites in the Ammonite territory. While only 16 (13%) of the surveyed sites produced evidence of some kind of human activities during the Late Bronze Age, there are 112 (89%) sites representing the Iron I period. Analyzing the excavated sites, the ratio seems to be completely different. In addition to 12 (71%) sites revealing evidence from the Late Bronze Age, there are 13 (76%) that contained material culture from the Iron I period. It appears that most of the sites continued to be occupied from the Late Bronze Age to Iron I Age. The material culture seems to be a continuation of local tradition throughout the periods in question (Franken 1969; Franken and Power 1971; McGovern 1986: 338; 1987: 267; Herr in press).

The reasons for such an increase in the settlements are not yet completely clarified. The increase might have been caused by intensive agricultural activities during the Iron I period, caused by more favorable environmental and sociopolitical conditions of the region. This would bring into action a shift from nomadism to sedentarization of the region (LaBianca 1989: 169-178). Therefore the increase of settlements is not caused by the break in the cultures, but

rather by an indigenous growth where an already existing site expanded and numerous new ones appeared.

It was earlier suggested that the heartland of the Ammonite territory was surrounded and guarded by a chain of towers located in strategic places (Landes 1961: 69). This hypothesis would suggest a more or less centralized system of the society in the region. The concept of a centralized state of Ammon during the Iron I period has been thrown into doubt by evidence of recent archaeological discoveries. As Rudolph H. Dornemann emphasized, lack of substantial evidence concerning those structures should bring probability that the major occupational phase occurred in some other later periods, but not during the Iron I Age (1983: 123, 124; Kletter 1991: 39-41). Therefore the region did not experience any centralization at that time and society was far from urbanized.

It appears that there are only a few sites that revealed substantial architectural remains, indicating walled settlements. The most prominent one is Tell el-Umeiri, which was encompassed by a casemate wall. The defense system consists of a glacis supported by a revetment wall. In addition, the whole system is strengthened by a dry moat dug into bedrock. In spite of the fact that the city witnessed an intensified fortification system, there is not sufficient evidence to conclude that this was a typical

representation of a state society (for more on the components of a state society, see below).

Moabite Territory

Despite the fact that Moabite territory is less disputed than Ammonite, it changed through the course of history from occasional invasions of other peoples (Israelites, Amorites). This is mainly true for the northern borders, while the southernmost border, the biblical Brook Zered (Wadi el-Hasa), almost never changed. For this reason, the northernmost border of Moabite territory was Wadi Hesban, and in the time of oppression, the biblical Arnon River (Wadi Mujib) (Mattingly 1994: 318-320; Dearman 1989a: 189-194). For the purpose of this study, however, the most extended territory of Moab is considered, which is the territory immediately east of the Dead Sea. This includes the land between Wadi Hesban (north) and Wadi el-Hasa (south).

Recent Surveys in the Region

The northern territory of Moab (between Wadi Hesban and Wadi Mujib) was visited more frequently than the southern one (between Wadi Mujib and Wadi el-Hasa). In the 19th century, visitors were travelers, explorers, and mostly adventurers (Mattingly 1994: 330-331). The most significant ones were Seetzen (1854-5), Burckhardt (1883), de Saulcy (1853-4), and Tristram (1873). A more systematic survey of

the region was performed by Nelson Glueck (1934a; 1935; 1939).

The first scientific surface survey was not conducted prior to the early 70s. When Tell Hesban was then excavated, a team of surveyors was formed to examine the area of about 10 km in diameter around the tell. The team examined a good portion of the Madaba region, which was in Moabite territory. During the late 70s another team was organized, sponsored by Emory University and directed by J. Maxwell Miller and Jack M. Pinkerton (1991), to examine the central plateau of Moabite territory, around Kerak. In addition to the Hesban survey, the MPP team re-examined the northern region in the mid-80s (1987); it is still under investigation (a survey team examined the territory around Tell Jalul during the 1994 season). In addition to these major surveys, Udo Worschech conducted one in northwest Ard el-Kerak on a smaller scale (1985b; Worschech, Rosenthal, and Zayadine 1986).

The most significant survey for this study was conducted by Miller, in the central plateau, while the region between Wadi Hesban and Wadi el-Mujib has not yet been thoroughly examined. The statistical analysis, therefore, is based mostly on the results produced by Miller and his team.

Kerak Plateau Survey

In order to determine the settlement pattern and density of the sites during various archaeological periods, Emory University, together with ACOR and the Department of Antiquities of Jordan, sponsored a team of surveyors to examine the Kerak plateau. During several years of surveying, they recorded 443 sites. According to the report, Chalcolithic sites are represented by 17 (4%). Following the cultural periods, early cities (EB II-III) appear in the region in the Early Bronze Age I-III and are represented by 64 sites (14%). The settlements seem to decrease during the Early Bronze Age IV, where only 28 (6%) were discovered. The situation seems to be different during the Middle Bronze Age, when settlements increased to 55 (12%). Unlike the situation in Cisjordan, where the Late Bronze Age witnessed decrease in the settlements, here, during the same period numerous new settlements appear. Subsequently the surveyors recorded 109 sites from this period, about 25%. Settlements again decreased during the Iron I period, where only 72 sites (16%) produced evidence of occupational activities. There is a slight increase during the Iron II period, represented by 99 sites (22%). The Hellenistic period witnessed a certain decrease in settlements with 68 sites (15%). The Nabataean presence in the region was evidenced by 291 (66%) sites that revealed some kind of human activities in the region. The Roman

period stabilized with 184 sites (42%), followed by the Byzantine period that stayed almost unchanged, with 163 sites (37%). Finally, the Islamic period underwent slight changes when the settlements decreased to 157 sites (36%) (see fig. 12).

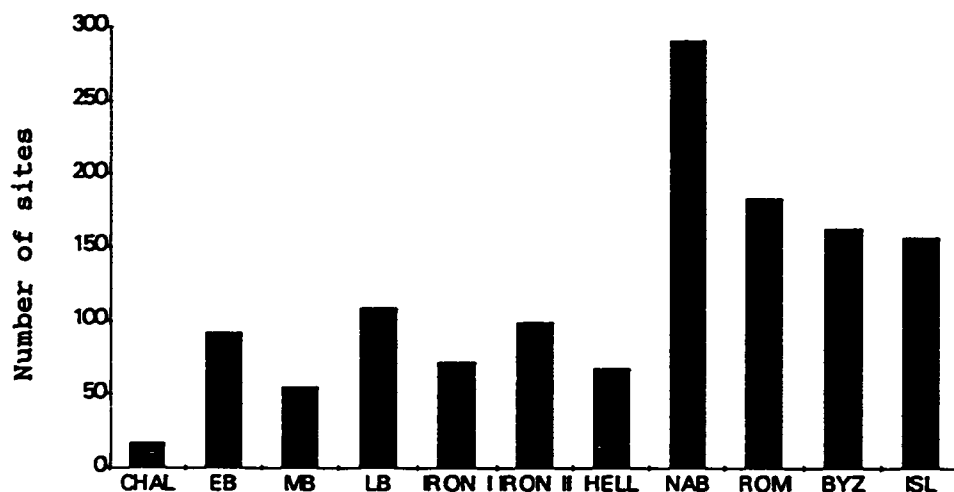


Figure 12. Kerak Plateau survey.

Considering only the sites that yielded more than five pieces of pottery sherds, the ratio is significantly different in all the periods. Consequently the Chalcolithic period is represented by only 1 percent of the sites: Early Bronze Age I-III by 8 percent; Early Bronze Age IV by 4 percent; Middle Bronze Age by 3 percent; Late Bronze Age by

7 percent; Iron I by 6 percent; Iron II by 6 percent; Hellenistic period by 3 percent; Nabataean by 38 percent; Roman period by 12 percent; Byzantine period by 15 percent; and Islamic periods by only 16 percent. Nevertheless, the pattern does not seem to change drastically at any of the sites, as seen in figure 13.

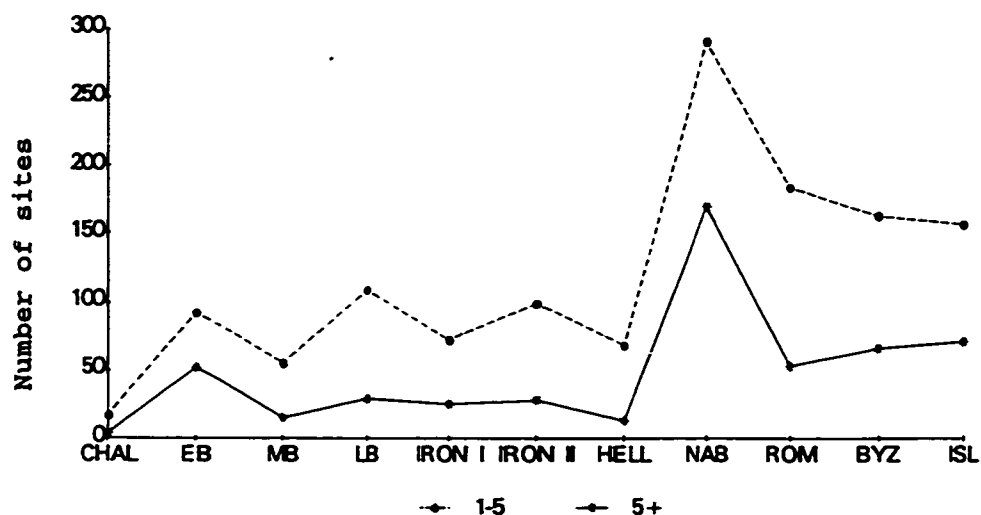


Figure 13. Density of sites in Kerak Plateau.

Data Analysis

Since the interest of this study focuses on the Late Bronze and Iron I Ages, more systematic analysis is done on these periods. When considering the sites examined in the Kerak Plateau, the surveyors designated all the sites by size, nature, and function (Miller 1991: 26).

Accordingly, the sites that revealed presence of Late Bronze and Iron I material were categorized by types. The following statistics emerge. Considering the sites with five or more pottery sherds found thereon, it is obvious that those designated as "tells" are more numerous than the others. The pattern of distribution seems to be similar in both periods, with a slight difference in "tells." In spite of the fact that Late Bronze sites are more numerous than those of Iron I Age, the number designated as "tells" is slightly higher in Iron I than during the Late Bronze Age.

Counting all the surveyed sites in the Moabite territory, the situation might be slightly different. The fact is that some of the surveyors failed to give any information concerning the site they encountered, regarding the number of the pottery sherds, size, or function of the sites. Because of this limited data, this study is not totally complete. Nevertheless, following the available data, there are 112 sites that revealed some kind of human activity during the Late Bronze Age. Only 75 sites yielded some evidence for Iron I Age.

The sites designated as "tells" appear to be represented the best in both periods, followed by those diagnosed as "ruins" (as seen in table 4).

Since the Late Bronze sites are almost twice as numerous, it is to be expected that the ratio would be similar when the sites are categorized by the number of

TABLE 4

DISTRIBUTION OF LATE BRONZE AND IRON SITES IN MOAB BY TYPES

Type	#	%	Late Bronze	%	Iron I	%
Tell	60	42.0	46	32.0	39	27.0
Ruins	45	31.0	35	24.0	22	15.0
Building	19	13.0	14	10.0	9	6.0
St. Heap	8	5.5	7	5.5	2	1.5
Scatter	11	8.0	9	6.0	3	2.5
Spring	1	0.5	1	0.5	0	0.0
Total	144	100.0	112	78.0	75	52.0

sherds in both periods. It appears that the pattern is followed when the first (1-2 sherds), second (3-5 sherds), and third (6-10 sherds) categories are considered. Nevertheless, when the sites revealing 11+ sherds are accounted for, the situation appears totally different, where the Late Bronze period yielded 14 sites and Iron I, 15 sites (as seen in table 5).

As already mentioned above, the sites designated as "tells" are the most numerous. In addition to those categorized by types, the sites should also be categorized by the number of sherds collected. Considering the "tell" sites, the decrease in number is obvious during the Iron I period, when the first (1-2 sherds), second (2-5 sherds),

TABLE 5

RATIO OF LATE BRONZE AND IRON I SITES IN MOAB BY SHERDS

Period	1-2	%	3-5	%	6-10	%	11+	%	Total
Late Bronze	57	51	27	24	14	12	14	12	112
Iron I	34	50	14	21	5	7	15	22	68

and third (6-10 sherds) groups are taken into account. However, this is certainly not true for the category where 11+ sherds were found. Here the sites appear to increase slightly during the Iron I period (as seen in tables 6 and 7).

TABLE 6

RATIO OF LATE BRONZE SITES ACCORDING TO TYPES AND SHERDS

Type	1-2	%	3-5	%	6-10	%	11+	%	Total
Tell	22	48	12	26	3	7	9	20	46
Ruins	16	46	10	29	6	17	3	9	35
Building	7	50	4	29	3	22	0	0	14
St. Heap	4	57	1	14	1	14	1	14	7
Scatter	7	78	0	0	1	11	1	11	9
Total	56	51	27	24	14	13	14	13	111

TABLE 7

RATIO OF IRON I SITES ACCORDING TO TYPES AND SHERDS

Type	1-2	‡	3-5	‡	6-10	‡	11+	‡	Total
Tell	17	47	7	20	2	6	10	28	36
Ruins	8	44	5	28	2	11	3	17	18
Building	6	67	2	22	1	11	0	0	9
St. Heap	2	100	0	0	0	0	0	0	2
Scatter	1	33	0	0	0	0	2	67	3
Total	34	50	14	21	5	7	15	22	68

Archaeological Excavations in the Region

Since the beginning of the second half of this century, there have been several major and numerous minor archaeological excavations conducted in the region.

Late Bronze Age

During recent decades, archaeological activities have increased in the Moabite region. Some of the projects are still in progress (Tell Jalul, Khirbet el-Balu'). Hence, final reports are still not available. There were three excavated sites that revealed occupational presence during the Late Bronze Age in the region. In one of those, the Late Bronze evidence was produced by the pottery excavated from a tomb; and the other two are "tells." One of the "tells" yielded architectural remains (only floor in

Khirbet el-Balu'), while the other presented only pottery material found in unstratified layers (see tables 8 and 9).

TABLE 8
DISTRIBUTION OF LATE BRONZE AND IRON I SITES BY TYPOLOGY

Type	#	%	Late Bronze	#	Iron I	%
Tell	4	67	2	33	4	67
Fortress	1	17	0	0	1	17
Tomb	1	17	1	17	1	17
Total	6	100	3	50	6	100

TABLE 9
DISTRIBUTION OF LATE BRONZE AND IRON I SITES
BY MATERIAL CULTURE

Type	Late Bronze		Iron I	
	#	%	#	%
Architecture	1	17	3	50
Pottery	2	33	2	33
Layer	0	0	1	17
Total	3	50	6	100

Sociopolitical Structure of Moabite Society in Late Bronze Age

Due to the increased archaeological and survey activity in the region, it is now obvious that there was a significant degree of human activity during the Late Bronze Age. However, it should be noted that the intensity of the settlements is not as high as in the Ammonite territory. Rather, the archaeological evidence suggests a certain degree of decrease in density of the settlements as one moves from north to south in Transjordan (Bienkowski 1992a: 8; Knauf 1992: 50).

As for the settlement patterns during the Late Bronze Age, figure 13 (see above) demonstrates an increase in settlements during the period. Therefore the sedentary occupations became more intensified, as documented above and in Appendix 2 (Ibach 1987; Miller 1991; Koucky 1987; Worschech 1984; 1985a; 1985b; 1985c), indicating some kind of shift in sociopolitical structure of the Moabite society.

This led S. Timm to make a tentative suggestion that Moab was a territorial state as early as the Ramesside period (Timm 1989: 8). Since statehood implies a certain degree of urbanization (Fried 1967; Service 1975; Dostal 1985), it is to be expected that archaeology would provide some evidence to accommodate such a suggestion. On the contrary, "the [archaeological] evidence does not suggest a major urban phase, but a region in demographic transition

from a sparsely inhabited, largely pastoral phase to one of increasing sedentary occupation" (Dearman 1992: 69).

Further, most of the population of Late Bronze Moab was not completely sedentarized, but rather lived in scattered villages or smaller settlements (Dearman 1992: 73). This is in harmony with a significant number of Late Bronze sites discovered by various surveys, and very few by archaeological excavations, all of them lacking any fortification during this period.

Thus, the Moabite Plateau witnessed a non-urban society with fairly dispersed settlements, reflecting a semi-sedentarized society practicing mixed sheep/goat pastoralism and cereal agriculture. The lack of large, fortified settlements might indicate that residence mode and subsistence strategy were more oriented toward the pastoral-nomadic rather than an agricultural spectrum.

Iron I Age

Evidence of the material culture related to Iron I period was discovered at six sites in the Moabite territory. Four sites are designated as "tells," while only one as fortress and another as a tomb. From those six sites, three revealed a presence of architecture related to the period, while two yielded only pottery scattered in unstratified layers. One produced a layer related to the period, without any architectural features associated with it (see tables 8 and 9 above).

Sociopolitical Structure of Moabite Society in the Iron I Age

Following his survey, Glueck suggested that the Transjordanian kingdoms "were highly advanced and strongly organized" at the beginning of the 13th century B.C. (1967b: 434). His suggestion was based on the presupposition that the Israelites appeared at that time in Transjordan and were confronted by what appeared to be organized resistance. As evidence for this conclusion he emphasized that "the borders of their kingdom were fortified by strong fortresses" (1967: 434).

To some extent, this model was used by A. Alt, who emphasized the "gap theory" to provide evidence for his theory of the emergence of Transjordanian peoples. Furthermore, he noticed the explosion of Iron I settlements reported by Glueck, and highlighted the process by which the transhumant nomadic ancestors of the Moabites became sedentary. He summarizes his conclusion by stating:

It appears to me that on the basis it became possible to explain historically the more rapid movement of the nomadic tribes that penetrated the Transjordanian cultural area from land acquisition to the founding of new state, encompassing entire territories. (Alt 1940: 215)

He was followed by M. Noth, who raised the possibility that there might have been some sort of Moabite kingdom prior to the establishment of the monarchy. Thus some of the Moabite kings might have been only local rulers over small regions of Moab. Further, he stated that "it is

in any case certain that the Moabites . . . had already developed established forms of government headed by monarchs" (Noth 1951: 471).

Later, Van Zyl basically agreed with Glueck and Alt concerning the beginning of the Moabite kingdom, insisting that "at the end of the 13th century B.C. the Moabite Kingdom had already been established" (Van Zyl 1960: 112). In addition, R. G. Boling suggested that the first territorial state of Moab was established during the 13th century B.C., protected and isolated by two Wadis, Mujib to the north and el-Hasa to the south (1988: 51-52).

Focusing on the territory between Wadi Mujib and Wadi el Hasa, U. Worschech proposed the idea that this part was under centralized authority during the Iron I period. The territory north of Wadi Mujib, according to him, had a very loose and localized political structure, perhaps scattered city-states (1990: 106-108). He strengthened his theory by using Glueck's argument that the territory is encompassed by a chain of fortresses guarding the heartland of centralized Moab (1990: 54-59, 105).

Following the reports provided by Glueck and Miller concerning the sites suggested as fortresses, it is evident that the line of their fortifications may be traced on the surface without any excavations (Miller 1992b: 87). In addition to the fact that Glueck missed quite a few such fortresses, it is difficult to trace the line of the

frontier defense. As seen above, one of the fortresses has been excavated and revealed ample evidence that the structure was in use during the Iron I period. However, both Glueck and Worschech are too optimistic in expecting that all of the designated fortresses would reveal the same evidence. A number of them expose evidence that the sites' major occupational phase was during the Nabataean period (Miller 1991). Moreover, some of these totally exclude any surface pottery from the Iron I period (Khirbet Medinet er-Ras) (Glueck 1939: 86-88). It seems that the suggestion of the existing line of fortresses is preconceived by the notion of an organized and centralized early Moabite monarchy, rather than by archaeological evidence.

Based on archaeological data, it is evident that some kind of sedentarization was intensified during the Iron I period. The presence of numerous Late Bronze sites in the Moabite region might suggest that sedentarization actually was more intensified during the Late Bronze, rather than during the Iron I period (see table in Appendix 2). Nevertheless, most of the pottery types are typical for the Late Bronze II period, suggesting that the first forms of sedentarization appeared during this period (Brown 1991: 193). This widens the possibility that

the occupation, or at least sedentary occupation, of the [Kerak] plateau increased significantly from that of Middle and Late Bronze Ages, for Iron I wares are both numerous and widely distributed across the landscape. (Brown 1991: 197)

With this in mind, it would be appropriate to suggest that the large number of Late Bronze sites might portray "an upswing in the sedentary population of the plateau near the end of the Bronze Age" (Miller 1992b: 80).

As for the organized monarchical system of society, as proposed by some scholars above, Miller is more inclined to accept the "minimalist view" (1992b: 88). That is to say, neither the biblical nor the archaeological data are sufficient to draw any concrete conclusion for a positive identification of a monarchy.

Concerning the available archaeological data, all that can be said is that "along with the noticeable increase in sedentary life during the Iron I, there is also some evidence of organized strategy" (Miller 1992b: 88). He emphasizes this by stating that

there will have been a few modest cities, each with its king who also controlled some of the surrounding countryside. However, tribal elders also will have played a role in the political structure, especially among the villages scattered throughout the land. Also from time to time there will have arisen local chieftains who carved out local kingdoms. (Miller 1992a: 890)

According to the pottery analysis, all the types appear to be of local production. An imported repertoire basically does not exist in the Moabite region. This would suggest that trade was not in the stage that a state-society would require. Furthermore, most of the sites that revealed both Late Bronze and Iron I material strongly suggest that the transition between those two periods went smoothly,

rather than by destruction. All this, in addition to the nature, density, and distribution of the sites, would imply that the region was far from urbanized, with an organized state-society, where sociopolitical centralization of government is required.

Edomite Territory

It is generally agreed that the Edomite territory covers the area between Wadi el-Hasa to the north, Wadi Arabah to the west, and the desert areas to the east and south. In addition to early travelers, the region was visited by Glueck and has been studied by modern surveyors. A better understanding of the settlement patterns was provided by MacDonald, who surveyed the southern Ghor, the northeastern Arabah, and the Wadi el-Hasa regions (1980a; 1980b; 1982a; 1982b; 1982c; 1983; 1984; 1988; 1992b; 1992c). Several more surveys were conducted in Petra, Judayid, and the Aqaba-Ma'an regions (Homés-Fredericq and Hennessy 1989: 12).

Recent Surveys in the Region

Evidence of the Late Bronze Age material culture was produced only by the Wadi el-Hasa survey. In addition, the Southern Ghor, Northeastern Arabah, and Aqaba-Ma'an surveys yielded some Iron I pottery sherds. (During the first season of the 'Aqaba-Ma'an survey, the surveyors recorded two sites that yielded Iron I pottery. The sites

were not discussed, or described, and map coordinates were not given. The sites are located in Wadi Rumman and known as Rakbat Um Edgeyer and Jebel Utud [Jobling 1981: 105-112].)

Wadi el-Hasa Survey (WHS)

This survey was sponsored by the Department of Antiquities of Jordan and funded by the Social Sciences and Humanities Research Council of Canada. A team of surveyors was formed in the autumn of 1979, when the first season of the survey was launched (MacDonald, Banning, and Pavlish 1980; MacDonald 1980a; 1980b; 1982a; 1982b; 1982c). It was followed by another two seasons conducted in 1981 (Rollefson and MacDonald 1981; MacDonald, Rollefson, and Roller 1982); and 1982 (MacDonald et al. 1983). The appointed director was B. MacDonald, who recorded 1,074 sites in the Wadi el-Hasa region.

It appears that the region was occupied from the Neolithic period to modern times. The Chalcolithic period was represented by 16 sites (1.5%), when a significant increase to 59 sites (5.5%) was recorded in the Early Bronze Age period. After Early Bronze, the settlements drastically decreased to where Middle Bronze is represented by only 2 sites (0.2%) and the Late Bronze Age by 8 sites (1%). A significant increase is evidenced during the Iron Ages where Iron I is represented by 49 (5%) and Iron II by 48 sites (5%). The region again witnessed a decrease in the Hellenistic period, for which the surveyors recorded only 15

sites (1.5%). During the Nabataean period there was an explosion of new settlements, the region then presenting 257 sites (24%). A slight decrease in the Roman period was represented by 170 sites (16%). The number of the settlements remained almost unchanged during the Byzantine period, with 155 sites accounted for (14.5%). (See fig. 14.)

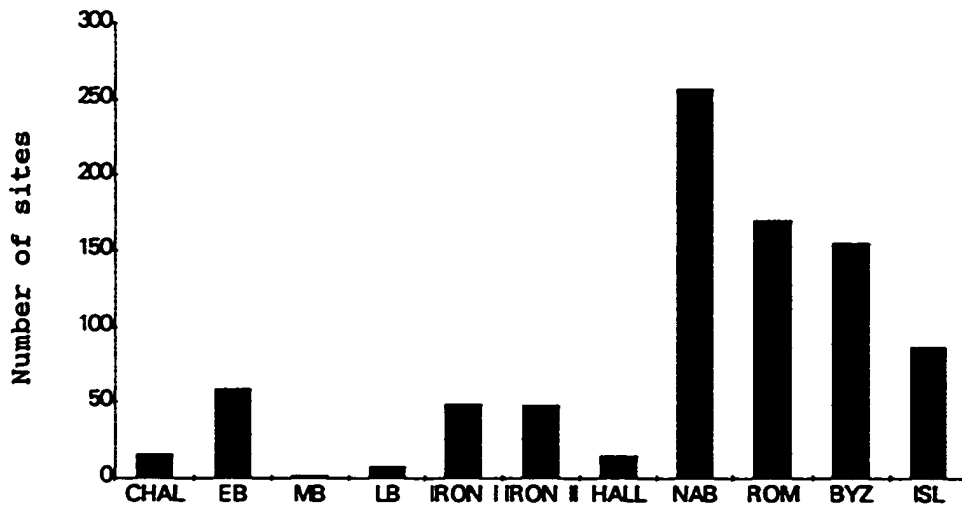


Figure 14. Wadi el-Hasa survey.

Again during the Islamic period, the settlements decreased in number to only 87 sites (8%).

The picture might be slightly different if only the sites that counted five or more sherds were considered. (See fig. 15.) Nevertheless, as figure 15 shows, the difference

is not so drastic. It appears that the line follows the same pattern concerning the various periods.

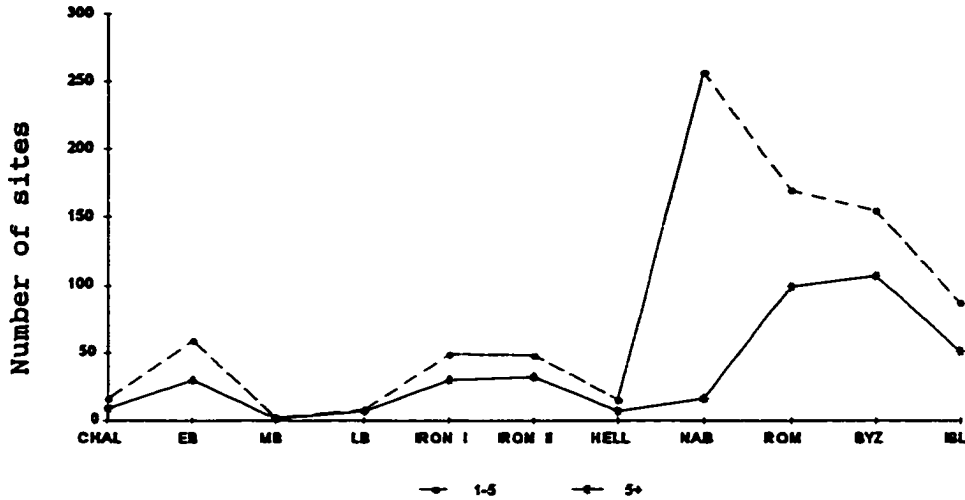


Figure 15. Density of sites in Wadi el-Hasa Survey.

Southern Ghor and Northeast 'Araba Survey (SGNAS)

When the survey at Wadi el-Hasa was completed, MacDonald organized a team of surveyors who examined and recorded the sites located in the Southern Ghor and the Northeast 'Araba region. The work was conducted during two seasons, the first in 1985 (Koucky and MacDonald 1985; MacDonald and Koucky 1986); and the second in 1986 (MacDonald and Koucky 1986; MacDonald *et al.* 1987; MacDonald, Clark, and Neely 1988). (See fig. 16.)

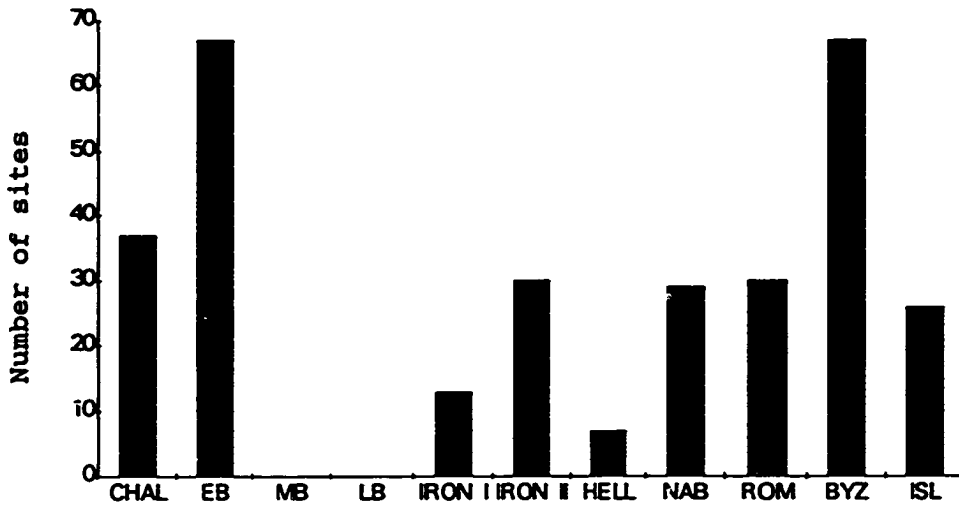


Figure 16. Southern Ghor and Eastern `Araba survey.

According to the surveyors, there were 240 sites encountered in the region during the two seasons of surveying. The Chalcolithic period is well represented by 37 sites (15%). During the Early Bronze Age occupational activities significantly increased when the settlements doubled, numbering 67 sites (28%). Two of the following Bronze periods revealed no presence of any settlements. Noticeable growth in sites appeared during the Iron I Age, when the region recorded 13 sites (5%). The increase continued into Iron II Age with 30 sites (13%), only to decrease again during the Hellenistic period, when only 7 sites were accounted for (3%). The Nabataean period witnessed another significant increase in settlements, to 29

sites (12%). The density of the sites seems to remain steady during the Roman period, 30 (13%), which was followed by a tense increase during the Byzantine period with 67 sites recorded (28%). The settlements decreased once again during the Islamic period to 26 sites (7%). (See fig. 17.)

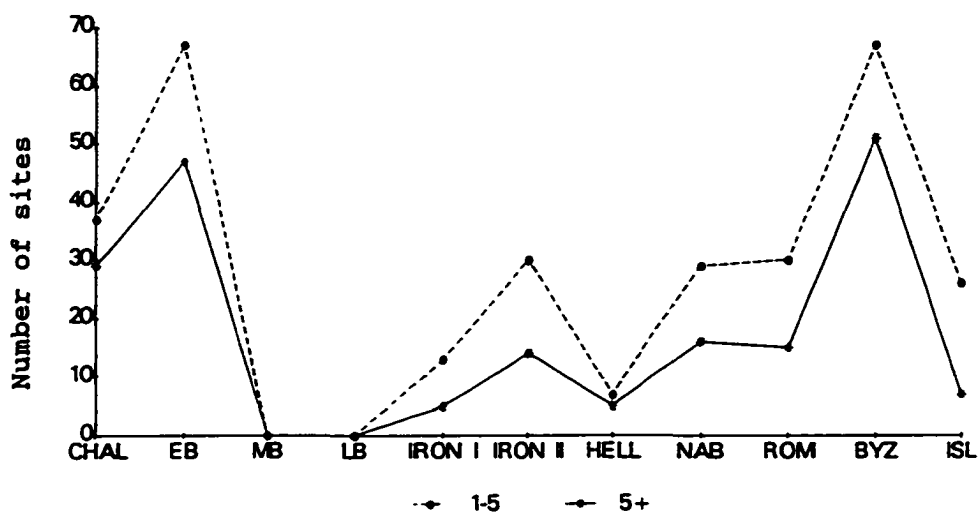


Figure 17. Density of sites provided by the Southern Ghor and Eastern `Araba survey.

The situation is more or less similar when only the sites that revealed five or more pottery sherds are considered. The only significant difference is seen during the Nabataean and Roman periods. When all the sites are regarded the Nabataean period has a higher number--1 percent more than the Roman period. Considering the five or more sites, the situation is reversed, when the Roman period has

a higher number than the Nabataean by 1 percent (as seen in fig. 17). Nevertheless when both surveys and all the sites that revealed Late Bronze and Iron I Age material culture are combined, the picture of the distribution of the sites through the periods would look like that in figure 18.

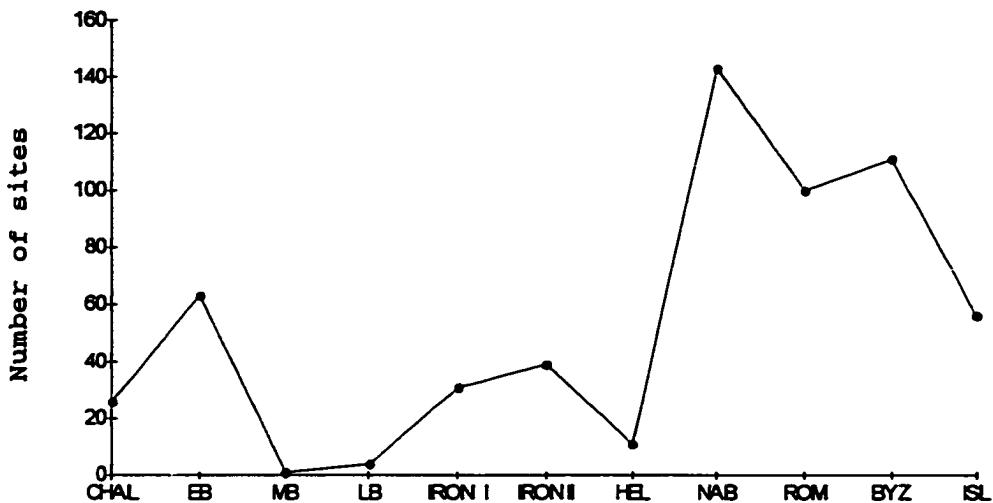


Figure 18. Density of sites in Edom.

Data Analysis

There are 58 sites in Edomite territory that revealed material culture related to the Late Bronze and Iron I Ages (see Appendix 3). It should be mentioned that the concentration of Late Bronze and Iron I sites is evidenced only in the northernmost region of Edomite territory. Therefore the central and southern parts of the

territory, in particular, were not occupied by permanent settlements during those two archaeological periods.

Among all the sites, those that are designated as "tells" are the best represented with 38%, and are followed by "ruins" (26%), and "scatter" (22.5%) (as seen in table 10).

TABLE 10
RATIO OF LATE BRONZE AND IRON I SITES IN EDOM BY TYPES

Type	#	%	LATE BRONZE	%	Iron I	%
Tell	22	38	3	5	21	36
Ruins	15	26	2	4	14	25
Building	7	12	0	0	7	12
St. Heap	1	2	1	2	0	0
Scatter	13	23	2	4	12	20
Total	58	100	8	14	54	93

Late Bronze sites are poorly represented in this region by only 8 sites, which is about 14 percent, while the presence of Iron I material was revealed on 54 sites, about 93 percent. The ratio of increase in "tells" during Iron I is reflected by the similar ratio when all the types are considered.

Evidently, when the sites are categorized by the number of the pottery sherds collected, Iron I is better represented in all categories (see table 11). While the

TABLE 11
DISTRIBUTION OF SITES BY CATEGORIES

Period	1-2	‡	3-5	‡	6-10	‡	11+	‡	Total
Late Bronze	0	0	3	38	0	0	5	62	8
Iron I	6	12	11	22	6	12	28	54	51

ratio of "tells" is represented in the category of 11+ during the Iron I period, the same category during the Late Bronze Age witnessed a decrease when compared to "ruins" (see tables 12 and 13).

TABLE 12
CATEGORIZATION OF THE SITES DURING LATE BRONZE

Type	1-2	‡	3-5	‡	6-10	‡	11+	‡	Total
Tell	0	0	2	10	4	20	14	70	20
Ruins	2	15	3	23	1	8	7	54	13
Building	1	14	1	14	0	0	5	72	7
Scatter	3	27	6	55	0	0	2	18	11
Total	6	12	12	24	5	10	28	54	51

TABLE 13

CATEGORIZATION OF THE SITES DURING THE IRON I PERIOD

Type	1-2	%	3-5	%	6-10	%	11+	%	Total
Tell	0	0	2	67	0	0	1	33	3
Ruins	0	0	0	0	0	0	2	100	2
St. Heap	0	0	1	100	0	0	0	0	1
Scatter	0	0	1	50	0	0	1	50	2
Total	0	0	4	50	0	0	4	50	8

Sociopolitical Structure of Edomite Society
in Late Bronze Age

As presented above, sedentary occupation in Edom during the Late Bronze Age is virtually absent. The settlements are represented by only eight sites, located in the northernmost part of Edomite territory, where the agricultural activities would have been most plausible. However, is there enough archaeological evidence to assume, safely, that those settlements were due to agricultural activities? Complete deficiency in architectural remains causes a certain degree of uncertainty concerning the exact nature of these sites. Because there is only one clear Late Bronze site, and because others are related either to Iron I or to the Middle Bronze Age, the uncertainty is deepened even more. A shortage of settlements should not be

interpreted as an absence of population. Even when a deficiency in settlements is evident, people moved and lived in the region throughout all the archaeological periods (Finkelstein and Perevolotsky 1990: 77, 78).

In spite of the fact that the evidence is still scarce, some scholars have attempted to draw tentative conclusions based on archaeological and Egyptian evidence. It has been suggested that the nature of the settlements is closely related to farming and herdsmanhip (Bartlett 1989: 81). The most recent attempt to suggest and reconstruct the nature of society in this region was proposed by Knauf. He depicts the Late Bronze Age inhabitants in Edom as "bands of tent-dwelling agriculturalists and pastoralists" (1992: 48).

He believes that the indigenous population in Edomite territory was comprised of nomads related to Esauide clans (1992: 49). Later, according to Knauf, there was an influx of newcomers (related to the Horites from Gen 36) toward the end of the Late Bronze Age, who settled the northernmost part of the Edomite territory. They established several agricultural settlements in the region. These agriculturalists came into close contact with Esauide nomads located slightly to the south. The threat from invading military powers resulted in "tribalization" of the Esauide bands.

There are certain problems related to this proposition, which Knauf ignored. First of all, his basic

archaeological argument for supporting the idea of agricultural settlements toward the north is rather weak. In spite of the fact that there are several Late Bronze settlements reported by WHS survey, none of these sites has any architectural structure (Bienkowski 1992a: 6) that would support an agricultural community. While the case might be made for occupational activities during the Late Bronze period in the region, its nature is far from certain. Second, Knauf bases his argument for the influx of newcomers on the fact that the settlements were established only on the northern fringe of the Edomite territory. If indigenous people established those agricultural settlements, it would be reasonable to expect that the settlements would be established wherever the annual average rainfall exceeds 400 mm (1992: 48). Knauf also fails to take other environmental factors into consideration, such as soil, slope, temperature, elevation, and--most important--national and international variability of rainfall patterns. Meeting only one of these factors does not necessarily mean a guarantee for agricultural success, although it is true that the northern region of Edom is the most promising for agricultural activities, as confirmed by modern agricultural maps of Jordan (MacDonald 1992b: 119).

Finally, Knauf proposed that prior to the newcomers (Horites) who established agricultural settlements, the region was occupied by pre-tribalized "bands." The word

"band" has a special meaning in modern anthropological usage. It is generally understood to be small egalitarian groups of kinfolk (less than 100 individuals), who are mobile hunter-gatherers (Renfrew and Bahn 1991: 154-156). The evidence to support the presence of such a society in the Edomite region during the Late Bronze period seems to be lacking.

A study conducted by O. LaBianca shows that pastoral nomadism was more than a common model in marginal areas like Edom (1990). Probably the region was populated by pastoral nomads for millennia before and after the Late Bronze period (LaBianca 1990; Finkelstein and Perevolotsky 1990; Finkelstein 1988).

Sociopolitical Structure of Edomite Society in Iron I Age

Despite the fact that the sites revealing the presence of Iron I material culture are more numerous than Late Bronze sites, the nature of these settlements is far from certain. Additional uncertainty is caused by the fact that none of the sites that have been excavated revealed any Iron I material. Moreover, quite a number of the sites are not so securely dated to Iron I as earlier assumed (Hart 1992).

In all, it is probable that the society of Edom during the Iron I period was similar to that of the previous period, i.e., pastoral nomads. The consensus among

archaeologists is that sedentarization of Edom did not start prior to the seventh/sixth century B.C. (Hart 1992: 97).

**Tentative Proposition Concerning the Nature
of the Societies in Transjordan**

According to the data presented above, it seems clear that sedentarization started at different times in various Transjordanian regions. If the sedentarization of a region is depicted by a number of sites recorded from a certain period, then it would be safe to remark that the first region to witness this process was Ammon, followed by Moab and finally Edom. Figure 13 (above) might suggest that the Moabite region actually started sedentarization, which does not seem to be the case. As discussed above, most of the sites that revealed Late Bronze material in Moab are firmly dated toward the final phase of the period. Considering the sites in Ammon excavated and surveyed, it is evident that this region revealed evidence of the Late Bronze I period. (See fig. 19.)

Nevertheless, when all the surveys are included, the settlement pattern would look like in figure 20. This diagram is incomplete to a certain extent, since only the surveys that revealed Late Bronze and Iron I material culture were included. Nevertheless, the difference should not be drastic. Rather, the diagram would follow the same pattern with small variations.

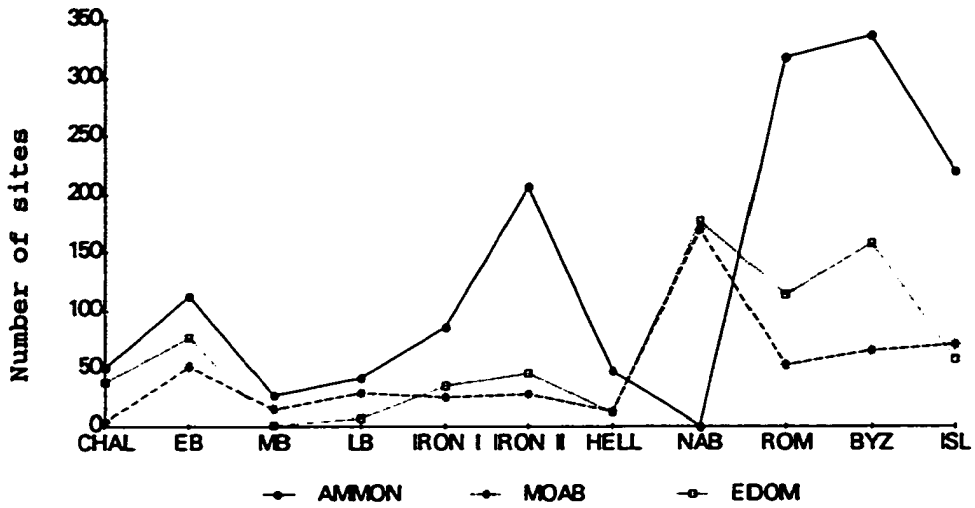


Figure 19. Density of the sites by the regions.

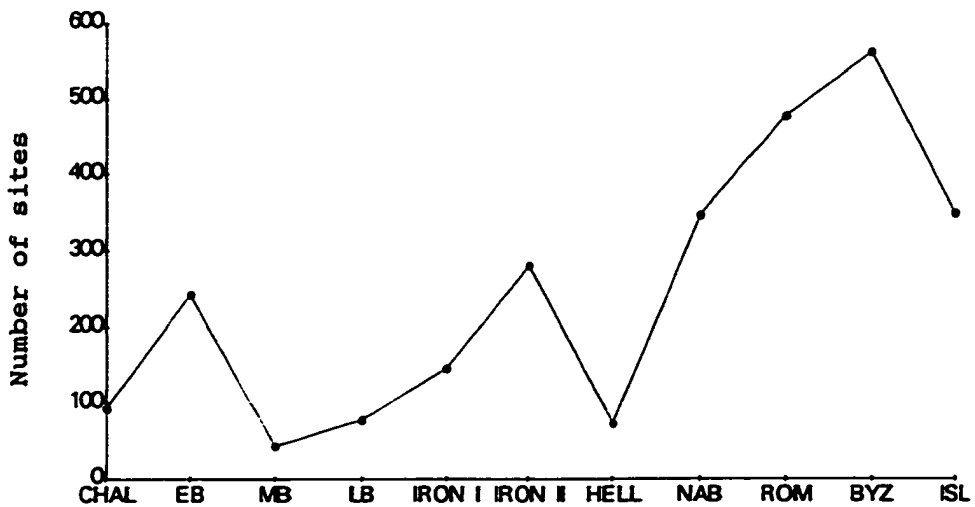


Figure 20. Density of sites in Transjordan.

It is evident that the elements of gradual sedentarization are present during the Late Bronze and Iron I period in particular. Some scholars would like to connect this process of sedentarization with the development of urban society that resulted in city-states (McGovern 1986). This would be in harmony with the "evolutionary hypotheses" where societies develop from primitive stages to more complex ones (Frick 1977; 1985). Thus the tribal society is preceded by "bands of tent-dwelling agriculturalists," as Knauf suggested for the society of Edom during the Late Bronze Age (Knauf 1992: 48).

Nevertheless, as seen above, there is no basis upon which sedentarization would clearly demand an urban society of the region. In addition, all the arguments of McGovern and Knauf seem to be too weak, as demonstrated above, to support the view that the structure of society would follow the "evolutionary pattern." Contrary to the propositions above, LaBianca and Younker would argue that tribal societies were always present, with possible deviations during different periods of history (1995: 400-415).

State vs. Tribal society

In order to establish a base for the discussion on the sociopolitical structure of the Transjordanian regions, it would be desirable, first, to establish firm correlates of the state and tribal societies, and then discuss which

society best fits the whole region, following the archaeological evidence presented above.

State Society

An increase in agricultural activities--together with that of the population--combined with a favorable political condition, triggered the emergence of an urbanized society. Consequently, agriculture is recognized as one of the major components of that kind of society. In order to survive, the bureaucratic layers of society were heavily supported by supplies brought from the periphery to the center.

Intensification of agriculture

It was noted that the agricultural intensification of the region played a decisive role in the formation of a state-society (Frick 1985: 196-204). Environmental conditions of the region would require perfect timing, critical for the various labor activities connected with the production of agricultural goods, delegated through a central hierarchy. Furthermore, seasonal labor shortages might provide a basis for the expansion of a labor force through an increase in population (Frick 1985: 197; Wright and Johnson 1975: 267-289), which in turn would generate a surplus of agricultural products. In this way, ground for a 'chain reaction' was created in which several variables would depend upon each other in a state-society.

In addition to manpower, large animals (usually cattle) were heavily exploited for the cultivation of the land. The same were also used for meat, milk, and leather products. For this reason, a significant increase in cattle bones should be demonstrated by the excavations throughout the region. Due to the intensified agricultural activities, there would be little space left for sheep/goat herding, and, thus, bones of these animals would be significantly decreased.

Due to the modern procedure of archaeological excavations, more attention is paid to the accumulation of animal remains (bones) (LaBianca and Younker 1995) in order to better understand the socioeconomical structure of society in various periods.

In spite of the fact that archaeological evidence is scarce in the Transjordanian region, there were some attempts to collect and record the bone findings: Umm ad-Dananir (McGovern 1986); Hesban (LaBianca and Younker 1995); Tell el-Umeiri (Geraty et al. 1989; Herr et al. 1991); and Jalul (Younker et al. 1993; Gregor 1994; 1995).

According to the reports, the Umm ad-Dananir excavation recorded 45.17 percent of sheep/goat bones, 5.99 percent sheep and 1.63 percent goat bones, while cattle bones were represented by only 0.82 percent (McGovern 1986: 316). Since the excavation at Hesban failed to reveal any stratified material from Late Bronze and Iron I Ages, bone

findings are not applicable to this study. During the two seasons of excavation at Tell el-Umeiri, the excavators recorded a presence of 39.6 percent sheep/goat bones and 3.2 percent cattle bones in the stratified layers representing the Iron I period. Tell Jalul went through two seasons of excavations (1992 and 1994). According to the field reports, there are 76 percent sheep/goat bones and 21 percent cattle bones. Tell Jalul is located in the center of a cultivated area, which is in accord with a higher percentage of cattle bones. Nevertheless, none of the sites presented above would accommodate the idea of a state society, but rather the evidence that the region began with the gradual process of sedentarization and limited exploitation of agricultural products. Besides, it was already noted earlier that it was not unusual for nomadic groups to tend some cattle as well.

Development of trade network

In usual circumstances, a city-state system would require a major center surrounded by a network of smaller administrative and production city centers (Wright 1977: 387). While some centers would be concerned with agricultural products, other major concerns might be seen in ceramic production. All the goods, however, would have to be moved through central pools into redistribution networks (Johnson 1973: 107-129). Moreover, major centers would control peripheral ones because of special resources (Wright

1969), or because of their location on important trading routes (Weiss and Young 1975). Thus the evidence of long-range trade by the means of imported goods needs to be documented by the archaeological discoveries in the region.

The development of a trade network would be evidenced by an extensive collection of imported goods discovered on the excavated sites as well as in the tombs. Apart from the Amman Airport structure, whose identification is still under discussion, imported goods are extremely scarce. Imported pottery (Mycenaean and Cypriot ware) is more than limited and not adequate to support the idea of a developed trade network.

Evidence of extensive storage facilities

For the accumulated surplus, there had to be established storage facilities (storehouses, silos) to preserve the agricultural products for non-food-producing months, as well as for trade (Frick 1985: 199). In this case, a sophisticated administrative system would have to be instituted to manage the surplus by means of buying and reselling the products (Wright 1977: 383, 384).

During the several seasons of excavation at Tell el-Umeiri, the excavators discovered a significant amount of storage jars located under the destruction debris that marked the end of the Iron I Age settlement. In spite of the amount of storage jars, it is evident that the capacity

of the jars was barely enough to support the inhabitants during the non-productive months of the year. Certainly, the contents (barley, oil, wheat) were not stored to support a developed trade network in the area, but rather as a reserve for the inhabitants in the city. In addition, there was no evidence of silos with a capacity that would adequately support the idea of a trade network and, thus, the possibility of a state society.

Planned architecture

In addition, this level of society would be recognized in planned architecture (streets, houses, distinctive public places). Furthermore, palaces, temples, and houses of the highest level of society should be distinguishable from those of the rest of the population.

Observing Western Palestine in the same periods, it is evident that there were city centers (Megiddo, Hazor) that displayed a sophisticated city planning, in addition to the special areas developed for administrative and cultic purposes. Separation of palaces from city temples implies additional evidence of competing levels of authority within one center. The presence of several temples (Mevorakh and Lachish), some of them isolated from the main settlement, reflects a diversity of practices and beliefs.

According to the excavated material presented in the reports, there is very little, if any, evidence supporting such monumental architecture. The only possible

structure that might reflect such an architecture, to a certain degree, are the Amman Airport structure, whose origin and function is still under debate. Interestingly enough, some of the suggestions concerning the function of the structure are launched by Campbell and Wright (1969), followed by Finkelstein (1988: 343), that the structure served as an isolated cultic center for a "tribal league."

In summary, it is obvious that the archaeological data are very limited concerning the periods in question. While some sites revealed no evidence related to these periods, others are still being excavated. Nevertheless, according to the evidence at our disposal, it is safe to conclude that there is very little evidence to support any level of a state society in the Transjordanian regions during the Late Bronze and Iron I Ages.

Tribal Society

Since the archaeological data do not support the idea that society of Transjordan during the Late Bronze and Iron I periods was urbanized, it would be desirable to re-examine the excavated material as found in the archaeological records. This in return would provide positive evidence from which to draw conclusions concerning the structure of that society.

According to Colin Renfrew, there are some 20 features easily distinguishable by archaeological data that would discern correlates concerning a tribal society (he

uses ranked rather than tribal society in his work) (1972: 73). All of these correlates might have been summarized in five points as suggested by C. S. Peebles and S. M. Kus (1977: 431-433); or in three points as proposed by Timothy Earle (1978). This approach was challenged by Joffe (1993: 17, 18), who emphasized that it is oversimplistic in nature, and cannot be successfully used in understanding the political, social, and economic structure of a given society. For this reason a re-examination of the available material found in tombs, architectural remains, various artifacts, faunal remains, and settlement patterns should provide adequate evidence for determining the structure of society in the Transjordanian region.

Burial remains

As firmly established, a tribal society would require a certain level of hierarchy (Wright 1977: 387) reflected in tribal leaders or chiefs. Thus the ranking society is evident in the standard of life outlined in the housing, clothing, and diet during the lifetime, as well as in burial practices associated with afterlife beliefs.

Archaeologically, this variable is best discerned through mortuary practices and in architectural features of a particular site. As far as mortuary practices are concerned, ranking of persons is represented by superordinate and subordinate dimensions, documented through the components of the burial contents. In addition to the

content of objects associated with the status of the deceased in society, this prediction would require different numbers of persons within the burial.

In addition to several isolated cave burials that yielded some Late Bronze and Iron I material, the best example for this testing would be a group of caves excavated in the Baq'ah Valley (McGovern 1986). There are 33 caves that were excavated or explored, and 16 of them revealed material relevant to the periods mentioned above (McGovern 1989b: 43). Only 3 caves (A2, B3 and A4) yielded substantial material for comparison.

According to the reports provided by the excavators, all 3 caves are similar in size, the only difference being that cave A2 consists of two chambers. One of them measures 5.2 m by 3.4 m, while the other is 5.2 m by 5 m. The cave designated as B3 measures 6 m by 6 m, and A4 5 m by 4 m (Brown 1986: 32, 45, 54, 56). In cave A2 there are 22 individuals buried (Finnegan and Husted 1986: 297); in cave B3, 30 individuals (Rolston 1986: 302); while cave A4 contained as many as 217 individuals (Saul 1986: 314). Despite the fact that all the caves are of similar size, the different ratio might have been associated with a ranking of the tribal society. In addition, the ratio of objects discovered in the caves supports this assumption. Cave A2 yielded 198 various objects; cave B3, 521; and cave A4, only 192 objects (McGovern 1986: 202-271). The ratio represented

here clearly indicates that in caves A2 and B3 combined there are more than 13 objects per individual, while in cave A4 there is less than 1 per individual.

The difference in the numbers of individuals in the various caves, combined with the number of objects per individual, clearly indicates the existence of a superordinate and a subordinate ranked society. This difference might support the existence of a tribal society in the region.

The fact is that the architectural material provided by the excavations is too scarce in regard to the ranking tribal society. This is mainly because there is a deficiency of excavated material for the study, and even more, a lack of properly published material. Nevertheless, many of the projects are still in progress and future material might bring more light to this question.

Ranked tribal society might be seen in Khirbet Mdeinet el-Mu'rrajeh, where two pillared houses, which might have belonged to a higher class of society, were excavated (Olávarri 1983: 174). In addition, excavation at Tell el-Umeiri during the last two seasons (1992 and 1994) revealed evidence of some residential houses built of huge boulders (Yunker et al. 1993: 220). That, too, might reflect a tribal society.

Settlement systems

Settlement systems should be reflected in a number of elements. One of them is hierarchy of settlement types and sizes, exposed in the intersite of their relationship to each other. This would be reflected in the position of the settlements, as well as in their function. Furthermore, the smaller sites should be located in areas that assure a high degree of support to each other and to the central major site. The difference should be detected in architectural features, as well as in the number of occupants in the central settlement in relation to other sites in the vicinity.

According to the reports provided by excavations and surveys, it is obvious that all Transjordanian regions witnessed the existence of a central place theory during the Late Bronze and Iron I periods. The Madaba Plains Project provided evidence that Tell el-Umeiri acted together with Tell Jawa as central sites functioning in their own sphere of the environment. Surveys of the region documented about 50 sites being actively involved in the process of occupation and their relationship toward the major sites (Tell el-Umeiri and Tell Jawa). In addition, the Baq'ah Valley survey, combined with excavation of Umm ad-Dananir, provided a similar picture, where Umm ad-Dananir acted as a central site surrounded by two other smaller sites.

In the Moabite region the situation is similar concerning the number of "tell" sites, compared to other type sites designated by various surveys. Evidently, there are 12 "tell" sites in the Iron I period and 12 in the Late Bronze period that contained more than five sherds, out of about 150 sites that revealed evidence for those two periods. On an average, this accounts for more than six smaller sites to one that is designated as a "tell."

The situation in the Edomite region is similar to that above, to a certain extent. Out of 58 sites, there are 19 designated as "tells" producing more than five sherds. Therefore the ratio for this region would be about three smaller sites for one larger.

In addition to the dispersion of the sites throughout the regions, some of the major sites were protected by city walls (Sahab, Umm ad-Dananir, Balua' [?], Jalul [?] during the Late Bronze period, and Tell el-Umeiri, Balua', Khirbet Mdeinet, Tell Jawa [?], Jalul [?] during the Iron I period). Furthermore, several sites were established on locations that are not the best choices for strategic purposes. Tell el-Umeiri is not situated on the highest point from which it would have a commanding view, but rather on a spur surrounded by higher hills. A similar situation is that of Jalul located in the middle of a cultivated zone, being exposed in all directions to invading armies. This, combined with the position of the "tell" sites throughout

the Transjordanian region, plausibly suggests that those sites were not established primarily for defensive purposes, but rather to exercise their role and function in a central place theory.

Limited trade network

Since tribal society requires a certain degree of organization, a trade network should be existent and evident throughout the region. The trade involved is exercised regionally as well as internationally, to a certain extent (Wright 1969).

The best way to detect trade activities in the region is the presence of remnants of imported pottery dispersed in the tombs and occupational layers of the settlements. Evidently, the trade from Greece was more intensive in Western Palestine, but traces of Mycenaean and Cypriot pottery are present in Transjordan also. Most of the excavated caves, as well as sites, revealed a limited presence of imported pottery. In addition, there is a great quantity of local imitation that provides further evidence for only a limited trade network in the region.

Limited storage facilities

Since the tribal society underwent a certain degree of organizational activities, it is to be expected that the storage of limited surplus (Wright 1977: 387) would be maintained for the non-harvest months. Most of the sites

are much smaller than their counterparts in Western Palestine, and as such did not require an enormous amount of surplus for support during winters. Umm ad-Dananir encompasses an area of 2.5 hectares; Tell el-Umeiri, 1.53 hectares; Tell Safut, less than 2 hectares; Tell Jawa, 2 hectares; Khirbet Mdeinet el-Mu'rrajeh, 1.5 hectares. The size of the settlements would accommodate about 500 people, and as such do not require a large surplus and large storage facilities.

Excavations conducted on most of the sites revealed the presence of storage jars, especially at Tell el-Umeiri. Be that as it may, the quantity is not disproportional to the needs of the occupants. Therefore it was certainly not used for trade purposes.

Summary

During the 70s, there has been a strong notion that there was a break in the sociopolitical structure at the end of Late Bronze and the beginning of the Iron I periods. According to evidence accumulated through numerous excavation reports and surveys, it is becoming more and more clear that there was a slow process of transition between those two periods rather than a violent break in cultures. In this light, there is strong evidence that the Transjordanian region underwent socioeconomic changes during the Late Bronze and Iron I periods. During the Late Bronze period, the slow process of sedentarization, triggered by

intensification of agricultural activities, evolved in the establishment of small permanent settlements. The cause of the intensified sedentarization might be seen in favorable political as well as economic, environmental, and ecological conditions. Changes did not occur in all the regions at the same time. As presented above, the intensification of agricultural activities and the gradual growth of permanent settlements were activated in the Ammonite region first, sometime in the beginning of the Late Bronze period, then followed by the Moabite region during the final phase of the Late Bronze period, and finally the Edomite region witnessed the same process, which started with limited settlements only in the extreme north during the Iron I period. More excavations in the future will certainly produce more evidence to help us understand the settlement pattern and sociopolitical structure in Transjordan.

In spite of the fact that archaeological data are still inconclusive, there are some hypothetical suggestions concerning the structure of society in the regions during the Late Bronze and Iron I periods. From the evidence at our disposal, it is possible to suggest, at least tentatively, that society was probably of a tribal character, rather than an urbanized state, as seen above. As tentative as it may be, this suggestion holds that the tribal communities were controlling the regions, and successfully shifted from pastoral nomadism to more

agricultural activities when the environmental conditions became favorable.

CHAPTER III

ANTHROPOLOGICAL CONCEPTS

According to archaeological evidence, settlements increased toward the end of the Late Bronze Age and especially during the beginning of the Iron I Age in Transjordan. The increase is first documented in the territory of Ammon, then in Moab, and last, in the northernmost part of Edomite territory.

The archaeological record represents the complexity of the settlement patterns of the Transjordanian regions between Late Bronze and Iron I Ages. While the region of the Ammonites shifted toward sedentarization during the Late Bronze I period, the Moabites did not so until the Late Bronze II period, and the Edomite region until the Iron I period (only the northern section). Thus it is clear that at the same time, some Transjordanian societies were strictly nomadic, some seminomadic (some segments of the society were sedentarized while other still preferred nomadic way of life), while others were more or less sedentarized. Nevertheless, the archaeological record indicates that the whole society of Transjordan was tribal in character, regardless of whether they lived in permanent

settlements or chose to live as nomads. Because of this settlement complexity it is necessary to analyze basic anthropological terms (heterarchy, hierarchy, ethnicity, tribal, and supra tribal polities) to understand better their political, economic, and social structure in connection with its sustainability and flexible nature.

It was assumed that a tribal society is more primitive on a societal scale and reflects only nomadic way of life consisted of smaller groups of people without any relationship between them (Service 1962, 1975). This understanding is mainly based on the assumption that there is no strong, well established hierarchy between the layers of the tribal society. As such this type of society is not capable of organizing any formidable force when any sociopolitical or environmental pressure occurs. When heterarchy (Crumley 1995) of the societies is applied (relationship between segments of a society on horizontal level) then it is clear that tribal society is not only capable of surviving economic and environmental pressures by decomposing into small units, but such society is able to consolidate into a larger units to create a formidable force to stand against any kind of threat.

This understanding of tribalism is reflected in ethnicity and ethnic identity that results in closeness and kin-based relationships between the various segments of tribal society (Smith 1986: 13-16; Rex and Mason 1988: 158,

159). Furthermore, the shift from nomadism to sedentarism should not be understood as transfer from more primitive (tribal) society to more developed (urban, state) society. It rather reflects flexibility of a tribal community to adapt hostile condition (whether caused by environment, plague, or political pressure) shifting from sedentary to nomadic ways of life, and other way around, when the condition became favorable.

Hierarchy vs. Heterarchy

On the basis of the theory of evolution, anthropologists have attempted to predict societal changes based on the assumption that the majority of societies would change from a lesser to a greater degree of hierarchy as they develop to more complex and sophisticated societies (Service 1962; Fried 1967; Friedman and Rowlands 1978; Johnson and Earle 1987; Gledhill, Bender, and Larsen 1988; Maisels 1990; Nassaney 1992; Hirth 1992; Spencer 1994). When the concept of hierarchy is applied it usually includes a number of implicit assumptions: that the ranking is present and permanent in all the levels of a given society. It is also suggested that the hierarchies are composed of elements that are subordinate to others and as such are subject to ranking (Crumley 1979: 144; 1987: 158).

According to anthropologists, there are at least two types of hierarchy: scalar and control (Crumley 1995: 2). Scalar hierarchy is seen in a global-regional-local

relationship where any level can affect any other with respect to the fact that authority would evolve from the top toward the lower ones. In this case, full-time specialization will occur only under the guidance and encouragement of an elite group within the society (Brumfiel 1987; Hicks 1987). On the other hand, control hierarchy is usually considered as interchangeable with order in opposing chaos. By this, anthropologists assume that the operation of complex economics requires hierarchies of coordination and control (Engels 1902; Polanyi 1944: 48-49; Sanders and Price 1968; Wright 1969; Flannery 1972). Both types are seen as operating on a vertical level within society where power, control, and authority are established in order to sustain its liability and to successfully operate within its segments. This hierarchical principle is applicable to complex (multilevel) as well as in egalitarian (usually two-level) societies.

This approach, however, has failed to recognize the existence of a horizontal level where coalitions, federations, and other examples represent shared and counterpoised power (Crumley 1995: 3). Furthermore, arguments against the band-tribe-chiefdom-state model (typical for hierarchical approach), introduced by Service (1962), were provoked by the fact that "the variability, incomparability, and indeterminacy of categories" (Crumley 1995: 3) are not properly addressed. In addition, clear

markers in the archaeological record are missing and much of the archaeological data do not fit cultural evolutionary models at all (Crumley 1995: 3, 4).

The inability to accommodate all the aspects of the complex nature of societies has led anthropologists to suggest a new approach that addresses the relationship between the various segments on a horizontal rather than a vertical level (White 1995: 104). The concept of heterarchy was introduced by McCulloch (1945), who defines it as the relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways.

Referring to tribal societies, it was assumed that they should be depicted in a pyramid structure of embedded social groups where each level is more inclusive (Sahlins 1968: 16; Evans-Pritchard 1969: 248; Braun and Plog 1982: 507). In this case, several households form a lineage (extended family); several lineages form a clan, and several clans form a tribe. According to this model, the tribal identity is given priority over the other segments contained within the tribal structure. It was suggested that

one set of operant social relations, or structure, is not necessarily a building block of any other set of social relations. Players in the system are constantly coming together, breaking apart, and reshuffling, depending on the situation and the particular social rules that might be invoked at the moment. (Rogers 1995: 8)

The importance of other (lower) segments of tribal societies has brought anthropologists to an agreement that they should be studied under time and space conceptions (Rogers 1995: 7). Through the hierarchial approach, the segments are locked in time and space where change from a lower to an upper level is impossible and territorial boundaries are permanently set. However, the archaeological record has not been able to provide any concrete evidence for a strict and final division between the territories belonging to different tribal entities. This is certainly true for the Transjordanian societies where even today archeologists continue to argue about the territorial boundaries of Ammon, Moab, and Edom (see above in chapter 2). The difficulties in detecting clear boundaries between the tribes are evident by the fact that these territories have changed over time due to political and sometimes economic pressures. In addition, archaeologists are still arguing over whether pottery, which is one of the main components for dating the material culture of the societies of Transjordan, should be used for ethnic identification.

Through ongoing manipulations of personal identities and contacts within a tribal entity, and even sometimes between several tribes, a large number of players can maintain access to various human skills and resources that might be adapted, remodified, and applied to a special need of a certain segment within the society. In this case

the heterarchical approach removes the tribe from its heralded position at the top of the organizational pyramid and considers it as one of several coexisting social constructions. (Rogers 1995: 11)

Furthermore, the tribal heterarchy is dependant on the existence of diversity, including variety at the level of its numerous segments as well as of individuals. Its flexibility is well suited for the unstable sociopolitical as well as economic conditions (Ehrenreich 1995) evident throughout Transjordan.

It would seem that the concepts of hierarchy and heterarchy are completely opposed to each other. This, however, is not true, at least not where the Transjordanian tribal societies are concerned. As Crumley has emphasized, the play between hierarchy and heterarchy should be seen "across space, through time, and in [the] human mind" (1987: 163). A low level of hierarchy is certainly present in some egalitarian societies (Zagarell 1995: 88) where kin-based differences in status are evident.¹ This is mainly because the hierarchy-heterarchy relation allows both temporal and spatial flexibility where heterarchy can move toward hierarchy and vice versa (Renfrew and Cherry 1986; Crumley 1987: 164-165; 1995), without invoking cultural collapse. This flexibility and the ability to adapt has allowed the Transjordanian tribes to overcome political and economic

¹This is emphasized more where the segments and their relationship are discussed further in the following chapter.

pressures and to survive through many centuries (LaBianca and Younker 1995).

Ethnicity and Ethnic Identity

There is not a single word in English that would successfully describe the phrase "ethnic," or "ethnic group." The term "ethnic" derives from the Greek word ἔθνικός, meaning national, foreign, gentile, or it may indicate nationality. It is closely associated with the word ἔθνος, which designates a number of people living together. It may also refer to a group of people belonging to the same tribe (Liddell and Scott 1973: 480).

According to *A Dictionary of the English Language*, the term "ethnic" was designated as an adjective meaning heathen, pagan, not Jewish, not Christian. One who is ethnic is considered as "the peculiar infolence of degenerated Chrifitians" (Johnson 1755). In addition, following the *New Revised Encyclopaedic Dictionary*, the meaning of the term is extended to "pertaining to races" (Hunter and Morris: 1897: 1944), where Prof. Turner was quoted, who connected ethnic questions to anthropological studies. Further, *Webster's Third New International Dictionary* provides more information, indicating that the term means "relating to community of physical and mental traits possessed by the members of a group as a product of their common heredity and cultural tradition" (Gove 1993: 781).

As noted above, the meaning of the term has changed through the course of history, due to the contribution of anthropological and sociological studies. As now understood, the term relates to the specific and peculiar characteristics of a certain group that shares fundamental cultural values (Narroll 1964: 283-312) and demonstrates differences from other group(s) in language, culture, and physical characteristics (Kedourie 1988: 25).

It was also noted that the term "ethnic," together with some other related terms (ethnic group, ethnic identity, ethnicity, ethnic categories), is self-explanatory and as such seeks no definition (Cohen 1978: 385), or is difficult to define since it is an inexact concept (Ladd 1975: 417). This, however, has not discouraged anthropologists' and sociologists' attempts to define the term. In this respect, a meaning has been proposed that defines "ethnic group" as a reference group that consists of people who share a common historical style based on features and values (Kunstadter 1970). Through interaction with other groups they identify themselves as those who share this distinguishing style (Royce 1982: 18). They are a group of people who share a common set of traditions different from others. Such traditions usually include religious belief and practices, a common language, a sense of historical continuity, and a common ancestry or place of origin (de Vos 1975: 9). Common ancestry is closely

affiliated with a name that serves as a badge of the basic group identity, whereas language and style indicate an individual's origin or probable association with the group. In addition, a physical element in basic group identity is closely associated with place and land. Interaction of the group (people) and place (geographical location, land) shapes its character and the life patterns of its individual members as well (Isaac 1975: 44, 45, 50).

"Ethnic identity" assumes that it represents a sum of feelings contained within the group concerning those values, symbols, and common histories that distinguish them from other groups (Cohen 1978: 386). "Ethnicity" for Royce is simply an ethnic-based action (1982: 18). "Ethnic categories" are classes of people based on real or presumed features (Kunstadter 1970).

An overall review concerning ethnicity has been provided by Isajiw (1974) who lists the attributes of ethnic groups that have appeared in 27 definitions. From those definitions he has abstracted 12 characteristics, which include five that appear most frequently. One characteristic that is used more than any other is that of common ancestral origin. This is followed by the same culture or customs, religion, race, and language. It has been assumed that a person obtains these characteristics and learns the meaning of values and symbols by being born into a certain ethnic group. Evidently he, the person, does not

belong to an ethnic group by choice, but rather is born into it and as such becomes closely related to the group through emotional and symbolic ties (Breton and Pinard 1960). In addition,

an ethnic group consists of people who conceive of themselves as being of a kind. They are united by emotional bonds and concerned with the preservation of their type. With very few exceptions they speak the same language, or their speech is at least intelligible to each other, and they share a common cultural heritage....Far more important, however, is their belief that they are of common descent. (Shibutani and Kwan 1965: 40-41)

When a symposium was held in 1973 under the auspices of the Social Science Research Council on the theme of ethnic identity, a goal was set to agree on a working definition of terms regarding a given ethnic group and ethnicity. Several characteristics were brought together in order to define ethnicity or ethnic group. Those that were the most frequently used are related to national origin, common descent, common ancestral origin, and common cultural heritage (Royce 1982: 24). Sometimes this characteristic cannot be demonstrated and is regarded as unrealistic, mythologically oriented, or partly fictitious history (Shibutani and Kwan 1965; Lehman 1967: 109). In spite of the fact that the characteristic of a common origin may not always be demonstrable, belief in it is what counts and is sufficient as such (Glazer and Moynihan 1963; Royce 1977). Furthermore, the label "ethnic" is reserved for those human groups that entertain a subjective belief in their common

ancestor, regardless of whether real blood relationship exists or not (Weber 1961: 306). This again is demonstrated through their religious practices, common language, customs, and physical appearance. Sometimes, when the physical and customs resemblances are lacking, development of community-forming powers might be buttressed by a memory of an immigration, either performed as a group or as an individual migration (Weber 1961: 306).

There are two central ideas indicated by this "cultural" approach to the problem of ethnic identity. The first is concerned with generally shared values, applied to a macro culture that makes them different from any other group, while the second deals with the particular behavioral traits and customs that create the social boundary around the particular group (Levy 1975: 26). These cultural forms are usually described as features that signal the boundary between ethnic groups (Barth 1969: 14). Cultural features form the ethnic boundaries that by themselves are stable and continuous from generation to generation (Barth 1969: 15, 16).

The ethnic boundaries might be visible or invisible, symbolic or real. Most often they are manifested in territoriality, history, language, and economic considerations (Cohen 1969: 103-117).

It may appear that ethnic groups are institutions in which individual members are irrevocably linked together

from birth to death (Gordon 1964: 28). This might not have been the case, however, considering an alternative of choice introduced in the definition of ethnic identity (Kroeber 1963: 150). Application of the idea of dynamics, choice, and situational use of cultural features might be appropriate as a fact of self-identification (Royce 1982: 28). In this context ethnicity is best understood as a strategic choice by certain individuals who intentionally choose another group for various reasons. This move might be recognized as of strategic importance in order to gain some power or privileges (Bell 1975: 171; de Vos 1975: 24).

The process in which an individual or a smaller group identifies itself as part of a larger one is known as "incorporation" (Horowitz 1975: 115). In this case newcomers are completely incorporated into the group, accepting unconditionally all cultural traits together with established customs. In this way they are totally accepted and protected by the group and regarded as legal members with all its privileges and responsibilities.

According to Harold R. Isaac, a sense of belonging, in addition to self-esteem (self-acceptance, self-respect), is the most important ingredient in a member's personality and life experience when incorporated with group identity. A sense of belonging should be manifested in all collectivities such as: class, social status, and occupational and professional possibilities (1975: 34).

Individual belonging is a decisive factor for maintaining membership within the group, expressed as a security device for self-preservation and survival. In this respect the member cannot be denied or rejected, and one's identity, either inherited by birth or obtained by choice, is regarded as "an identity he might want to abandon, but it is the identity that no one can take away from him" (Isaac 1975: 35).

Emic vs. Etic

In addition to the boundaries that signal ethnic identity, there is a consideration that "double" boundaries should be emphasized (boundary maintained from within, and boundary imposed from outside the group). Individuals enclosed by the inner boundaries are able to differentiate among themselves by the various categories recognizable only from the inside by the members of the group. These distinctions are meaningful, with great significance, and they are appropriate only to the insiders. This concept is known among anthropologists as "emic" perspective (Thomas 1991: 40). There is a clear difference between various segments of one ethnic group that cannot be detected by the outsiders to whom the members of all the inner groups are more or less the same (Levy 1975: 25-50). Due to inability to differentiate between the segments, the outsiders are

compelled to find the concepts that are meaningful to them, which is known as "etic" perspective (Thomas 1991: 40).¹

Considering the Transjordanian peoples, concepts of emic/etic perspectives are applicable indeed, for the most we know about them comes only from their unfriendly neighbors, who tried to picture them in sarcastic terms. The Egyptians simply refer to the Moabites as Shutu and only later during the time of Ramesses II do they recognize them as Moabites (Kitchen 1964: 64; Miller 1992a: 886). As for the Edomites, they are usually known as Shasu people from the early Egyptian texts (see the next chapter), and as Edomites from the time of Merneptah (ca., 1224-1214 B.C.) (Pritchard 1969: 259). The Assyrian texts refer to the Ammonites, Moabites and Edomites during the eighth century B.C. and are mentioned by name (Pritchard 1969: 282).

Nevertheless, very little or almost nothing is known about these peoples from an "emic" perspective. The only exception is the Mesha Stele (eighth century B.C.) where the king Mesha identifies himself as a Moabite and as a Dibonite as well. This device might be understood as "etic"

¹This is especially the case with the ethnic groups within ex-Yugoslavia. Before 1990 for most of the world we were known as Yugoslavians, and nobody really knew of any other subgroups existing within Yugoslavia (except for a few historians). In addition, we presented ourselves to the outsiders as Yugoslavians in order not to bring confusion. However, there was always clear distinction within different ethnic groups, and among ourselves we were never considered as Yugoslavians but rather as either Croats, Serbians, Macedonians, Slovenians, or Bosnians.

perspective where he states who he is for the outsiders (the king of Moab), and then he uses an "emic" concept to identify himself for the insiders (Dibonite). This might indicate that there were other ethnic groups within the Moabite people, of which only they were aware.

Ethnogenesis

The word "ethnogenesis" is a relatively young term and is usually related to the creation of a new ethnic group. It was introduced by Lester Singer who defines the term as "the process whereby a people, that is an ethnic group, comes into existence" (1962: 423). The condition that triggers the process of "ethnogenesis" (creating the Black ethnic group in the States) is seen in five sociopolitical factors: (1) power of relationship becomes a basis for a portion of a population to be distinguished from the rest; (2) members of this distinguished population are assigned to a special social role; (3) due to the interaction within the group, a social structure is likely to develop among them; (4) the next step brings awareness of their common social status and fate; and (5) depending on the nature of this structure an ethnic group will emerge with a content of self-image (1962: 424). How and to what degree these factors can be applied to Palestine is difficult to ascertain. In addition, standard cultural traits--a common cultural heritage, a common origin, a common language, a common history, and a common geographical

location (so strong in Palestinian cultures) that safe-guard and define an ethnic group--are completely excluded from the norms set by "ethnogenesis."

The term, however, has not been used by anthropologists as much as by biblical scholars, who have applied it to the creation of new ethnic groups in Palestine (e.g., Israel, Ammon, Moab, and Edom). The idea of "ethnogenesis" was implied by Mendenhall (1973) and Gottwald (1979), and was accepted by others. Sometimes it has been called "religious ethnogenesis" referring to the fact that they gathered together around a Divinity (Weippert 1979: 33). According to these scholars, the Israelites were the product of certain sociopolitical conditions that existed in Palestine toward the end of the Late Bronze Age. According to this viewpoint, a socioeconomic collapse caused a number of peasants to flee from the landlords who lived in the lowlands of Canaan and to inhabit the hill country where they established a new religion (Yahweism) and became a new ethnic group, Israel. Some of these people continued to flee to Transjordan where they became Ammonites, Moabites, and Edomites.

This concept of "ethnogenesis" might be understood as a process of "amalgamation" among anthropologists (Horowitz 1975: 114-116). It simply means that two or more

smaller ethnically different groups would join and create a new ethnic group.¹

The first objection to this theory is its relevancy due to the "time" factor, since a modern group formation process cannot be automatically transferred to antiquity, knowing that the political and economic contexts are entirely different. In addition, the "place" factor plays an important role in "ethnogenesis" as well. The fact is that all the examples that are used to support the theory are seen in groups of people who voluntarily (Europeans) removed themselves from their original ethnic groups, or involuntarily (African Blacks) were removed to an entirely different place. Due to the political, economic, and social securities and pressures in entirely different environments, new ethnic groups emerged. Thus, "ethnogenesis" defined as a process of "amalgamation" exists only in theory, and is

¹To support his theory, Horowitz has used several samples in recent history to demonstrate its reliability. Nevertheless, the objection to this theory is that the author uses an example which is historically inaccurate. Here, Bosnian Muslims are pointed out to be a new ethnic group that emerged from Croats and Serbs who lived in Bosnia. It appears that by joining or through intermarriage their descendants would become neither Croats, nor Serbs but rather Muslims.

The validity of this theory must be questioned knowing that the author neglected to recognize a third important group that happened to be there, Muslim Turks. Under the political and economic pressure some of the Croats and Serbs voluntarily became part of the main group, Muslims. Then again this process is known as "incorporation" rather than "amalgamation," where member(s) of one group become(s) part of another group accepting all cultural traits, as already discussed above.

documented only in modern history. We must be careful not to oversimplify history by applying it to the formation of ancient peoples in Transjordan.

Tribe and Tribal Identity

The term "tribe" is widely used to designate "a group of persons forming a community and claiming descent from a common ancestor" (Murray et al. 1926: 339). The term derives from the Latin word "tribus," meaning "three," and was supposedly used to describe any of the three ethnic divisions of early peoples of Rome (Latins, Sabines, and Truscans). The distinction between these three ethnic groups was based primarily on their cultural background and linguistic differences.

Even before the time of Rome other words are encountered that reflect the spirit of "tribus." The Greek word φυλη was used and applied before Homeric times to groups of different peoples. According to Victor Ehrenberg, "the Greeks themselves came into the land as 'tribes.' To what extent during the immigration and settlement large tribes divided or small tribes united lies outside our knowledge" (1960: 8).

It is suggested that the term "tribe" might have derived from the word "trev," which is an ancient British word. The word "trev" is a compound word derived from the Celtic words "ter if," meaning "his land" (Johnson 1755).

According to *Webster's Third New International Dictionary*, the term "tribe" relates to a social group made up of numerous families and clans, together with slaves and adopted strangers. It expands into an endogamous social group composed of villages that occupy a specific geographical territory. The members of a tribe possess cultural, religious, and linguistic homogeneity. They are commonly united under one head or chief (Gove et al. 1993: 2440).

Values and traditions that hold tribal society together are transferred through generations and are not meant to be questioned.

In tribal societies (including peasants, nomads, seminomads, semisedentary farmers) a man is born into a pre-determined set of rights and obligations. His political, social, economic, and religious rights and obligations precede him. He is born into a set of answers so necessary for his survival and the survival of his group in a subsistence economy. (Dupree 1964: 298)

In addition to this, "all these attributes perpetuate an 'inward-looking' society, which simply means a society into which a man is born into a set of answers" (Dupree 1973: 250).

It appears that the terms "tribe" and "ethnicity" are similar in definition and should be accepted as synonyms (Smith 1986: 13-16; Rex and Mason 1988: 158, 159). Nevertheless, B. Tibi has pointed out that this equation of the terms cannot be applied to the tribal communities in the Middle East (1990: 131, 134). To this respect it was

proposed that the term "tribe" is a subgroup of an ethnic entity. In this case, several tribes might represent segments of a closely affiliated larger ethnic group. This is certainly true for the tribes of Israel where 12 tribes belong to the same ethnic group. Further, tribes of Israel are closely related to the Edomites and thus form another even wider ethnic affiliation. The same line of argument is applicable to the Ammonites and Moabites who, according to the biblical account, share the same forefather (Lot). (For more on the origins of the Ammonites, Moabites, and Edomites, see chapter 4.)

Structure of Tribal Community

Tribes are usually multi-community societies, made up of individual communities integrated into a tribal structure through kinship (Renfrew and Bahn 1991: 156). These individual communities are sometimes known as "clans," which generally operate within the tribal framework and claim a common ancestor or a common origin. Furthermore, "clans" may also have been composed of "subclan" groups (Hart 1970: 11, 12) that relate to an extended family.

Within the composition of tribal membership there is a significant emphasis on kinship relations. It is evident, to a certain degree, that in the political cohesion of the tribal units (clans) the members "represent a population integrated for the achievement of diverse internal or

external goals, management of the community or warfare" (Fried 1975: 5).

One lineage of a clan usually ranks above all the others and is known as the "chiefly lineage." From among its men a chief is chosen whose role serves as permanent coordinator and who is deeply involved in the redistribution of surpluses of products (Service 1962: 143-177). In addition, the chief may serve as an intermediary negotiator with other units within the tribal framework. They are generally the most influential men of the clans, whereas the tribal head is considered to be chief among the chiefs (Sweet 1965: 1132-50).

Structure of Tribal Economy

A tribal society's subsistence is usually based on cultivated plants and domestic animals. They may be settled farmers or nomads with a "mobile economy based on intensive exploitation of livestock" (Renfrew and Bahn 1991: 156), or both combined, farmers and nomads (Cunnison 1970: 315-345; Watson 1979: 245-262).

One of the most important roles played in the tribal economy is ownership of the strategic resources, one of which is land. Access to the basic productive resources is one of the anchors of the concept of tribal society, whether for agricultural activities or animal husbandry (Fried 1975: 50; Cribb 1991).

According to Sweet who studied some African tribes, every clan in a tribal society is linked to a certain territory where all the members have equal access to grazing fields and permanent sources of water. If one clan is affected by drought, grazing permission of another clan, usually the closest geographically and genealogically, is required. When on the move, every member is bound to demonstrate willingness of participation in defense and raids. In this way the main occupation of the members would require keeping and guarding the herds and particularly participation in raiding activities (Sweet 1970: 271, 272).

Studying some other African tribes, Cunnison added that it is not unusual for a tribe to be involved in agricultural activities in addition to animal husbandry. In such a case, duties of the members are carefully arranged so that cultivation of the fields is performed properly and on time, and livestock tended. Since the cultivation season is extensively dependent on rainfall, it is obvious that the timing of planting and harvesting is of utmost importance. For that reason the younger members of the clan would tend the herds and the adults would be engaged in agricultural activities (Cunnison 1970: 324, 325).

The cultivable land is divided among the families of the clan. Plots of land are transferable within the family from father to son and cultivated in that fashion. Members of an extended family usually cultivate their land close to

one another. When harvest time is over, herds are left in the fields for grazing, cultivating, and fertilizing at the same time. After the fields have been exploited, or due to the shortage of rain, the clan is forced to move on, searching for new cultivable land (Cunnison 1970: 333-339), or to put more emphasis on animal raising.

The tribal type of economy is best manifested in the system of production, distribution and consumption. With regard to production activities, they are based mainly on domestic or, at most, on clan units. It may happen that two or more clans or communities would combine their forces in production, usually where the labor demands exceed domestic size. When that happens, "it is almost invariably a matter of restricted cooperative exchange, often based upon affinal kin tie" (Fried 1975: 47).

In spite of the fact that some anthropologists deny any level of tribal economic activity (Fried 1975: 53), the tribal level of economic integration is much stronger in regard to the distribution of goods rather than in the production processes (Malinowski 1937: 232; Mauss 1966: 277; Sahlins 1972: 175), since it requires supervision and organization. In addition, storage of surpluses incorporated in a tribal framework plays a decisive role in understanding their social infrastructure. Related families cultivate their land close to one another and as a result would have a number of combined granaries, which would be

guarded interchangeably by dependable members (Cunnison 1970: 335).

It is obvious that the organization of tribal economic activities is not as necessary when food production, preparation, and consumption are considered. It is also evident that storage of surpluses, distribution, and to a certain extent trade, demand some kind of organizational activities that might be indicated in the tribal structure itself.

Structure of Tribe as a Sociopolitical Unit

Through the years of examination and careful study of tribal units, anthropologists have come up with several identifiers that would designate a tribal society. In that respect Raoul Naroll lists six criteria as follows: trait distribution, territorial contiguity, political organization, language, ecological adjustment, and social community structure (1964: 306-312). With certain modifications Gertrude Dole has suggested that name, awareness of unity, genealogical relationship, and cooperation in ceremonial, economic, or political organization are additional criteria for the concept of "tribe" (1968: 87).

Since it is difficult to apply all criteria to every single case, some anthropologists deny the existence of tribes in some parts of the world (Sharp 1958: 2-4). Furthermore, some have gone so far as to suggest that tribes

have never existed except for groups organized under the influence of recent acculturation (Fried 1967). Others have chosen to avoid the term, while not rejecting it altogether (Steward and Faron 1959: 17, 21).

Nevertheless, the term cannot be avoided, since it is widely used in the literature and designates a sociopolitical unit (Khoury and Kostiner 1990; Stein and Rothman 1994). It is used for ethnic groups, in contrast to states with centralized government (Dole 1968: 90), who are capable of forming a significant polity in uniting together for defensive purposes against intruders (Elkin 1938: 413, 414). Thus a tribal society does not represent a disorganized society without any form of cooperation, internal or external, but rather a politically organized body (Morgan 1878: 103).

In addition to patrilineal blood lines (common ancestor), other bonds are emphasized by a number of anthropologists to establish a mutual closeness within a tribal unit. Such a closeness "can be developed through cooperation with nearby households, mutual herding arrangements, kinship and patronage relations, and other bonds of mutual interest" (Eickelman 1989: 93). Furthermore, individuals or even smaller groups can attach themselves to tribal communities, or detach themselves from them (Kamp and Yoffee 1980; Cribb 1991: 52-55). In this case there is a certain degree of flexibility when closeness

is involved, and what counts "is who acts together in a sustained way on various ritual and political occasions" (Eickelman 1989: 93). In addition, "tribalism in the Middle East is best considered as one organizational principle in a dynamic and complex political environment" (Bates and Rassam 1983: 257).

Some anthropologists here failed to recognize any clear structural distinction between the concepts of "band" and "tribe." Both of these types are segmental organizations composed of loosely linked equivalent and internally homogenous units, with no overall hierarchical principle uniting them (Sahlins 1961: 322-345; Service 1962: 111-114). Nevertheless, it seems true that most of the groups that Service considers as "tribes" appear to be more complex and advanced than "bands" (Service 1962: 119-120). Moreover, his distinction is not based on the fact that the tribal units share a set of structural criteria that separates them from "bands" but rather on several other variables, such as: population density, stability or size, number of associations, political roles, or coordinated activities.

In addition to this approach, another quantitative approach has been proposed by Herbert Lewis. In his model he has suggested that this approach tells us more about the development of political structures and behaviors within a tribal unit. By this notion the understanding of a

sociopolitical structure of a tribal unit is broadened to the extent that "it may also mean growth in the scope of leadership and rule, greater competition between groups and individuals, greater diversity of organizational arrangements and political choices" (1968: 103).

Both approaches suggest that a tribe is a sociopolitical unit with an organized structure. As such, tribe tends to emphasize corporateness when dealing with outsiders. In this context, purpose and function of a headman or tribal chief come into focus (Barth 1961; Marx 1967; 1977; Bates and Rassam 1983; Eickelman 1989). Thus, they are capable of negotiating with representatives of other units, even states, as a single corporate entity. Furthermore, they may form alliances, wage wars with other tribes or even states. For the purpose of negotiation or war, tribal entities are "almost naturally competitive with a state form of political organization" (Bates and Rassam 1983: 267).

It is far from true that the tribal system of life belongs to disorganized and ununified groups of bands. The facts presented above rather suggest the opposite, emphasizing the notion that tribes are fully organized sociopolitical units operating within their region.

Tribe vs. State

According to most anthropologists, a state is the most advanced society on the scale of cultural and

sociopolitical evolution (Service 1962; 1975; Fried 1967; Wright 1977: 379-397; Flannery 1972: 399-426; Frick 1985). Their models have been followed by many, and the definition of a "state" might be summarized as

a type of very strong, unusually highly centralized government, with a professional ruling class, largely divorced from the bonds of kinship which characterize simpler societies. It is highly stratified and extremely diversified internally, with residential patterns often based on occupational specialization rather than blood or affinal relationship. (Flannery 1972: 403, 404)

In addition, the existence of a centralized state-society includes a potential for pluralism. It allows culturally distinctive groups to retain their ethnic differences, as long as they accept the authority of the central government. In this way, state societies involve acceptance of multi-ethnicity and pluralism as the major features of cultural identification (Cohen 1978: 399).

It seems that most anthropologists agree that cultural evolution unilineally progresses through several broad organizational stages. In spite of the fact that they all mostly agree on a final product (i.e., that the society developed from primitive ones--bands, tribes--to a more advanced state), their approach or concerns are slightly different. While Service is mostly concerned with changes in the social structure of societies (1962), Fried puts more emphasis on political organization (wealth, power, and political authority) (1967). Furthermore, Frick has stressed the importance of the systematic nature of

relationships between population, agricultural intensification, and socio-cultural change (1985). In this way, ethnoarchaeology has been employed in the process of state-formation discussion.

Another approach has been launched concerning the problem of socio/cultural evolution employing ecological succession, where succession is "a descriptive term referring to the classification of ecological systems in terms of increasing complexity over time" (Gall and Saxe 1977: 207). This idea introduces the concepts of energy, information, and structure in a systematic matrix. It also opens the way for the notion of what has been called "predatory expansion" (Sahlins 1961) in which one socio/cultural form is in some circumstances found to be better adapted than another.

Nevertheless, all of these cultural evolutionary models use the stages of integration in a ladder-like succession of structural phases, where each follows the preceding one. A model presented by R. N. Adams introduces the idea of coordination and centralization where both are integrated (1975: 209-211).

Either way, a majority of anthropologists believe that egalitarian societies (bands and tribes) belong to primitive societal models. In that case, state-society belongs to more sophisticated, advanced societal models, on the scale of evolutionary slow progress.

Recently anthropologists have questioned the reliability of traditional evolutionary typology (Yoffee 1993; Rothman 1994). Tremendous variability among increasing examples of society has lately been documented by archaeologists and ethnographers. This variability among the societies cannot be squeezed into the current stage models within one particular region (Feinman and Neitzel 1984). Considering the situation among several regions, the case seems to be the same. Furthermore, variability cannot be effectively classified by means of an integrated trait list where, if one trait is present (leadership), one can assume all the other traits (social stratification, coercive force, specialized production, market economy) must be present as well (Earle 1987: 279).

In addition, other anthropologists emphasize ethnographic or ethnohistoric cases as a basis for questioning the evolutionary typologies. Evolutionary steps or stages of society that developed through the course of history are not seen as realistic, but rather as an ideal type that has no existence in reality (Kohl 1987; Yoffee 1993).

Furthermore, the stage models ignore the more important variability in cultural change and fail to explain why societies change (Dunnell 1980). In this way they obscure and overshadow the boundaries between society's developmental stage (Wenke 1981: 86). Thus the dynamics,

functioning societies, and continuous trajectories of change are usually reduced to static, and therefore discrete inattention in the stage typologies (Rothman 1994: 3). By the "either/or" approach (either it is an egalitarian, or it is a state society), categories rather than actual societies become a major focus of the study, which is not acceptable (McGuire 1983: 93).

Obviously, the evolutionary stage, or step typology, of societies is not applicable in general, and in Middle Eastern societies in particular. Therefore tribal societies should not be considered as primitive and less advanced on the scale of development, but rather should be regarded as "not a single phenomenon, an undifferentiated whole, a peripheral social system or simply a stage in the evolution of human civilization" (Khuri 1980: 12), but rather as a sociopolitical force. Tribalism is rather "a persistent social and political force bringing together people for many different purposes, and doing so in the context of many different, competing, or alternative principles of alignment" (Bates and Rassam 1983: 258). Evidently, "what most distinguishes the Middle East politically is the persistence of tribalism coexisting with the state" (1983: 258; see also Tibi 1990: 127).

It has also been documented that tribal societies often existed within the state as a common and important factor (Rowton 1976c: 240; Tibi 1990: 127-152). Through

this model Michael Rowton launched a new idea considering the integration of state and tribal societies (1973a; 1973b; 1976c; 1977). According to him, tribal societies did not cease to exist when urban state-societies prevailed in the Middle East and Western Asia. The model that he studied and developed is based on "enclosed nomadism," which is defined as a stage on a dimorphic scale (Rowton 1973a: 202-204).

Basically, according to this model, the interaction of nomadism and agriculture, due to economic reasons, would result in a new complex society that would involve a sedentary population together with nomads "centered on a town in tribal territory" (Rowton 1973a: 202). These centers would serve as an economical and political nuclei from which societies would be governed.

Thus, the integration of nomad and sedentary resulted in a new political structure, where the polity itself would actually be a tribal confederation with a city-state at its core (Rowton 1976c: 222). In this respect a tribal leader or chief would partly reside in the town (Stein 1940: 10) or fortified residence (Malcolm 1829: 130; Stein 1940: 116, 210; Wilson 1941: 61), thus having a place of residence on both ends of the tribal migration routes.

Some prominent tribesmen, together with tribal chiefs, served as military commanders, as well as officials in civic government (Rowton 1976c: 228, 229; Tibi 1990: 139, 140). As such they would be required to live most of the

year in an urban center being deprived of nomadic activities. In this capacity they would serve in a dual role--as tribal leaders and as officials of the government responsible for levying taxes (Rowton 1976c: 231).

Through this model a diachronic perspective is highly recommendable, wherein tribal societies are encouraged to lean toward sedentarization as a link between tribal nomadization and urban sedentarization. In the same process, there is always a trend toward sedentarization and never in the opposite direction toward nomadization (Rowton 1976c: 236).

In spite of the fact that tribal societies tolerated and supported a state, they would rigorously react in case of a threat to their own safety (Malcolm 1829: 438). In addition,

throughout the history of western Asia those tribes which formed part of established territorial states have tended to reaffirm and strengthen their autonomy whenever the power of the central government weakened. In doing so the more powerful tribal confederations would begin to function as incipient autonomous states (Rowton 1976c: 240).

Furthermore, "they [tribes] constitute states within the state, with their own armed forces, and control of the territories over which they migrated" (Monteil 1966: 134).

Evidently tribal societies coexisted together with and within urban states in the past. In this case the role of a tribal society is slightly remodified to the extent that their ultimate power is somewhat limited in regard to

the usage of natural resources (water, minerals, etc.). That the tribal society maintains its basic structure and behavioral pattern when under the state is mainly due to its adaptability and flexibility (Tibi 1990: 127). Calamities that cause collapse of urban state societies do not leave such a drastic mark on tribal societies. As a result, when the state collapses, people tend to stick to their tribal affiliations.

Tribes, Nomadization, and Sedenterization

Usually a tribal society was regarded as one step below the state society on the scale of sociopolitical evolution, in which state societies are more advanced than tribal ones (Dole 1968: 83-100; Lewis 1968: 101-110; Fried 1968: 3-20; 1975). Under this condition a tribal society was strictly related to nomadism, while a state society to sedentary occupants supported by agricultural activities in addition to animal husbandry (cattle herding), where the cattle were used in the process of food production (ploughing, harvesting, and bringing the harvested crop home).

In addition, it was proposed that the tribal elite always tends to be sedentary oriented, and thus encouraged sedentarization on their tribal kinsmen (Rowton 1976c: 236). In this case, being sedentary is a higher, more prosperous and more advantageous system of life than that of nomads. Furthermore, the tribal elite were seen as some sort of

linkage between a sedentary population and nomads (Rowton 1976c: 233).

Historically, however, the above model is far from factual. While it is true that some tribes are mostly interested in animal herding, or nomadism, it is also true that some are agriculturally oriented (Awad 1959: 25-56). In addition, there is enough evidence to claim that in many instances the same tribe is considered seminomadic, and under this structure they are able both to tend animals and to cultivate the land (Awad 1959: 30, 31; Cunnison 1970: 315-345; Rowton 1976c: 233; LaBianca 1990: 39).

Nomads vs. Sedentary

As suggested above, it seems that sedentary activity (agriculture) mirrors a higher level of society on the evolutionary scale and therefore a more profitable one (Rowton 1976c). Nevertheless, as far as profit is concerned, it is recommended that, considering "the balance between the pastoral and agricultural sectors, . . . the growth capacity of the pastoral enterprises gives them an advantage over the agricultural enterprises" (Barth 1973: 17). This would imply that the wealth accumulated by nomads could give them predominance over the agriculturalists. Thus, it is to be expected that during the course of history, the population would shift not only from nomadic to sedentary, but the other way around as well, where "nomadism

[serves] as an answer to both economic and political pressures" (Gellner 1973: 9).

The tribal form of organization may have been found among both sedentary people living in permanently settled villages and among nomadic groups. Farming and herding are closely related economies appearing symbiotically in the ancient Levant (Gulick 1971: 99-100). Shifts from nomadic to sedentary life are seen as the means of fluidity of tribal entities to sustain life and prosperity. When the wealth of a nomadic household was accumulated it became advantageous for them to invest the wealth into different resources (such as land). Nevertheless, when drought or other environmental conditions resulted in crop failure, such households could return back to nomadic life (Barth 1961; LaBianca 1990: 40, 41).

It seems that economy played a key role in relations between nomads and sedentary tribes. It has already been suggested that political pressure determines whether a society will shift from animal raising to agriculture, or the other way around. When the great powers, Mesopotamia on the north, and Egypt in the south, were declining politically, militarily, and economically, the smaller regions that were sandwiched between had more space to increase their political independence, which generated economic growth and influence within their own territories (van der Steen 1995: 155). This, as a result, would provoke

an increase in permanent settlements, which would yield economic demands and prosperity.

In spite of the fact that political factors are of great importance, they alone could not be seen as the sole elements that triggered shifts in settlement patterns. Favorable ecological conditions (development of industries and mineral exploitation), population growth, in addition to environmental conditions (rainfall that would increase agricultural production), combined together with political factors are seen as decisive components that generated shifts from non-sedentary to sedentary populations, and vice versa.

In addition, food subsistence, which involves food production, storage, distribution, preparation and consumption, is a major component that would shape societal changes and formation in Transjordan (LaBianca 1987; 1990). Furthermore, food production serves "as a barometer of local level social organization" (LaBianca and Younker 1995: 402), where its variability directly reflects concepts of intensification and abatement. As the region's food production intensifies, it is obvious that its inhabitants would become more land-tied, resulting in increased agricultural activities. In this way, intensification of the food production is closely connected to permanent settlements and sedentarization of the region.

On the other hand, abatement usually occurs when inhabitants reduce and/or abandon agricultural activities in favor of nomadism and animal raising. As distinguished from sedentarization, this pattern requires more mobile residential patterns, where increased investments in livestock production generate an abatement of permanent settlements (LaBianca and Younker 1995: 402).

By this reasoning, maximal use of agricultural land and availability of water (see chapter 2) in the region would play a decisive role in shaping the regional communities. Since the Transjordanian region lacks any major river that would suffice for extensive irrigation, agricultural activities would strictly depend on dry farming.

Apparently the shifts in behavior and settlement patterns of the population that are caused by these environmental risks are best understood under the realm of tribalism (LaBianca and Younker 1995: 403). Only under the structure of a tribal society would the inhabitants of Transjordan be able to cope with such stress economy because

it appears to be a direct correlation between fluctuation in food system intensity levels, sedentarization, nomadization, local-level political organization (specially tribalism) and the larger world system (especially as seen in externally imposed supra-tribal politics) (LaBianca and Younker 1995: 403).

Role of Tribal Polities in Transjordan

During the sedentarization process, people settled in hamlets, villages, or towns. Further, it enabled people to increase their concentration to crop raising. This commitment to agriculture resulted in their attachment to particular pieces of cultivable land. It led further to the development of more continuous patrilineal genealogies, where the rights to cultivate particular plots of land would be passed down through generations as an inheritance. This more rigid lineage caused by sedentarization would develop stronger feelings of group loyalty and obligations as well. In this way tribal clans bound by the deep sense of common ancestry would clump together in villages and small towns, where clan sentiments would develop barriers (limited cultivable land, limited natural water resources) for outsiders to be incorporated (LaBianca and Younker 1995: 404).

On the other hand, pastoralization involved increased devotion of time to breeding herds of animals. Since pasturage is not available in one place throughout the entire year, pastoralism involves movement of herds and people from one place to another. As a result, people became less attached to one piece of land, and rather tended to put more emphasis on creating numerous personal networks and cooperative alignments with other people. By this they would obtain access to a wider area of pasturage and water

for their livestock (Peters 1970; Marx 1973). Because of these cooperative economic and political tendencies, more loose and flexible genealogies emerge. In this case, individuals who are members of these cooperative alignments may not share a common lineage (Marx 1967: 190; Lancaster 1981: 35, 151; Hiatt 1981; Eickelman 1989: 89).

This greater flexibility of genealogies among pastoral tribes resulted in the formation of larger corporate groups, which was not the case among the settled tribes (Barth 1964; 1973). Under these conditions, they gained a political advantage over the sedentary tribes who were settled in small hamlets and villages that were controlled by non-sedentary tribes (Barth 1973: 17). In this way, the villagers were "enmeshed in various ways under the more inclusive organizational structures of the more nomadic tribes" (LaBianca and Younker 1995: 404).

Due to economic demand combined with favorable environmental and political conditions, tribal polities in Transjordan were able to shift successfully from range-tied (nomadic) to land-tied (sedentary) household modes. Contrary to the opinion that tribalism is related only to nomadism, while sedentarization is seen as a higher sociopolitical level (Rowton 1973a; 1973b), it is apparent that both sedentarization and nomadization were common devices successfully used by the tribal polities in Transjordan (Awad 1959: 26-32). In addition to strictly

nomadic and sedentary groups, seminomadic and semisedentary groups lived together in various ratios at the same time throughout history (Gubster 1984: 24-25).

Nomadism should not be regarded as a lower stage on a societal and political scale but rather as "an answer to both economical and political pressures" (Gellner 1973: 9). Thus when environmental and political conditions became favorable the people of Transjordan tended to shift toward sedentarization, which involves permanent settlements and agricultural production. On the other hand, under the "stress economy" caused by political oppression or drought, tribal polities tended toward nomadism as a safety device for subsistence of life.

Role of Supra-Tribal Polities in Transjordan

Due to a defensive reaction to some external political threat, centralized forms of political government among tribal societies would be typically brought into existence. In addition, the common goal of unity and mutual economic prosperity would be initiated by the centralized powers, where tribal leaders would coalesce around the monarch forming a supra-tribal council. In this case the king was seen and considered as a sort of "sheikh of sheikhs."

Throughout the history of Transjordan, supra-tribal polities co-existed with indigenous tribal entities (Bates and Rassam 1983: 264-267; LaBianca 1990). This, however,

resulted in a more organized expansion of natural resources, an organized trade system controlled by government agencies, and control over trade routes. Organized control of production by the urban-controlled bureaucratic agencies was forced to compete with already-established tribal systems of economy. In addition to food-production activities, organized craft production, together with other specialized forms of activities (art by the means of sculpture, poetry, music, pottery), would be greatly encouraged. Production of these specialized craft components and market demand would have to be administrated by the central powers.

Nevertheless if local production came under stress, then local producers would have to spend more time in food-production activities and less in craft work. This would result in a decrease of craft products by which the administrative gains would be deeply affected. If the stress deepened, than the flow of subsistence products would also decrease. Furthermore, the decrease of centrally produced goods would cause a drop in income, and therefore, signal a managerial crisis. Such a deficit developed by the decrease of products, would motivate either reforms, internal rebellions, or diversionary aggression toward other regions (Wright 1994: 69). When the centralized government collapsed, "the tribally based systems [would] have reemerged to take full control again" (LaBianca and Younker 1995: 405).

The fact that nomadism and sedentarism are deeply rooted and present in tribal societies of Transjordan enables these tribal entities to survive through the collapse of the central government. This is because those households that maintain a nomadic way of life during the centralized expansion remain as preservers of know-how, which would serve as a survival device and reservoir of skills for their sedentary tribesmen in the time of economic collapse. Their flexibility to adapt a sedentary way of life when economic conditions are favorable, and to shift back to nomadism when these conditions become hostile and central government fails, is what has enabled the Transjordanian tribes to survive throughout history.

Summary

Similar components embedded in the definition of terms ethnicism and tribalism indicate a close relationship between the two (Tibi 1990: 137-143). These are seen in the common ancestry, cultural traits (customs, religious practices), and strong internal ties that are implied in mutual support and dependability among the members. In both ethnic and tribal communities outsiders are usually accepted on an individual basis in compliance with certain requirements (complete acceptance of all cultural traits, total commitment toward the group, honoring the leaders, and acceptance of religious ideology as well). The gains for such an outsider are seen in the fact that he/she would be

treated in the same manner as any other member who was born into the group. Blending into the group would provide for such a person complete security. Furthermore, wealth and prosperity gained by the group would not be denied to any member of the group, regardless of how membership was acquired.

The personal security of every member of a tribe is emphasized by its political structure. Tribes are, in most cases, organized groups with an elder or chief at the head whose responsibilities are, on the one hand, to serve as mediator between two quarreling parties, and on the other as coordinator for economic growth and prosperity of all the members. With its organized sociopolitical structure they should not be regarded as more primitive societies on the evolutionary scale of societies. Tribes are seen today as societies co-existing alongside and within the modern state. This fact supports the suggestion that tribes existed for a long period of time in the history of humankind. As such they were able to adapt and successfully use sociopolitical and environmental conditions to their advantage when opportunity for economic prosperity arose. For this reason, nomadic and sedentary ways of life were accepted widely by various tribal households who used these modes according to their needs and economic opportunities.

In this respect, environmental and political conditions played a decisive role, at least for Transjordan.

Availability of rainfall and fertile soil would encourage the formation of permanent settlements and agricultural activities. Since the annual precipitation decreases toward the south, agricultural production would be safe, to a certain extent, only in the territory of Ammon, while Moab and, even more, Edom would face greater risk factors in production of barley and wheat.

In a time of unfavorable political and environmental conditions (heavy taxation, drought, pestilence) the population of Transjordan was able to shift from sedentary to nomadic ways of life because there were always fellow tribesmen who maintained nomadic skills and served as reservoirs of essential knowledge of how to survive. This capability helped them survive through all the political difficulties caused by numerous adversaries, as well as by many unfavorable environmental conditions through many past centuries.

CHAPTER IV

LITERARY EVIDENCE

Present archaeological data strongly suggest that Transjordan was settled throughout "Glueck's gap" (ca. 19th-12th century B.C.), and that the settlements were occupied by tribal societies. Throughout chapter 3 it was demonstrated that the tribal societies were flexible enough to decompose into small units and consolidate into large ones depending on the political pressures and environmental conditions. As such they were able to create a formidable force to confront intruders in protection of their settlements, land, and people.

Nevertheless, the question still remains whether or not this model could be accommodated by the available literature. Unfortunately very little literary evidence has been found that can be dated to the Late Bronze and Iron I Ages. It seems that the settlers in that region were either illiterate, literate but chose not to leave written records, or their records have not yet been discovered by excavations. Because there is no contemporary epigraphical evidence, we must rely on written sources from neighboring regions.

The only available data derive from Egyptian documents and the Hebrew Bible. It seems that the Egyptian inscriptions tend to suggest that the peoples the Egyptian armies encountered were nomads, most likely organized in tribal societies. These documents disallow any speculation that the societies in Transjordan could have been urbanized (state level) societies.

At first glance it appears that the biblical account demands a strong centralized government with a ruling monarch at its head. In spite of the fact that the Bible refers to kings, cities, and armies, it is necessary to investigate and study these terms in order to determine whether or not the account demands an urban society. In addition, other terms (tribe, alder, chief, clan, family) are also applicable to this study.

Biblical Text

Although the Bible is considered by some to be of secondary importance concerning our knowledge about history of Canaanite cultures (Van Selms 1958: 182-184; Miller 1992b: 88), it still remains as the most important source in regard to the reconstruction of Transjordanian history (Van Zyl 1960: 4).

Origin of Transjordanian Nations According
to the Biblical Text

Ammonites

According to the biblical text the Ammonites were descendants of Lot by his younger daughter. In Gen 19:38, the phrase **בְּנֵי עַמּוֹן** ("sons of Ammon") is used for the first time. The same word pattern is common in the biblical text for other peoples such as, **בְּנֵי יִשְׂרָאֵל** ("sons of Israel"), **בְּנֵי לוֹט** ("sons of Lot"), **בְּנֵי שְׂעִיר** ("sons of Seir"), and **בְּנֵי חֶת** ("sons of Heth"). However, D. I. Block suggests that of these, only **בְּנֵי עַמּוֹן** is to be translated in its gentilic form, i.e., "Ammonites," rather than "sons of Ammon" (1982: 183-195; 1984: 211).

In the LXX version, an explanatory phrase (**υἱός γένους μου**, "the son of my family") was apparently added to resolve etymological problems of the word **עַמּוֹן**. Nevertheless, for some theologians the etymology of the word is still uncertain (Buttrick 1990: 633), or even pointless (Skinner 1951: 315), while others have made attempts to suggest its origin. Some have seen its origin in **DY** as the epithet of an associate deity (Fuerst 1867: 1064), or it even may have been **עַמִּי**, the name of a local divinity (Derenbourg 1880: 142). Ludwig Koehler suggested that **עַמּוֹן** is nothing more than variance of **DY** and, consequently, **בְּנֵי עַמּוֹן** should be translated as "sons of my people" or "sons of my kinsmen" (1945: 154-156). To support his view, he listed a variety of terms with various suffixes that do not

change the meaning of the shorter forms. Nevertheless, his views were challenged with an argument that the common practice of the past was indeed favorable where people were named after their common ancestor (Stamm 1949: 382; Landes 1956: 12; Younker 1994a: 295, 296). In that case אֲמֹנִי cannot be interpreted different than the "Ammonites."

Moabites

The word מֹאָב is used for the first time in the story of Lot and his two daughters, and recorded in Gen 19:30-38. The LXX, again, offers an additional explanation to this incident, saying that the name means "from my father" ($\epsilon\kappa\ \tau\omicron\upsilon\ \pi\alpha\tau\epsilon\rho\acute{o}\varsigma\ \mu\omicron\upsilon$). In the Hebrew language, the same phrase is מִן־אָבִי , which has produced the traditional understanding of the name.

Since the beginning of this century different suggestions have been given by various scholars as alternatives to the traditional view. According to A. G. Smith the name Moab should be associated with the Hebrew word מְבֹ , the participle form of which would be מֹבֵב , meaning "the desirable" (1902: 3166). K. Vollers suggested that the name is a compound of בַּ , meaning water, and מֹב , meaning father (1908: 237), or is connected to some Arabic cognate, such as ma'âb, meaning "the land of sunset" (1908: 237-240). A few decades later, E. D. Grohman came upon the idea that the origin of the name should be seen in Shemu-'abu(m) prince of "Upper Shutu" found in the Egyptian

Execration Texts (1958: 39-48). Maxwell Miller basically agrees with this proposal with the addition that Shemu-'abu(m) was a dynastic name applicable to the people living east of the Dead Sea (1989b: 1; 1992a: 882).

Regardless of the diversity of opinion concerning the origin of the name, the biblical evidence strongly suggests that Moab was the son of Lot by his older daughter, and consequently became the forefather of the Moabite nation (Gen 19:37).

Edomites

Following the biblical text, we are informed that DYN is for the first time mentioned in Gen 25:30, and is actually the second name of Esau. Even though the etymology of the word is difficult to grasp, some would propose that the name is to be associated with the word 'DYDN, found earlier in vs. 25 meaning "red" (Buttrick 1990: 665; Bartlett 1992a: 287), while others would point rather toward the word DYN as an older form of DYN (Baethgen 1888: 10).

The origin of the text has been disputed ever since the 19th century (Nöldeke 1899: 1182), and was presented to the biblical reader as "a memento of the greed and stupidity of [the Edomites'] ancestor" (Gunkel 1966: 297). The name originated among Transjordanian herdsmen (Noth 1972: 98), and the equation of Edom with Esau "is the late product of a secondary combination" (1972: 95). Esau is rather identified with the Phoenician mythic hero Usoos (Tiele

1869: 447), or with the desert goddess Asiti, mentioned in two Egyptian inscriptions (Müller 1893: 316). In both cases, the equation of Esau with Seir is more plausible than with Edom (Maag 1957: 422). They were identified with Esau no earlier than the time of David, when he conquered the Edomites (Wallis 1969: 21; Mayes 1974: 109; Bartlett 1977: 17; 1989: 85; 1992a: 288).

The word **דַּיָּן** is again identified as the second name for Esau in Gen 36:1. The fact is that in this chapter alone, the same word is used four times more (vss. 8,9,19,43), and every time is connected to the name of Esau. In fact, two times we are told that Esau is the forefather to the Edomite people (vss. 9, 43). By doing this the author attempts to emphasize the fact that there is no doubt in his mind regarding the Edomite genealogy.

Sociopolitical Terms in the Bible

מֶלֶךְ, Its Terminology and Application

The Hebrew word **מֶלֶךְ** is one of the most commonly used nouns in the Bible. The *Englishman's Hebrew and Chaldee Concordance to the Old Testament* has used 31 columns (85 entries per column) to demonstrate its wide usage. According to Abraham Even-Shoshan the word **מֶלֶךְ** appears 2698 times in the Old Testament (1984: 665-672) in its basic form. It probably derives from the root that might be

translated as "counselor," since the Aramaic cognate verb means "advise, counsel."

The word מֶלֶךְ is most commonly translated as "king," but certainly has a wider range (Millard and Bordreuil 1982: 139). It is used in the Bible and other literature to designate Hebrew and Gentile rulers, as well as a title for the Divinity. The title is given in the Bible to a variety of rulers. Its meaning in antiquity is similar to today's, but its application is significantly different. The word might apply to an emperor (such as Nabuchadnezzar; Jer 46:2), an emperor's vassal (such as Jehoiakim, king of Judah; Jer 46:2), or even to a chieftain of a small city-state (such as the Canaanite and Philistine towns; Gen 14:2-8; 20:2; 26:1,8; Josh 10:1-3). It might also be used for a joint rulership, triumvirate (Balshazzar; Dan 5:11), or as a subordinate governor of a province (Darius as a ruler over Babylon under Cyrus emperor of Persia; Dan 5:30) (Culver 1980: 508; Payne 1936: 21).

The "Kings" (מְלָכִים) of Edom

The "kings" of Edom appear in Gen 36:31-39, and in 1 Chr 1:43-51. Apart from the misspelling of the last "king" (מֶלֶךְ-Gen; מֶלֶךְ-1 Chr), the list is identical. In addition, Genesis does not mention that the last "king" died, while 1 Chr 1:51 states that this "king" also died.

According to the discussion above it appears that the word "king" (מֶלֶךְ) would apply to more than a ruler of a

settled, unified, national monarchy. The probability that the "kings" did not rule over all Edom brings forth a new understanding of the title "king." The phenomenon of tribal "kings" (מלכים) or "chiefs" (שׂיאים) was well known and documented in the ancient world. For example, the Assyrian King Lists mention 17 kings who dwelled in tents (Gelb 1954: 223).¹ Further, the royal archives from Mari appear to discuss the defeat of several semi-nomadic tribal kings (Sarna 1989: 409).² The Mari texts also describe people groups such as the Haneans and Yaminites who were known as seminomadic people having kings (Malamat 1959: 67).³ The Bible writers, too, at times seem to use "king" in this restricted tribal sense. The five defeated Midian leaders

¹There are two almost identical Assyrian King Lists in existence. One is known as Khorsabad King List (Khors list) and another as Seventh-day Adventist Seminary List (SDAS list). In the first 9 lines on the Khors list and the first 8 lines on the SDAS list there are 17 names. They are as follows; Tudija, Adamu, Jangi, Kitlamu, Harharu, Mandaru, Imsu, Harsu, Didanu, Hanu, Zuabu, Nuabu, Abazu, Belu, Azarah, Ušpia, and Apiašal. The 10th line on the Khors list and the 9th on SDAS list state the following: "PAB 17 LUGAL.MEŠ-a-ni a-ši-bu-tu kul-ta-ri" meaning "Total of 17 kings who dwelled in tents."

²Unfortunately Sarna does not give any primary data to support his statement.

³In his dedication of the Shamash temple, Yahdun-Lim speaks of his military success over Haneans whose rulers built a city called Haman. There were five tablets found by A. Parrot in 1953, and the reference to Hanean rulers appears at the end of the 4th tablet. Later, during the reign of his son Zimri-Lim, a letter was written by the governor of Nahur. Line 35 of the letter states: "Se[nd] me your messengers and lay your full report before me, and then I will have the kings of Yaminites [coo]ked."

are called "kings of Midian" (מלכי מדין), and mentioned by name (Num 31:8), while the same persons are also known as "chiefs of Midian" (שׂיאי מדין) (Josh 13:21). Apparently it is not a coincidence that the land of Midian was occupied by five tribes (Gen 25:4). In this light, שׂיאי should be understood as "tribal chiefs and representatives" (Brown, Driver, and Briggs 1981: 672).

Therefore, the King List of Gen 36 does not require a settled, unified, national monarchy under a strong centralized bureaucracy. Those rulers were nothing more than local tribal leaders. That is the reason for every king being assigned to a different territory without leaving any dynasty after them, just like the appointed Judges of Israel.

Balak מלך ("King") of Moab

Even though the Moabites were subdued by the Amorites, and they did not have any possession north of the Arnon at the time of the Exodus (Num 21:26), it appears that an enclave of Moabites operated in the Jordan Valley opposite Jericho (Num 22:1; 26:3, 63; 33:44, 48, 49, 50; 35:1; 36:13). They may have been territorially connected by the mountain chain on the eastern side of the Dead Sea. Existence of this enclave supports the idea that the Moabite kingdom was not ruled by only one monarch with a strong centralized government, but rather by tribal kings or chiefs who reigned over only a smaller territory. That is perhaps

the reason why the Israelites still found themselves in the land of Moab after avoiding their territory south of the Arnon.

Balak, the king (מלך) of Moab (Num 22:4) or rather the tribal chief of that enclave, feared that the Israelites might take possession of his land, too. Apart from the coalition with the Midianites who were Moabite allies (Num 22:4), there is no biblical evidence that the Israelites came into a conflict with Balak (Judg 11:25).

The "king" (מלך) of the Ammonites

Here, in Judg 11, for the first time an Ammonite king is mentioned, 300 years after the Exodus (vss. 12, 26), which is the opposite of what one would expect. Because of natural environmental factors, sedentarization always appears first in the north (Ammon), and spreads toward the south (Moab, and last, Edom). The biblical text indicates that the Edomites (Num 20:14) and Moabites (Judg 11:17) had kings at the time of the Exodus. This fits well in the context according to the understanding of the meaning of the word "king" as "a head of a tribe" (Knauf 1992: 49) rather than of an empire or a state. Even though an Ammonite king is not known to us prior to the time of Jephtah, tribal leaders of Israel were seen as an equal counterpart to tribal kings of the Moabites or the Edomites. In this light, the Israelites did not need to establish a monarchy

under a king, but rather they chose to find a leader (Jephthah) to defend the land against the Ammonite king.

Eglon the "king" (מֶלֶךְ) of Moab

According to Judg 3 the Moabites gained control over a portion of land on the western bank of the Jordan River. The Moabites were ruled by the "king" (מֶלֶךְ) Eglon who apparently captured Jericho (Judg 3:12,13). After 18 years of oppression God appointed Ehud to deliver Israel. In this instance, too, a tribal-level leader, instead of a monarch, was sufficient to deliver Israel from the Moabite king.

In the light of the material discussed above, it is obvious that the term מֶלֶךְ ("king") does not demand a title for an established monarchy with a strong centralized government. It may also be applied to a leader of a tribe or a group of people. The fact is that the word "king" should not be understood in its narrowest sense, but rather the broader meaning must be employed, especially when dealing with societies such as, Ammon, Moab, and Edom.

אֵלֹף (Elder, Chief)

The word אֵלֹף is used 31 times in Gen 36 alone, and its frequent usage is of striking importance. According to J. Fuerst, its denominative form means "heads of a family or tribe" and is "applied to the heads of the Edomites in particular Gen. ch. 36" (1867: 97). The same word appears

in Exod 15:15 and is parallel to מִלְּךָ, having a similar meaning. It may be related to the Ugaritic or Northwest Semitic מִלְּךָ, meaning "prince," or "thousand," respectively (Bartlett 1989: 90). In addition, מִלְּךָ may also mean a "tent group," "family" (Petrie 1911: 43), or "clan" (Sarna 1989: 250). W. F. Petrie was followed by Mendenhall who expanded the meaning to a "sub-section of a tribe," used in the Old Testament (Mic 5:1). It may even mean a "contingent of troops" sent to war on specific occasions (Num 1:16; 10:4; Josh 22:21) (Mendenhall 1958: 52-66). Nevertheless, the context of Gen 36 would strongly suggest that the word מִלְּךָ here should be understood as the "chief" or "head" of a clan or family--a conclusion that is accepted by the majority of translators. In the line of this understanding, it is evident that the term מִלְּךָ refers to a ruler of several extended families or clan, while the term מֶלֶךְ refers to a chief or ruler of several clans, or tribe.

עִיר (City, Town) and Related Terms

The Hebrew term עִיר is used in the Old Testament 1092 times (Even-Shoshan 1993: 858-862). Its synonyms קְרִיָה and קָרָת are used less frequently. They are usually used in poetry, while the term עִיר is used in both narrative and poetry. Usually it is related to walled and/or fortified places since its verbal form (עוּר) means to surround, encircle, and enclose. It is translated as πόλις in the LXX, but is radically different from the Greek idea of

"city." In its developed form, the use of πολις has taken a political meaning, whereas the focus of קָו is on protection (Schultz 1980: 664). Nevertheless, Hermann Strathmann argues that the term πολις was never used as a political concept in the New Testament. It represents "an 'enclosed place of human habitation' as distinct from uninhabited areas, pasturages, villages and single houses" (1977: 530).

The Old Testament usage of קָו is not restricted only to strong fortified centers but it may also indicate any form of enclosure formed by a ring of adjoining houses. Thus, size and population are not a determinant of city status (Myers 1979: 705). In addition to walled cities and towns (עָרִים בְּצִוּרֹת), the term קָו is also used together with אֲרָץ ("unwalled"), indicating the existence of unwalled cities (Deut 3:5).

The term בְּצִוּרֹת comes from the word צָר , which literally means "cut off, separate" (Lev 25:5). Jeremiah employed the term to express a motion of enclosedness or inaccessibility in terms of understanding (33:3). The niph'al form of the term is used in Gen 11:6 and Job 42:2 in the context of being restrained or made inaccessible. The term is used in the piel form in the expression "strengthening walls" (Isa 22:10), as well as the idea of "fortifying a stronghold" (Jer 51:53). Evidently, when the term צָר is used in connection with a settlement it served

as an identifier for a place being separated, walled, or fortified.

The term **פְּזוּז** comes from the root **פָּזַז** (to scatter). Its literal meaning is "hamlet-dweller, inhabitant of a flat or leveled land." When used in connection with a city, the term determines the state of the city (unwalled, or unfortified). Both terms, **בְּצוּר** and **פְּזוּז**, are sometimes used together as opposites (Deut 3:5) distinguishing between fortified and unfortified or walled and unwalled cities.

Finally, while A. R. Hulst states that nothing definite can be said about the basic meaning of the term **עִיר**, Fuerst indicates that, in addition to its traditional meaning as a place encircled by a wall, the term might also mean "a place of encampment, a village, a hamlet, a nomad village or encampment" (1867: 1044).

שֹׁטֵט, מִטָּה (Tribe)

The Hebrew terms **שֹׁטֵט** and **מִטָּה** are used 190 and 251 times in the Old Testament, respectively (Even-Shoshan 1992: 1104, 1105; 646, 647). The word **מִטָּה** is also translated as a stick, or a rod staff (Exod 4:2; Num 20:9). Sometimes it is especially applied to the rod of a king, scepter (Ps 110:2), or to a soldier's spear (Hab 3:9,14,; 1 Sam 14:27). The word **שֹׁטֵט** is also translated as a stick, for striking and chastising (Isa 10:15,24; 14:5; Prov 10:13; Job 9:34), a shepherd's crook (Lev 27:32), a scepter of a king (Gen 49:10), a measuring rod (Ps 74:2), and a spear (2 Sam

18:14). Both $\eta\tau\lambda$ and $\upsilon\lambda\psi$ are used interchangeably and are both translated "tribe," 215 and 89 times, respectively. The original meaning of both terms is "rod, staff" implying a shepherd's implements (Ps 23:4), or a walking stick (Gen 38:18).

In most cases the terms indicate individual tribes of Israel (1 Kgs 12:20; Exod 31:2), but may also refer to all the tribes together (Deut 33:5; Num 31:4; Josh 4:5,8) as a distinction from other peoples living around them. In addition, other phrases are not excluded such as "tribe of the fathers, ancestral tribe" (Num 1:16, 47; 33:54), and "tribe of your father" (Num 18:2).

The LXX used $\phi\upsilon\lambda\eta$ as the equivalent of the two Hebrew terms above, and is used to refer to the similar types of reality. The Greek term $\phi\upsilon\lambda\eta$ is also used by the New Testament writers to indicate the same phenomena. In addition, *A Greek-English Lexicon* translates the term $\phi\upsilon\lambda\eta$ as "a race, tribe, a union formed in an organized community" (Liddell 1973: 1961).

Obviously the Old and New Testament writers indicate that a tribe is composed of a people who are united by the ties of blood and descent, by local habitation, and can form a military contingent to stand against any threat to their territory.

משפחה (Family, Clan)

The term משפחה is used 303 times in the Bible (Even-Shoshan 1992: 721, 722) and represents tribal subdivision. It derives from the root שפח meaning family or clan (Klein 1987: 394). Sometimes, the term משפחה is used to designate genus or kind of animal (Gen 8:19), and kind of destroyers (Jer 15:3). It is commonly translated as "family" by some Bible versions (RSV). However, this translation is not the most appropriate in all instances because the term משפחה "could comprise quite a large number of families. It was a unit of kinship, but of far wider scope than the English word 'family' denotes (except metaphorically)" (Wright 1992: 761).

The term is best represented in Josh 7, where it seems to demonstrate a second level, or subdivision, on the scale of tribal organization, and is comprised of several extended families. It is clearly used to distinguish a kin group more extensive than a family. Members of a clan are generally united by blood ties referred to as a common ancestor. In addition to blood ties, other factors (families sharing the same geographical region, assimilation of weaker families by stronger, cooperation of several weaker families to form a strong front) play an important role in clan formation (Wyper 1979: 716).

The term משפחה, according to Gottwald, stands for protective and restorative purposes (1979: 257-268). The

primary focus of this formation is the **גֹּאֵל** (redeemer) whose duty is to avenge the murder of a kinsman (Num 35), raise a male heir for a deceased relative (Deut 25:5-10), to redeem a lost plot of land (Lev 25:23-28), and to maintain or redeem a person or the dependents of a kinsman in debt (Lev 25:35-55). From this, it is evident that the **מִשְׁפָּחָה** existed for the good of constituent families. "These functions were all restorative in that they were emergency means to restore the normal autonomous basis of a member family" (Gottwald 1979: 267). In addition to the restorative and protective function, every clan was explicitly linked to military activity, where it was obliged to provide 1,000 soldiers (Num 1 and 26).

בֵּית אָב (Father's House)

The term **בֵּית אָב** covers a household or extended family. It may consist of grandparents, parents, children, and even unmarried uncles, aunts, and cousins. Sometimes the term is used synonymously for a tribe (Num 17:2). Usually this extended family is an exogamous unit, meaning that the marriage is outside the family, but within the clan (De Geus 1976). It is possible that a **בֵּית אָב** could contain 50-100 persons (Josh 7; Judg 6) (Wright 1992: 762), and therefore "it is likely that the spatially isolated clusters of dwellings-compounds-housed the minimal [בֵּית אָב]" (Stager 1985: 22). The **בֵּית אָב** is usually patrilineal (only sons are

recognized, while daughters by marriage belong to the household of their husbands).

The land should always remain within the family and could not be sold permanently outside the family. The only legal method allowed in the Old Testament where the land could change owners was by inheritance within the family.

An essentially inalienable piece of land possessed solely by a gentilic unit, whether large or small; hence, this land could not, at least in theory, be sold to any would-be purchaser, and its transfer from one owner to another could only be effected through inheritance. (Malamat 1962: 149; see also Anderson 1969: 35-37; de Vaux 1961: 253, 254)

Daughters could inherit the land only in absence of sons, but they had to marry within their clan (Num 27:1-11; 36:1-12).

It seems that Israel's system of economy was geared toward economic survival on every scale. Thus not only the wealthy elite but the lowest socioeconomic units (the family) remained protected on their patriomial land.

Clearly, these sociopolitical terms mentioned above suggest that the society described in the biblical account was tribal in character. Even the term "king" when understood in its wider context does not require centralized monarchy but rather could be applied to "lord," "prince," or "chief." In this light all these "kings" mentioned in the time of the Exodus and settlement were nothing more but tribal rulers. In the same argument, the term "city" does not apply only to well-protected, walled settlements but

could be related to small unwalled villages as well, indicating semi-nomadic, or even nomadic encampments.

The social structure of a tribal society, as suggested by the biblical account, is a kin-based society, in which various clans and extended families within clans cooperate on social, political, and economic bases. Thus, all segments of the society are well protected and their survival is guaranteed on every scale.

Genealogy of Edom

Throughout the last two centuries there have been many attempts to identify some of the names mentioned in Gen 36 (Wellhausen 1870: 28-30; Moritz 1926: 81-92; Albright 1957: 126-128, 210; Bartlett 1969b: 1-20; Aharoni 1979: 245). According to their interpretations, at that time the Edomites already had kings or chief-leaders, and the text was composed in a very late period, ca. sixth century B.C. (Knauf 1985: 245-253.). Since the text contains what appears to be an Edomite king list, Knauf argues, it was composed during the post-monarchic period of the early Persian empire. Nevertheless, he was challenged by J. R. Bartlett on the basis that Amos (1:12) knew of Teman and Bozrah, and therefore, the composition must be of an earlier date, ca. eighth century B.C. (1977: 10-12; 1989: 100). Perhaps, Bartlett suggests, the list was composed at the time of Uzziah and was edited during the seventh century B.C. by the Deuteronomistic historian who probably used two

groups of material (1989: 101). Based on the Song of Moses recorded in Exod 15, with its mention of the chiefs of Edom (vs. 15), D. N. Freedman came to the conclusion that the Edomites existed well before the 12th century B.C. (1975: 9; 1987: 315-335). In addition, J. Skinner proposed that the Edomite monarchy started about 200 years before David (1951: 435).

All the above suggestions for the date of the Edomite King List are based on the presupposition that the presence of kings requires established centralized monarchies with their fortified capitals. Since the present archaeological discoveries cannot provide any evidence for strong centralized city-states with established kingdoms, the date of the list was suggested to be of a later time. Nevertheless, in the light of the discussed material above concerning the sociopolitical terminology in general and "kings" and "cities" in particular, it is obvious that the list could have been created any time during the Late Bronze Age (ca. 1550-1200 B.C.)

The Character of the Edomite King List

Special attention has been paid to the Edomite king list of Gen 36:31-39 (Bartlett 1965: 301-314; 1989: 94-102; 1992a: 14). The text states that these are "the kings who reigned in the land of Edom, before any king reigned over the Israelites." This could simply mean before the monarchy

of Israel was established, as accepted by most scholars, and thus it refers to King Saul. Others suggest that this means before any Israelite king ruled over Edom (Buhl 1893: 47; Skinner 1951: 434; Simons 1959: 24, n. 9), which implies King David. Either way, C. Westermann indicates that this may have been an insertion done by the court of David or Solomon (1987: 251), and H. M. Morris suggests it was the prophetic expression of the author, based on Deut 17:14-20 (1976: 530).

From an analysis of the King List, it is obvious that two formulas were followed (Desnoyers 1922: 71, n. 2): (1) וְשֵׁם עִירוֹ "and the name of his city was" (Bela, Hadad, Hadar), and (2) מֵ "from" (Jobab, Husham, Samlah, Shaul). Bartlett suggested that an editor used two different sources to create the list (1965: 302). In addition, scholars have struggled with identification of these names, whether personal or place, for decades.

Bela has been suggested to be Balaam (Nöldeke 1869: 87; Meyer 1906: 376; Gressmann 1913: 318; Kittel 1923: 320). This comparison makes sense since his city, Dinhabah, is identified by Jerome and Eusebius either with Dannaia, located about eight miles north of Aeropolis toward the Arnon, or with Dannaba, located in the hill country west of Hesban, north of Arnon (Klostermann 1904: 76). If this identification is correct, then Dinhabah is deep in the Moabite territory.

Hadad's city, Avith, has been associated with some hills known as el-Ghoweythe (Burckhardt 1822: 375; Lury 1896: 26; Desnoyers 1922: 70; Gunkel 1966: 394; Bartlett 1989: 97). These hills are also located in Moab.

The third king that belongs to the same formula, "and the name of his city was," is Hadar and his city is Pau. According to the LXX, Pau is replaced by Φογώρ in Num 23:28, and known to be in Moab. Again, Eusebius follows this version and suggests that its location is to be found in the mountains of Moab (Klostermann 1904: 168). There are some other vague speculations on the name Mezahab, grandmother of Hadar's wife. It was suggested that Mezahab is a place rather than a personal name (Marquart 1896: 10; Meyer 1906: 375, 376). Following this hypothesis, Hadar and his city would certainly be placed in the territory of Moab.

When considering the other group of kings included in the formula "from," the situation seems to be more promising. Identification of Bosrah is universally accepted among scholars as Buseira, located some 35 km south of the Dead Sea (Bartlett 1989: 98). The land of Temanites may be identified as Wadi Hisma (Clermont-Ganneau 1906: 464-471), or it was an oasis of Teima toward northwest Arabia (Knauf 1985: 249-250). In addition, Nelson Glueck would suggest that Tawilan is to be recognized as ancient Teman (1940: 24), yet others would see it as Shobek (Klostermann 1904: 96; Simons 1959: 404; Buhl 1983: 31). In any case, the

southern region of Edom is generally accepted as the land of the Temanites (Bartlett 1989: 40, 99).

Masrekah, the city of Salmah, is etymologically connected to a vine-growing region in northern Edom according to E. Meyer (1906: 373), or to be more precise, in Gebalene, for E. Klostermann (1904: 124). According to B. Moritz and J. Simons, the region of modern Jebel Mishraq, between Ma'an and Aqaba, is the most plausible territory for biblical Masrekah (Moritz 1937: 101; Simons 1959: 390). The realm of Shaul of Rehoboth is placed in the northwest corner of Edom by Bartlett (1989: 50-51,99), or more accurately near modern Khirbet Rihab, just south of Wadi el-Hesa, according to Simons (1959: 391).

There is one more king to whom the name of a city is not attached. Whether the tradition concerning Baalhanan is an isolated fragment inserted later in the list as suggested by Bartlett (1965: 309), or whether his city was Rehoboth, the same as Shaul's, is impossible to ultimately determine at this time.

Following the major stream of thinking, the first group of three kings belongs to the territory of Moab, while the second group of four kings belongs to the land of Edom. In the latter case, it was proposed that they reigned over the four corners of Edom (Bartlett 1965: 311; 1992a: 289). The difficulty concerning the equation of Edomite kings with Moabite territory is more than obvious. The idea that the

Edomites ruled over a wider territory during the reigns of those three kings is misleading and without historical or archaeological support. In addition, the biblical tradition would not allow such an idea, either. The suggestion that it is possible that those cities were not capitals, but were only home towns of their family, or were their birth places (Bartlett 1965: 304, 311), is speculative and without support.

Primarily, such ideas are based on the assumption that the list was made from two different sources. If so, it could be expected that the two lists would be sequential, which does not appear to be the case. According to the list, the first, fourth, and seventh kings with their cities belong to the first "formula," while the second, third, fifth, and sixth kings have the second "formula." This creates a perfect structure which could be seen as follows:

A BELA (1)
 B JOBAB (2)
 B HUSHAM (3)
 A HADAD (4)
 B SAMLAH (5)
 B SHAUL (6)
 A HADAR (7)

Moreover, change in the "formula" may be nothing more than the artistic literary ability of the author, who sets the text in such a way that the reader would enjoy it to the fullest extent. The presence of the formula **וימלך תחתיו** ("when . . . died then . . . reigned after him") that is found in connection with every king in the list but

the last one (who may have been alive at the author's time) further supports the unity of the list.

Determining whether the list is arranged by the location of places (east-west, or north-south) goes beyond the available data, and any suggestion would be highly speculative. Most of the names, whether personal or place, are generally not mentioned in the Old Testament outside the list, with a few exceptions. This, however, cannot be understood as a denial that the list is "an historical document in the strict sense" (Westermann 1987: 251). However, as seen above, the identification of these names is far from conclusive (apart from Bosrah whose identification is well agreed upon by scholars).

Since none of the "kings" established a dynasty, it seems that the list suggests succession through election, or by the power of arms where the chief of the strongest clan took precedence (Meyer 1906: 372), rather than dynastic kingship--although some strongly proposed dynastic lineage through daughters of the kings (Frazer 1906: 11; Morgenstern 1929: 108, 109; Albright 1942: 206, n. 58). Furthermore, it has been traditionally understood that the list represents a chronological succession giving every king about 20 to 25 years of reign (Meyer 1906: 381; Albright 1942: 206, n. 58; O'Callaghan 1948: 121, n. 3; Rowley 1950: 78, 79, 162; Van Zyl 1960: 131, n. 2). Although the text strongly suggests that the succession is chronological, any proposal

concerning their years of reign is highly speculative and should not be accepted as a fact. It may be significant to note that the biblical Judges were appointed to rule over smaller territories from the center or city in which they were born. In the same way the kings of Edom ruled from their cities where they were born, which were at the same time the centers of their clan or tribe.

Conquest Episodes

At the time of the Exodus, Moses sent messengers to the king of Edom requesting free passage (Num 20:14-21), which the king refused. However, the text in Deut 2:1-8 strongly suggests that the Israelites did not ask the Edomite king for passage, and the Edomites were afraid of them. This seemingly contradictory account has caused many scholars to suggest that two different sources were used (von Rad 1966: 41; Noth 1968: 148-152; 1972: 206; Bartlett 1972: 26; van Seters 1972: 182-197; Wüst 1975: 10-24). In the light of previously discussed material it is evident that both accounts may be in harmony with each other. The first king they encountered (more likely a tribal chief) refused to allow the Israelites to pass through his territory. For that reason, the Israelites had to go around. When they circled far enough, they were allowed to go through Edomite territory not controlled by him.

Indigenous People vs. Intruders

The information at our disposal suggests that Horites, Emites, and Rephaimites had lived in Transjordan, but were driven out by the Edomites, Moabites, and Ammonites respectively (Deut 2:10,12,20). Only one enclave under the leadership of Og the Rephaimite, king of Bashan, was left unconquered (Deut 2:11). The occupation of Og's territory by the Israelites is seen as justified since the Moabites and Ammonites were unable to retake their land from the Amorites (Sumner 1968: 220). It may be that Og was the last remnant of the tribe since the biblical text claims that the people under Sihon and Og were Amorites (Deut 3:8).

The biblical text gives no information about where the Ammonites, Moabites, and Edomites were prior to driving out the indigenous peoples of Transjordan. Following the popular "wave" hypothesis, Glueck suggested that semi-nomads became Ammonites, Moabites, and Edomites (1970: 153). He was followed by many others with certain variations including G. M. Landes (1956: 31-35), Noth (1958: 154), and Alt (1966: 215). However, this long-held view was challenged by Mendenhall who introduced into the discussion a new interpretation of their emergence. According to him (and others), while many future ancient Transjordanians may have originated in Anatolia and northern Syria, others may have fled from Cisjordan as a result of the socio-economic collapse, what he calls a "peasant's revolt" (Mendenhall

1973: 108, 109, 149, 157-173; 1983: 97-99; Ålhstrom 1986: 83-85; 1990: 82-85).

Mendenhall was followed by Gottwald who regarded the "infiltration" from Canaan to Transjordan as a local phenomenon. The lower class of Canaanites fled the economic and social inequality of urban centers located in the lowlands. Consequently, they inhabited the highlands of Canaan, and the Transjordanian plateau (Gottwald 1979: 429, 433). Nevertheless, others suggest that they may have been descendants of the general population living on the eastern side of the Jordan River (Boling 1988: 21, 22; Miller 1992a: 889), or the indigenous population that expanded under improving economic circumstances (McGovern 1987: 270, 271; Bartlett 1989: 65).

In a similar way, Knauf follows the infiltration hypothesis with the addition that people migrated for economic, rather than social or other reasons. Newcomers came into the area as a result of Egyptian activity in the Wadi Arabah. Since the terrain was very inaccessible, they moved further north when copper was discovered in the Feinan area. When the work was over, the workers decided to stay and thus contributed to the formation of the Edomite population. To what extent that contribution was a significant factor is a matter of speculation (Knauf 1992: 48, 49).

Contrary to the biblical account, Knauf would suggest that the Horites were newcomers rather than the descendants of Esau (1992: 49). According to his model, the Esauites were bands of tent-dwelling nomads, while the Horites were agricultural settlers. Both, through the course of time, became "Edomites" where the descendants of Esau took the leading role (1992: 48). Following his reconstruction of events, the land of Edom, Moab, and, probably, Ammon existed long before the Edomites, Moabites, and Ammonites settled in the Transjordan (Knauf 1992: 48; Bienkowski 1992a: 8). The idea is supported by the fact that even Mesha on the second line of his stela (ninth century B.C.) describes himself as king of Moab, but not yet as a Moabite. He identifies himself as a Dibonite, rather than as a Moabite. Therefore, Moab developed from a country to a state, and yet, there was no Moabite nation (Knauf 1992: 50).

Knauf's conclusions, however, are highly speculative and inconclusive, lacking any textual or historical support. His only argument for his model is Mesha's¹ identification of himself as a Dibonite rather than a Moabite. Despite the fact that Mesha identifies himself as a Dibonite, he explicitly states that he is the king of Moab as well. This device of double identification might be interpreted as an "emic/etic" clause, where he identifies

¹On the Mesha Stela, see Dearman (1989a).

himself as a Dibonite for the people of Moab to indicate his ethnic affiliation to the Dibonite clan, and at the same time as the king of Moab for all the outsiders who are not aware of clan divisions within the Moabite people.

Egyptian Evidence

Since the major economic and strategic interest of Egypt was the territory west of the river Jordan (the corridor that connects them with Mesopotamia) (Ahituv 1972: 41, 42; 1984; Weinstein 1981: 1-28; Redford 1982a; 1982b), it was to be expected that very little evidence in the Egyptian inscriptions would refer to Transjordan. Therefore most of the place names from the Egyptian monuments are located in Cisjordan rather than in Transjordan. Nevertheless, the latest studies indicate that Egyptian interest in Transjordan was never entirely extinguished. This is based on documents such as: the "Execration Texts" (19th century B.C.), the Topographic list of Tuthmosis III (15th century B.C.), the List of Amenhotep III (14th century B.C.), the Papyrus Anastasi (13th century B.C.), and the Topographical list of Ramesses II (13th century B.C.). In addition, evidence of Egyptian interest in Transjordan is being documented every year by a number of excavations, and their cultural remains are found throughout the region (Weinstein 1981: 1-28).

A careful examination of data will bring additional understanding of the pattern and social structure of the population.

Egypt and Ammon

Surprisingly, there is no direct reference to Ammonites in Egyptian records during the New Kingdom period (Bienkowski 1992a: 3). Nevertheless, if Kitchen is right, then the Brussels Text's reference to Upper Shutu can be understood as a reference to Ammonite territory (see below). Following his line of identification, there were numerous rulers north of the Moabite territory. Even though the identification of individual places is uncertain, it seems clear that the list represents the names located between Moabite and northern (Syrian) territories.

According to Maxwell Miller (1992b: 77, 78), and D. Redford (1982a), supported by Kitchen (1992: 23-25), the topographical list of Tuthmose III should be seen as one partly representing the topography of Transjordan (at least as far as the site numbers 89-101 are concerned).

Consequently, some of the place names should belong to Ammonite locales (Miller 1992b: 77). Later, the Amarna Letters, together with the pharaohs of 19th and 20th Dynasties, deal with some names located north of Moabite territory (Kitchen 1992: 26).

It is clear that the Egyptian evidence concerning the Ammonite territory is far from complete. However,

following the evidence at our disposal it is clear that the social structure of Ammonite society should be very similar to that of Edom and Moab. In spite of the fact that some rulers might be operating in the area, they should not be seen any differently from tribal rulers reigning simultaneously in their small regions.

Egypt and Moab

The Egyptian reference to Moab, or more precisely, to certain cities of Moab, does not come earlier than the 15th century B.C. Nevertheless, there are indications that the Egyptians knew the territory under the name of Shutu (Kitchen 1992: 21).

Execration Texts

According to the inscription from the tomb at Beni Hasan, the region is named Shutu. Earlier execration texts (the Mirgisa and Berlin Texts) inform us that the land of Shutu is an area, while according to the later text (Brussels text), the same region is specified as Upper and Lower Shutu. The exact location of the named region is far from certain. Identification with Ammon and Moab, respectively, as given by William F. Albright (1941: 34, n. 8) has never been seriously questioned, apart from T. L. Thompson (1974b: 123), whose ideas were disputed by Kitchen (1992: 30, n. 3).

Albright built his argument around trying to tie the Egyptian term *št* with Semitic *ṢṢ* found in Num 24:17. Here, in Numbers, a clear parallel is drawn between Moab and *ṢṢ*, which is seen by Albright as an equivalent for Egyptian Shutu (1941: 34; Miller 1992a: 885). In spite of the fact that the texts mention a succession of local rulers (Kitchen 1992: 21), they are seen by Kitchen as nothing more than local, pastoral rulers reigning over tribal territories.

Tuthmose III's Topographical List

Since its discovery, Tuthmose III's list has been generally understood as one that represents the places in Syria-Palestine, from the Negev to Galilee, with the addition of some places even further north. The list represents 119 place-names, most of which have been positively identified. Nevertheless, the identification of numbers 89-103 has been seriously questioned. It was suggested, earlier, that they are scattered places in northern Galilee (Aharoni 1979: 162, 163). S. Ahituv has followed this identification without major modification (1984). However, a new proposition has come out in the meantime suggesting that these names should be located in Transjordan rather than in Galilee (Redford 1982a: 55-74; 1982b: 115-119).

If toponym 92 is Wadi Zerqa, and 99 is Wadi Mujib, then 98 *Tpn* should be Dibon. In spite of such a geographical plausibility, the orthography in addition to

the phonetic differences cause various difficulties with this equation (Kitchen 1992: 25). Nevertheless, this identification should not be dismissed entirely because its Galilean counterpart is no better candidate.

Moab and Ramesses II

Since the excavation of the outer face of the eastern wall of the temple of Luxor (Kuentz 1922: 232-234), scholars looked forward to the interpretation of the text. After its interpretation (Kitchen 1964: 47-70), the text appears to throw more light on Ramesses II's campaign in Palestine in general, and Transjordan in particular. Scene A:I reads as follows: "Towns that Pharaoh's arm captured in the land of Moab: Btrt" (Kitchen 1964: 50). Further, in Scene B:IV, another town was listed: Tbnw. The former has been identified as ancient Raba Batora, while the latter as Dibon, located on the northern ridge of Wadi Mujib (Kitchen 1964: 64).

Despite the fact that Kitchen thought the relief should not bring any confusion among the scholars, his interpretation of the text was seriously challenged. Existence of two registers (upper and lower) resulted in disagreement among the scholars. While Kitchen attempts to separate those two, Ahituv sees them as one document. It is clear that the upper register presents the toponyms located somewhere in the north, therefore, the lower should correspond to it accordingly (Ahituv 1972: 141, 142).

Ahituv cannot deny, however, the reference to Moab in the lower register. Nevertheless, he would deny any connection of the name "tbniw" with the one related to Moab. Kitchen would partially agree with differentiating the lower register, attributing all of its toponyms to a Moabite locale (Kitchen 1976: 313, 314). He has accused Ahituv of being wrong on all grounds,¹ arguing for clear evidence in regard to identification of "Tbniw" with Dibon.

Regardless of Kitchen's enthusiasm concerning the matter, other scholars approached the problem with more caution. While some would call for careful and prolonged study for the names "Moab" and "Dibon" (Miller 1977: 250, 251), others would deny any reference to the Moabite locale (Weippert 1979: 27).

It appears that Moab could also be found on a largely destroyed topographical list found at the northern pylon of the Luxor temple and inscribed on one of Ramesses II's statues (Simons 1937: 70, 71, 155, 156; Timm 1989: 5-9). There is also the possibility that the name appears on the list of Amenhotep III (Timm 1989: 9-14). Nevertheless, this suggestion has not gained much scholarly support and is regarded as only a possibility.

¹He has bitterly accused Ahituv of presenting his mistakes in six points (1992: 28, 31, n. 37). In addition, he blamed all his opponents accusing them of speculation, and uncritically following the errors of Ahituv, who "in a hasty and ill-conceived addendum to a footnote, peremptorily rejected the clear equation of *Tibunu* - Dibon."

Scholars seem to be discouraged by the fact that there is not sufficient archaeological evidence to support the existence of the identified cities in Moab (Winnett and Reed 1964; Tushingham 1972; 1993: 350-352). This, however, should not be an obstacle, because the Late Bronze cities might not have been found yet (as noted by Kitchen 1992: 28). Perhaps there is no reason to expect a strong walled settlement. Simply, "the cities" might have been small settlements, but promoted to the status of "cities" in order to present and promote as greater than reality the victory of pharaoh. Numerous small settlements related to the Late Bronze periods have been discovered throughout the Moabite region.

It is evident that Egypt was, to some degree, interested in the region during the New Kingdom period as presented above. Despite the fact that the names on the topographic lists are under discussion among scholars, it is obvious that Egypt was aware that the region was of considerable significance.

The presence of the "rulers," whoever they might have been, and the lack of strong, walled cities give evidence of a slow process of sedentarization. Nevertheless, by this process it would be wrong to envision strong centralized governments with mighty urban centers. Further, the Egyptian texts themselves contribute to the understanding of Moabite society during the Late Bronze and

Iron I periods. That is, the structure of the society at that time was nomadic which does not require a strong, centralized government, but can operate and survive based on tribal bonds led by chiefs, or tribal rulers.

Egypt and Edom

Despite the fact that Edom is identified in the Papyrus Anastasi VI: 54-56 (Pritchard 1969: 259), for the first time in an Egyptian inscription, its origin can be traced to the time of Tuthmose III (Helck 1971: 243, 244), or even much earlier periods (Bartlett 1992a: 287).

Brussels Texts

According to K. A. Kitchen, evidence for the existence of the Edomites may be seen already in the Brussels Texts, and in the story of Sinuhe (Kitchen 1992: 21). The texts are dated to ca. 1800, and 1900 B.C., respectively. In the latter, we are told that Sinuhe was met by Ya'ush, a leader from the land of Kushu, and this leader has a strong resemblance with Esau's son Je'ush (Gen 36:5). In this case Kushu may be identified with the land of Edom.

Interestingly enough, it is evident throughout the story that the land is represented as one inhabited by pastoral nomads, or semi-nomads. The territory is not ruled by a monarch, but rather by chiefs of clans (Posener 1940: 88, 89). This is a typical representation of a tribal

society with non-dynastic succession. A similar structure can be seen even in Egypt during the 13th Dynasty (18th century B.C.), where only a few dynastic successions are present¹ (Beckerath 1964-5: 29-86; Hayes 1973: 42-76).

Lists at Soleb

During the late 1930s, H. W. Fairman excavated Ramesses II's temple at 'Amara and revealed a lengthy register of African and Asian names (Fairman 1939: 141). After a detailed study of the lists the excavator discovered that this is only a copy of Amenhotep III's list carved on the walls of his temple at Soleb (Fairman 1940: 165).

There are six groups of names, of which the sixth is preceded by t3 š3šw (Shasu-lands). This clause led B. Grdseloff to a conclusion that these "Shasu-lands" are located in Edom, with the exception of the last one (Grdseloff 1947: 79). He was followed by many others with very little, if any, modification (Rowley 1950: 153; 1957: 14; Giveon 1964: 245; 1971: 241; Hermann 1966: 288; 1975: 76, 83, n. 19, 20; Albright 1968: 149; Helck 1968: 477-480; Weippert 1971: 105, n. 14, 106; 1974: 271; de Vaux 1971: 316, 317; Cross 1973: 61, 68, n. 17; Freedman 1975: 7; Görg 1976: 7-14). Nevertheless, this identification has been seriously questioned, and a new suggestion has been made that all these places are to be located in Lebanon and south

¹During that dynasty, family succession might be demonstrated for only six kings out of 60.

Syria (Astour 1979: 17-34). Even for the S'r, which was generally accepted to represent biblical Seir, Michael C. Astour would interpret it as S'rr (1979: 23, 24). In light of the fact that Shasu might refer to the bedouin tribes located between Sinai and Syria (Giveon 1971), the Seir name must be left open (Kitchen 1992: 26), and its identification with Edom should not be ruled out.

Amarna Correspondence

Archives from Amarna are known to be a well of information concerning the political turmoil in Cisjordan. For that reason, very little reference to Transjordan is to be expected. Nevertheless, letter 288, line 26 reads: "I am at war as far as the land of Šeru" (Moran 1992: 331). Here again, Šeru is generally recognized as biblical Seir (Aharoni 1979: 189, n. 112; Schmitt 1987: 43; Moran 1992: 392). Although unwilling to exert its influence during the Amarna period, Egypt was interested in Transjordan, and its presence is evident through artifacts discovered in the region (Bienkowski 1991: 104).

Edom and Ramesses II

It is clear that Ramesses II copied some inscriptions from Soleb, as mentioned above. This knowledge has introduced a certain degree of scholarly caution concerning the originality of other documents attributed to him. Nevertheless, several inscriptions are undoubtedly

dated to his time. Of special interest to us is a stele found at Tell er-Ratâba in the eastern Delta. In this stele Ramesses claims the following:

Making great slaughter in the land of Shasu
 He plunders their tells
 Slaying their (people) and building with towns bearing
 his name.¹

The second line might give the impression that cities are to be located in the land of Edom. Since no big centers can be dated to this period, the conclusion was drawn that this inscription cannot refer to the land of Edom (Kitchen 1964: 66). However, Kitchen corrected himself and offered a new translation: "he plunders their (mountain) ridges" (Kitchen 1992: 27).

A second inscription has been found at Tanis on an obelisk where "Shasu land" is paralleled with the "mountain of Seir." A similar expression is found on a stela from Gebel Shaluf, which indicates a close relationship between Shasu and Seir.

Papyrus Anastasi VI

In the Papyrus Anastasi VI document, the term Edom appears for the first time. Here, again the Edomites are represented as a nomadic society coming to Egypt with their livestock. "We have finished with allowing the Shasu clansfolk of Edom to pass the fort of Merenptah . . . to

¹Translation taken from Kitchen (1964: 66, 67). The other two translations from Ramesses II's monuments are used from the same translator.

keep them alive and to keep alive their livestock"

(Pritchard 1969: 259).

The relationship between Egypt and the Edomites during the New Kingdom (18th and 19th Dynasties) was very hostile (Redford 1982b: 115-119) it seems that in the time of Merneptah, the hostility ceased to some degree since the Egyptians offered them shelter.

Papyrus Harris I

During the reign of Ramesses III there seems to have been more hostility between the Edomites and the Egyptians. Apparently, pharaoh plundered the territory, once again leaving the land waste. The text reads:

I destroyed the people of Seir among the Bedouin tribes. I razed their tents: their people, their property, and their cattle as well, without number, pinioned and carried away in captivity, as the tribute of Egypt.
(Pritchard 1969: 262)

These raids might have been the result of the Egyptian mining interest in the Wadi Arabah and the Feinan area (Knauf 1992: 49).

Throughout the texts, it is clear that the population of the region was nomadic dwellers, living in tents. Even when chiefs are mentioned, they are really only tribal chiefs reigning over tribal entities rather than kings of a unified monarchy.

The Egyptians were interested in the region throughout the centuries, as shown above. This evidence confirms the fact that the Edomite region was not a deserted

wilderness prior to the Iron I period. Due to the structure of the society, not much of the cultural remains are expected to be extant, as far as architecture is concerned, so the lack of permanent remains should pose no problem to this interpretation. Moreover, frequent military interventions support the assumptions that the bonds of a tribal society might create adequate opposition and danger to the interests of Egypt.

Summary

While the debate concerning the origin of the Transjordanian nations is still ongoing, the biblical evidence strongly suggests their origin from eponymous ancestors. In spite of the fact that the Bible does not contribute directly to our understanding concerning the structure of their society, tribalism may be one of the most probable options. According to the material examined above, the societies started as tribal entities, a system that never ceased. Even later, during the biblical period of the Judges when they had "kings," the structure of the society did not change, since "kings" and "kingdoms" may be understood as tribal chiefs or leaders, along with their local territory (Stager 1985). Furthermore, a correct understanding of other sociopolitical terms (שבת, עיר, אלוף) (משפחה) sheds more light on the societal structure of the Transjordanian peoples.

Available Egyptian documents picture the region as one occupied by nomadic settlers without a centralized government. Even though some topographical lists suggest the existence of cities in the region, strong unified nations were far from a reality. The fact that the Egyptians invaded Transjordan on a few occasions supports the idea that the inhabitants of the region presented a threat to Egyptian interests. In that light, these peoples should not be understood mainly as a few bands of wandering nomads. Even the Egyptians must have understood the importance of bringing larger armies in order to secure victory. This fact strongly suggests the presence of strong tribal polities throughout the regions. Only under the tribal bonds could they have formed an army worthy of Egyptian attention (bearing in mind the extremely small size of the military units in Western Palestine mentioned in the Amarna Letters).

The existence of settlements, especially in the regions of Ammon and Moab (and later in Edom), suggests a slow process of sedentarization. This, however, does not eliminate tribalism. Due to the favorable climatic conditions, nomadism may be partly substituted with more extensive agriculturalism (LaBianca and Younker 1995), which, in turn, calls for certain administrative structures. Nevertheless, tribalism was never abandoned due to the same unstable climatic and political conditions that played a

critical role in the region. Rather, it provided a flexible political structure.

The evolutionistic pattern (from simple to more complex) led scholars to believe that the same must be followed where the structure of ancient societies is concerned. Here, the progressive pattern (band, tribe, state) was assumed to apply (Westerman 1987: 252). According to this scenario, once a higher stage is achieved the previous one is never supposed to occur again. Nevertheless, according to the biblical data, supported by Egyptian documents, tribalism never disappeared from Transjordan and was present throughout the Late Bronze Age and the Iron I periods.

CHAPTER V

SYNTHESIS AND CONCLUSION

According to the biblical account, the people of Israel encountered Edomites, Moabites, and Ammonites when they passed through Transjordan sometime during the Late Bronze or Iron I Ages. The biblical account also seems to portray these peoples as socially and politically organized. Regardless of one's view of the biblical account, there are other sources of data that support the idea that during this time different peoples did indeed occupy the region who were able to mobilize resistance against the intrusions of outsiders. This sociopolitical picture of the inhabitants of Transjordan is thus not only accurately reflected in the biblical accounts, it is also attested in the archaeological record. Archaeology, however, refines our understanding of the precise nature of this sociopolitical organization.

According to the archaeological record, the settlements that appear in the Transjordanian regions during the Late Bronze and Iron I Ages are small in size, usually unfortified, representing a non-urban, tribal society rather than a state with a developed centralized government.

The problem with many biblical scholars and archaeologists is that they have misunderstood the biblical accounts and assumed that archaeology should provide evidence for a more complex society, i.e., state. When archaeology was not able to do so they tended to suggest that the biblical account was inaccurate and misleading. From this study, however, it is evident that the biblical account does not require highly complex societies, centralized governments, and strong city centers for the Transjordanian region during the Late Bronze and Iron I Ages at all.

Archaeological Record

It is now well established that, contrary to earlier views, the region was, more or less, occupied throughout the 18th to 13th centuries B.C. without any significant gap between them. While it is evident that during the Iron I Age there was a sharp increase in the settlements throughout the Transjordan, more and more evidence emerges almost daily suggesting that settlements also existed in every period between the Early Bronze III and the Iron I Ages.

The settlements of these earlier periods, however, did not represent any highly organized sociopolitical entities, but rather randomly scattered small villages along the agricultural fringes. Even the settlements or fortresses from Iron I do not really represent a highly

complex society (i.e., state) that many assume the biblical account suggests.

From the excavated and surveyed material it is obvious that the Transjordanian settlements suffered a sharp decline after the Early Bronze III, but there was a steady increase (in the number and size of the settlements) during the Late Bronze and especially Iron I Ages. It is possible that this increase was mainly due to the political stability of the region, in addition to the environmental factors (sufficient rainfall that would encourage agriculture and permanent settlements). Furthermore, political and economic stability would result in the accumulation of surpluses and wealth that would, in turn, encourage an increase in population and expansion of settlements in size and number. Therefore, the appearance and increase of the settlements (combined with agriculture) might reflect a trajectory towards a more complex (state) society towards the end of Iron I and Iron II periods. However this level was not quite attained during the Late Bronze and Iron I Ages. In addition to the sedentarization of the region, there are other features that one would expect to find if an urban, state-level society did indeed exist in Transjordan during Late Bronze and Iron I Ages. For example, a developed trade network, which could be seen in imported goods and extensive storage facilities, and planned architecture would be expected. However, the archaeological data do not support

such a level of society since these features are not adequately presented in the record during the Late Bronze and Iron I Ages. Furthermore, temples (except isolated Amman Airport Structure), palaces, and other sophisticated city planning are totally absent from the Late Bronze and Iron I Ages in Transjordanian settlements. In addition, storage houses are non-existent in the region with the exception of a number of storage jars whose capacity is barely enough to support the people within the settlement during the non-productive months, or might represent only a limited trade network. Fragments of Mycenaean and Cypriot pottery, mainly found in burials may represent some trade but are almost insignificant in terms of their quantity and distribution, and certainly cannot support the theory of a highly developed trade network, as might be expected for a more sophisticated and developed society. Clearly the archaeological record at present cannot provide any evidence to support the notion that Ammonites, Moabites, and Edomites were organized into state level societies during the Late Bronze and Iron I Ages. As will be shown below, it is better to suggest the idea that these peoples were tribally organized.

Regarding the settlement record it is important to emphasize that sedentarization did not start at the same time in all regions of Transjordan. Settlements first seem to begin in Ammonite territory; this was followed in Moab,

and finally in Edom, but only in the extreme north of the latter territory. The data for the Late Bronze and Iron I Ages certainly show expansion of settlements, intensification of agriculture, and increased use of valuable natural resources (access to water, pasturage, and cultivable soil). This reflects an increasing diversity and complexity of the society; specifically there is a shift from nomadism to sedentarism, but this does not necessarily reflect the rise of a state-level society. Rather, it simply reflects the tribal fluidity which enables it to survive or to pursue a more prosperous life. In addition, it appears that the nomadic way of life continued to be acceptable and tolerable by the sedentary portion of the population. In fact, nomadization has never disappeared from the Ammonite, Moabite, and Edomite regions, even to the present. Internal exchange of goods and even limited trade networks between components of nomadic and sedentary society encouraged both, agricultural activities, and animal (sheep/goat) breeding. This cooperation can be better understood through the heterarchy which is present and typical of tribal societies, where some segments would be compelled to exercise nomadism while others, sedentary agricultural production.

This synchronization and flexibility provided a safety device for tribal peoples to sustain their existence, survival, and prosperity. When the economy faced any kind

of difficulties, either caused by political turbulence or environmental hazards, tribal societies were flexible enough to switch back to nomadization in order to sustain their existence. In this light the increase of settlements during the periods in question should not necessarily be seen as shifting from an egalitarian to a more complex society, but rather as a mechanism of using natural resources as dictated by the political and environmental conditions.

Additional support that the region was occupied by tribally organized societies is found in the imported pottery (in small amounts that were revealed mainly in burials) which suggests the development of a limited trade network; which, in turn, is characteristic for tribal or chiefdom societies. This limited trade network is also evident in the restricted number of storage vessels provided by the excavations.

Anthropological Support

In all, the archaeological evidence, even in its incompleteness, favors the presence of tribal societies in Transjordan during the Late Bronze and Iron I Ages more than highly complex, state-level ones. This understanding directs us toward more anthropological perspectives to better evaluate the development of various societies, in particular tribal ones.

As far as tribal society is concerned, its social structure is based strongly on several elements, such as a

presumed common ancestry, distinctive cultural traits (as seen in customs and religious practices), in addition to strong internal ties implied in mutual support and the security of all members. This mutual support and security is strongly emphasized in tribal communities because of kin-based relationships among the clans. For that reason, side by side, nomadism and sedentarism are not only tolerated but actively pursued for the survival and prosperity of the whole community. In this respect, it is evident that the existence of a tribal community depended on fluidity and cooperation among its segments (heterarchy), rather than on the management of chiefs and centralized government authorities (hierarchy). In this light, tribes should not be regarded simply as primitive societies on an evolutionary scale, but rather as viable alternate sociopolitical organizations that rather co-exist with, and function as counterparts to, state societies even to the present. The main factor that has helped them to maintain their existence throughout the millennia is their socioeconomic and political flexibility where they have successfully used political and environmental conditions to their advantage. This dynamic nature of tribal societies enabled them, under various circumstances, to quickly decompose into small social units, and to reconsolidate into larger ones to meet various challenges (such as invading Israelites during the time of exodus) and opportunities.

Biblical Applications

As argued above, the evidence provided by extensive archaeological surveys and excavations in Transjordan during the last three decades seems to fit into the anthropological concepts of tribal societies. This would seem to disagree with earlier interpretations of the nature of Transjordanian societies derived from the biblical account. When the Israelites were passing through the Transjordanian region many scholars have assumed that the biblical account required that they were opposed by peoples who were part of small but complex state-level societies under the rulership of kings.

A more careful examination of the biblical texts (especially the concepts of king, kingdom, etc.), however, allows for a better understanding and synchronization of the biblical and archaeological data.

It would appear that the biblical term "king/kingdom" does not necessarily apply to a monarch of a centralized state, which in turn would assume the existence of a centralized complex society. In its wide context (especially when Transjordanian kings/kingdoms are concerned) the term "king" can apply to any kind of ruler, including a chief or leader of a group of people tribally organized.

It should also be noted that the term for "kingdom" certainly is not restricted only to a territory with fixed

borders such as a centralized state might have; it might also be applicable to any fluid tribal territories, as well. In addition to this, it is interesting to notice that the term "kingdom" was never applied to the people of Ammon, Moab, and Edom during the periods in question (Late Bronze and Iron I Ages). This fact can be better understood in the light of a wider meaning of the term "king," in which the term is understood to be applicable to any kind of ruler.

The complexity of a tribal society is also evident in the biblical term for "city." Since the term indicates any kind of settlements, not necessarily only those encompassed by walls, obviously, it would not reflect only an urbanized society with a strong and developed centralized government, but is also certainly applicable to the settlement of a tribal society as well.

From all the evidence combined it can now be stated that the Transjordan was indeed occupied during the Late Bronze and Iron I Ages. However, the people living there were tribal nomads, living in seasonal camps or semi-nomads who occupied small settlements (at least for part of the year), or they were completely sedentarized and devoted to small scale, yet intensive agriculture. In spite of the fact that some archaeologists have recently tried to argue that those settlements were part of a state-level society, closer examination suggests that they are more likely reflective of sub-state societies, that is chiefdoms or

tribes. The social and political structure of a tribe or chiefdom does not require standing armies, which would in turn demand the presence of large urban centers (stables, rooms for arsenals, barracks). This, however, does not mean that these peoples were disorganized bands of nomads who were not capable of creating any substantial force to defend themselves against adversaries. Even though they did not maintain a standing army, the tribal societies were constructed in such a way that in time of threat they were able to create a formidable force to stand against aggressors in protection of their land, families, and settlements. As such, the Transjordanian tribes (Ammonites, Moabites, and Edomites), even though considered as nomads, attracted the attention of mighty Egyptian armies with their famous kings (Tuthmose III, Ramesses II, Merneptah), and were found worthy of being mentioned in the Egyptian record. In the same manner, these tribes would have been able to provide resistance to any invasion such as that attributed to the Israelites in the Bible.

APPENDICES

APPENDIX 1

SURVEYED AND EXCAVATED SITES IN AMMON

Late Bronze Age Surveyed Sites

- 'Ain el-Mayita (Gordon and Knauf 1987)
- El-Bueida (Conder 1889; Fohrer 1961; Ibach 1987)
- El-Suneiyat North (Boling 1989)
- El-Mabrak (Yassine 1983a)
- el-Rajib (Ibrahim 1992)
- Haud Abu Billana (Gordon and Knauf 1987)
- HS site 128 (Ibach 1987)
- Khilda Region (Sami et al 1991)
- Khirbet Othman (Sami et al 1991)
- MPP site 34 (Geraty, Herr, LaBianca 1988; Boling 1989)
- MPP site 36 (Boling 1989)
- Rujm Beider (Sami et al 1991)
- Rujm esh-Shebeil, or Rujm Shubeil (Glueck 1939; Gordon and Knauf 1987)
- Tell Bleibil (Wright Schick 1989; Merrill 1881; Glueck 1951; Mellaart 1956; 1962; Ibrahim, Sauer, and Yassine 1988; Raikes 1965)
- Wadi Shu'eib site 16 (Hadidi 1979; Wright et al 1989)
- Wadi Shu'eib site 19 (Wright and Schick 1988; Wright et al 1989)

Iron Age I Sites

- 'Abdun (Barakat 1973; Conder 1889; Glueck 1939)
Abu Silan (Ibach 1987)
Abu Sibne (Gordon and Knauf 1987)
'Ain el-Karm (Gordon and Knauf 1987)
'Ain Safsafa (Gordon and Knauf 1987)
'Arqob Abu Msalti (von Rabenau 1978; Boling 1989)
'Arqub er-Rashid (Gordon and Villiers 1983)
'Asaret Merj es-Sana (Glueck 1939)
Beddih North (Ibach 1987)
El-Bunsiyat North (Boling 1989)
El-Mumani (Barakat 1973; Glueck 1939)
El-Qeseir (Glueck 1939)
El-Qutnah el-Janubiyeh (Glueck 1939; Sami' at al 1991)
Et-Teleil (Barakat 1973; Glueck 1939)
Gypsum Mine West (Gordon and Villiers 1983)
Haud Abu Billana (Gordon and Knauf 1987)
Haud Umm el-Jihash (Gordon and Knauf 1987)
Haud Umm Kharruba (Gordon and Knauf 1987)
HS Site 6 (Ibach 1987)
HS Site 39 (Ibach 1987)
HS Site 129 (Ibach 1987)
HS Site 141 (Ibach 1987)
'Iraq et-Tahuna South (Gordon and Villiers 1983)
Jabal Abu Thawwab (Gordon and Knauf 1987)
Jabal et-Tuweim (Gordon and Knauf 1987)

- Jebel el-Fahud** (Ibach 1987)
- Khirbet Abu Hammad** (Barakat 1973; Glueck 1939)
- Khirbet Abu Hwei** (Glueck 1939)
- Khirbet Abu Thawwab** (Glueck 1939; Coughenour 1976; Gordon and Knauf 1985)
- Khirbet Bedran** (Glueck 1939)
- Khirbet edh-Dheina** (Barakat 1973; Glueck 1939)
- Khirbet el-Beider** (Glueck 1939)
- Khirbet el-Bireh** (Barakat 1973; Glueck 1939)
- Khirbet el-Bishari** (Fohrer 1961; Ibach 1987; Von Rabenau 1978; Boling 1989)
- Khirbet el-Edmah, or el-'Udhma** (Glueck 1939; Gordon and Knauf 1987)
- Khirbet el-Janus** (Barakat 1973; Glueck 1939)
- Khirbet el-Khabi'ah** (Glueck 1939)
- Khirbet el-Kursi** (Glueck 1939)
- Khirbet el-Mudmar** (Barakat 1973; Glueck 1939)
- Khirbet 'Erjan** (Barakat 1973; Sami et al 1991; Glueck 1939)
- Khirbet 'Erjan esh-Shemaliyeh** (Barakat 1973; Glueck 1939)
- Khirbet er-Rumman** (Glueck 1939; Gordon and Knauf 1987)
- Khirbet esh-Shmeisani** (Barakat 1973; Glueck 1939; Sami et al 1991)
- Khirbet es-Sweiwina** (Glueck 1939; Pape 1952)
- Khirbet Hanotiyeh** (Glueck 1939)
- Khirbet Juret el-Khasneh** (Glueck 1939)
- Khirbet Khandaq** (Burckhardt 1822; de Vaux 1938; Glueck 1939)

Khirbet Kursi esh-Sherqyeh (Glueck 1939)
Khirbet Morbat Bedran (Barakat 1973; Glueck 1939)
Khirbet Mshatta-Quseib (Gordon and Villiers 1983)
Khirbet Mudmar (Barakat 1973; Glueck 1939)
Khirbet Mugheirat el-Hassan (Glueck 1939)
Khirbet Muslim (Glueck 1939; Sami et al 1991)
Khirbet Sakhara (Glueck 1939)
Khirbet Umm el-'Idham (Gordon and Villiers 1983)
Khirbet Umm el-Qanafid (Conder 1889; Ibach 1987)
Khirbet Wad'ah (Glueck 1939)
Kom Yahuz (Conder 1889; Glueck 1937; 1939)
MPP Site 2 (Boling 1989; Sami et al 1991)
MPP site 10 (Boling 1989)
MPP site 19 (Boling 1989)
MPP site 22 (Boling 1989)
MPP site 23 (Boling 1989)
MPP site 25 (Boling 1989)
MPP site 28 (wrongly labeled as el-Buneyyat) (Boling 1989)
MPP site 30 (Boling 1989)
MPP site 40 (Boling 1989)
MPP site 43 (Boling 1989)
MPP site 44 (Boling 1989)
MPP site 48 (Boling 1989)
MPP site 88 (Yunker 1991)
MPP Site 129 (MPP Forthcoming publication).
Qasr 'Abdun (Glueck 1939)

- Qasr el-Wasiyeh (Glueck 1939)
- Qasr er-Ronaq (Conder 1889; Pape 1952; Glueck 1939)
- Qasr es-Sar (Burckhardt 1822; Warren 1870; Merrill 1881;
Conder 1889; Butler 1907; Glueck 1937; 1939; Pape 1952)
- Rawda (Ibach 1987)
- Rujm 'Ain el-Beida (Glueck 1939)
- Rujm Beider (Sami et al 1991)
- Rujm el-Fahud (Stoebe 1964; Von Rabenau 1978; Ibach 1987)
- Rujm el-Hamir (Glueck 1939)
- Rujm el-Jeish (Barakat 1973; Glueck 1939)
- Rujm el-Jidi (Glueck 1939)
- Rujm el-Jebelihah (Glueck 1939; Sami et al 1991)
- Rujm el-Mumani (Glueck 1939)
- Rujm el-Qutnah (Glueck 1939)
- Rujm er-Ruseifeh (Glueck 1939)
- Rujm esh-Shebeil (Glueck 1939; Gordon and Knauf 1987)
- Rujm esh-Shih (Glueck 1939)
- Rujm Hanotiyeh (Barakat 1973; Glueck 1939)
- Rujm Juwidiy'eh (Glueck 1939)
- Rujm Megrijha (Glueck 1939)
- Rujm Mobis (Glueck 1939)
- Rujm Musaffar (Glueck 1939)
- Rujm Nebi Hadad (Glueck 1939)
- Rujm 'Obeid (Glueck 1939)
- Rujm Qerqersh (Glueck 1939)
- Rujm Wanani (Glueck 1939)

- Rujum el-'Asa'igh** (Glueck 1939)
- Sabha and Zighan Caves** (Gordon and Villiers 1983)
- Sweifiyeh el-Gharbiyeh** (Glueck 1939; Pape 1952)
- Sweifiyeh esh-Sherqiyeh** (Glueck 1939; Pape 1952)
- Tell 'Alla** (Handaquq) (Gordon and Villiers 1983)
- Tell el-'Umeiri East** (Warren 1870; Conder 1889; Von Rabenau 1978; Ibach 1987)
- Tell Hajjaj** (Glueck 1939; Gordon and Villiers 1983)
- Tell Mghanni West** (Gordon and Villiers 1983)
- Telul edh-Dhahab** (Glueck 1939; Steuernagel 1925; de Vaux 1938; Gordon and Villiers 1983)
- Umm el-Basatin** (Warren 1870; Conder 1889; Ibach 1987)
- Umm es-Sarab** (Ibach 1987)
- Wadi Dulani Tal'at er-Ruz** (Gordon and Knauf 1987)
- Wadi Rumman West** (Gordon and Knauf 1987)
- Wadi Salihi West** (Gordon and Knauf 1987)
- Late Bronze Age Excavated Sites**
- Amman Airport Structure** (Harding 1956; Harding 1958; Hennessy 1966; 1970; 1985; Hankey 1974a; 1974b; Herr 1983a; 1976; 1983b; Merrillees 1968; Wright 1966; Campbell and Wright 1969; Fritz 1971)
- Jabal Nuza Tomb Amman** (Dajani 1966b)
- Jebel al-Hawayah** (McGovern 1986)
- Jebel al Qesir** (Glueck 1939; de Vaux 1938; McGovern 1980; McGovern 1986)

- Khirbet Umm ad-Dananir** (Glueck 1939; de Vaux 1938; McGovern 1986; 1989)
- Rujm el-Henu** (de Vaux 1938; Glueck 1939; McGovern 1981b; 1981c; 1983)
- Sahab** (Albright 1932; Harding 1948; Dajani 1970; 1987 Ibrahim 1972; 1974; 1975; 1985; 1987; 1992; Horn 1971)
- Tell el-Umeiri West** (Warren 1869; Conder 1889; Ibach 1978a; Geraty et al 1986; 1988; 1989; 1990a; 1990b Redford 1982a; Abujaber 1984; Geraty 1985; Younker et al 1990; 1993; Herr et al 1990; 1991; Battenfield and Herr 1989; 1993 Battenfield 1991; Low 1993)
- Tell Hesban** (Tristram 1873; Conder 1889; Booras and Horn 1969a; 1969b; Vyhmeister 1968; Mitchel 1992; Sauer 1994)
- Tell Jawa** (Boling 1989; Younker et al 1990: 14-16)
- Tell Nimrin** (Merrill 1888; Conder 1889; Abel 1910; 1931; 1938; Glueck 1951; Dornemann 1990)
- Tell Safut** (Wimmer 1987a; 1987b; Merrill 1881; Burrows 1931; de Vaux 1948; Glueck 1937b; 1939; Ma'ayeh 1960a; 1960b; Wimmer 1987b)

Iron I Age Excavated Sites

- Amman Citadel** (Seetzen 1854; Burckhardt 1822; Buckingham 1821; Conder 1889; Brunnow and Domaszewski 1905; Butler 1919; Bartoccini 1930; 1932; 1938; Harding 1951; Dornemann 1970; Zayadine 1973b; Bennett 1975; 1978; Bennett 1979a; 1979b; Zayadine et al 1987; 1989; Greene 1992)

- Jabal Nuzā Tomb Amman** (Dajani 1966b)
- Jebel al-Hawayah** (McGovern 1986)
- Khirbet el 'Al** (Robinson 1856; Guarmani 1938; Conder 1889; Smith 1894; Abel 1933; Glueck 1934a; Boling 1987; Reed 1964; 1965; 1972)
- Khirbet Al-Hajjar** (Thompson 1972; 1977)
- Raghdan Royal Palace Tomb** (Yassine 1975)
- Rujm Al-Malfuf South** (Conder 1889; Mackenzie 1911; Pape 1952; Glueck 1939; Thompson 1977)
- Sahab** (Ibrahim 1972; 1974; 1975; Dajani 1970; Horn 1971)
- Tell el-Umeiri West** (Clark 1989; 1991; 1994; Battenfield and Herr 1989; Geraty et al 1991; Lawlor 1991; 1994; Low 1991; 1994; Herr 1994; Fisher 1994; Younker et al 1993)
- Tell Hesban** (Beegle 1969; Thompson 1973a; 1975; Sauer 1975; 1976; 1978; 1994; Boraas and Geraty 1976; 1978; Mare 1976; 1978; Herr 1976b; 1978)
- Tell Jawa** (Younker et al 1990)
- Tell Nimrin** (Flanagan et al 1993)
- Tell Safut** (Wimmer 1987)

Surveyed Sites on Ammonite Territory

Num:	Name	Grid	Type	Period	Pottery
1	Tell Bleibil	2105.1465	Tell	LB	X
2	Sab. & Zighan Cave	2115.1770	Caves	IR	X
3	Tell 'Alla	211.177	Ruins	IR	X
4	Tell Mghanni West	212.178	Ruins	IR	X
5	Iraq et-Tahuna S.	214.178	Tell	IR	X
6	Kh. Umm el'Idham	2142.1750	Scatter	IR	X
7	Tell Hajjaj	215.173	Ruins	IR	X
8	Telul edh-Dhabab	2150.1770	Ruins	IR	X
9	Telul edh-Dhabab	2155.1770	Ruins	IR	X
10	'Arqub er-Rashid	216.174	Scatter	IR	X
11	Gypsum Mine West	216.177	Ruins	IR	X
12	Wadi Shu'eib S. 19	2161.1505	Tell	LB	I
13	Wadi Shu'eib S. 16	2194.1577	Tell	LB	X
14	Khirbet Mudmar	220.160	Ruins	IR	X
15	Kh. Mshatta-Quseib	221.173	Scatter	IR	X
16	Khirbet Khandaq	224.156	Scatter	IR	X
17	Rujum el-'Asa'igh	224.167	Ruins	IR	X
18	HSS 39	2256.1382	Scatter	IR	X
19	Kh. el-Khabi'ah	226.168	Building	IR	X
20	Kh. Ju. el-Khazneh	226.169	Ruins	IR	X
21	Khirbet Othman	2268.1566	Tell	LB	X
22	Khirbet el-Kursi	227.153	Building	IR	X
23	El-Qescir	227.154	Building	IR	X
24	Khirbet el Mudmar	227.163	Ruins	IR	X
25	Abu Silan	2276.1391	Scatter	IR	X
26	Rawda	2279.1388	Cemetery	IR	X
27	Kh. Kur. esh-Sher.	228.153	Building	IR	X
28	Wadi Salibi West	2283.1707	Scatter	IR	X

29	HSS 6	2284.1362	Scatter	IR	1
30	Kh. Umm el-Qanafid	2284.1386	Ruins	IR	X
31	Haud Umm Kharruba	2284.1703	Ruins	IR	X
32	'Ain el-Mayita	2284.1740	Ruins	LB	X
33	Qasr es-Sar	2286.1504	Fortress	IR	X
34	Hirbet er-Rumman	2288.1747	Tell	IR	X
35	El-Teleil	2290.1699	Tell	IR	X
36	Umm es-Sarab	2292.1379	Tell	IR	X
37	Haud Umm el-Jihash	2292.1758	Scatter	IR	X
38	Beddih North	2294.1395	Scatter	IR	X
39	Khirbet Hanotiyeh	2294.1534	Ruins	IR	X
40	Rujm Hanotiyeh	2295.1535	Building	IR	X
41	Rujm esh-Shebeil	2295.1724	Scatter	LB IR	X X
42	Wadi Rumman West	2297.1752	Scatter	IR	X
43	Khilda Region	2298.1563	Tower	LB	X
44	Haud Abu Billana	2298.1737	Tell	LB IR	X X
45	HSS 128	2299.1408	Scatter	LB	1
46	'Ain el-Karm	2300.1760	Scatter	IR	X
47	'Ain Safsafa	2302.1737	Scatter	IR	X
48	Kh. Abu Thawwab	2302.1748	Scatter	IR	X
49	HSS 129	2304.1409	Scatter	IR	X
50	Abu Zibne	2304.1757	Ruins	IR	X
51	Qasr er-Ronaq	2306.1510	Tower	IR	X
52	Wadi Dulani Tal'at	2308.1757	Scatter	IR	X
53	Rujm el-Qutnah	231.157	Ruins	IR	X
54	Jabal et-Tuweim	2311.1733	Tell	IR	X
55	Jabal Abu Thawwab	2311.1749	Tell	IR	X
56	El-Bucida	2315.1398	Ruins	LB	3
57	HSS 141	2316.1417	Ruins	IR	1
58	Sweifiyeh el-Gh.	2320.1517	Ruins	IR	X

59	MPP Site 25	2321.1449	Building	IR	X
60	MPP Site 88	2324.1399	Ruins	IR	X
61	Rujm 'Obeid	2324.1524	Ruins	IR	X
62	Sweifiy. esh-Sher.	2326.1517	Scatter	IR	X
63	MPP Site 48	2327.1396	Ruins	IR	X
64	Umm el-Basatin	2329.1366	Ruins	IR	X
65	Khirbet edh-Dheina	2329.1524	Ruins	IR	X
66	Rujm el-Jebelhah	233.159	Tower	IR	X
67	'Asret M. es-Sana	233.164	Ruins	IR	X
68	Rujm Megrijha	233.164	Ruins	IR	X
69	Rujm Mobis	233.167	Scatter	IR	X
70	MPP Site 28	2330.1447	Ruins	IR	X
71	MPP Site 30	2332.1430	Building	IR	X
72	Khirbet el-Edmah	2332.1709	Tell	IR	X
73	Kh. esh-Shmeisani	2333.1539	Building	IR	X
74	MPP Site 36	2336.1445	Scatter	LB	I
75	El-Qutnah	2337.1529	Ruins	IR	X
76	Khirbet el-Bishari	2338.1392	Ruins	IR	X
77	MPP Site 2	2338.1418	Scatter	IR	X
78	'Abdun	2339.1501	Fortress	IR	X
79	Kh. Morbat Bedran	234.164	Ruins	IR	X
80	Khirbet Abu Hammad	234.166	Ruins	IR	X
81	El-Mumani	234.167	Tell	IR	X
82	Rujm el-Mumani	234.167	Ruins	IR	X
83	MPP Site 129	2341.1423	Cave	IR	X
84	El-Buneiyat North	2341.1438	Tell	LB IR	I X
85	MPP Site 34	2344.1431	Building	LB	I
86	Qasr 'Abdun	2344.1495	Building	IR	X
87	Tell al-'Umeiri E.	2346.1421	Ruins	IR	X
88	Rujm Jurwidiy'eh	235.155	Building	IR	X

89	Khirbet Muslim	235.157	Ruins	IR	X
90	MPP Site 40	2352.1447	Scatter	IR	X
91	MPP Site 10	2357.1442	Ruins	IR	X
92	'Arqob Abu Msalti	2358.1404	Ruins	IR	X
93	MPP Site 23	2358.1426	Building	IR	X
94	Rujm 'Ain el-Beida	236.156	Tower	IR	X
95	Kh. Mng. el-H.	236.158	Ruins	IR	X
96	MPP Site 19	2360.1421	Building	IR	X
97	Khirbet Bedran	2360.1651	Building	IR	X
98	MPP Site 44	2362.1428	Scatter	IR	X
99	MPP Site 43	2362.1435	Building	IR	X
100	Khirbet 'Erjan	2364.1546	Tell	IR	X
101	Jebel el-Fahud	2368.1406	Tell	IR	X
102	Kom Yahuz	237.161	Tell	IR	X
103	Khirbet Sakhara	237.176	Scatter	IR	X
104	Rujm el-Fahud	2371.1411	Tower	IR	X
105	Kh. 'Er. esh-Shem.	2371.1553	Ruins	IR	X
106	Kh. es Sweiwina	2375.1482	Tell	IR	X
107	MPP Site 22	2379.1387	Building	IR	X
108	Rujm Beider	2382.1565	Tell	LB IR	X X
109	Qasr el-Wasiyeh	2386.1463	Building	IR	X
110	Khirbet el-Beider	239.156	Tell	IR	X
111	El-Rajib	2429.1453	Tell	LB	X
112	Rujm el-Hamir	243.154	Ruins	IR	X
113	El-Mabrak	2432.1492	Building	LB	X
114	Rujm esh-Shih	244.155	Building	IR	X
115	Rujm Nebi Hadad	244.175	Ruins	IR	X
116	Rujm el-Jidi	245.154	Building	IR	X
117	Rujm Wanani	245.157	Building	IR	X
118	Khirbet Abu Hewa	245.158	Fortress	IR	X

119	Rujm Musaffar	246.153	Ruins	IR	X
120	Rujm er-Ruseifeh	246.157	Ruins	IR	X
121	Khirbet el-Bireh	246.174	Ruins	IR	X
122	Rujm Qerqersh	247.161	Tower	IR	X
123	Khirbet el-Jamus	248.172	Ruins	IR	X
124	Khirbet Wad'ah	249.174	Ruins	IR	X

Excavated Sites on Ammonite Territory

Num	Name	Grid	Type	Period	Material
1	Tell Nimrin	2090.1458	Tell	LB	Pottery
1	Tell Nimrin	2090.1458	Tell	IR	Architect.
2	Tell Hesban	2264.1343	Tell	LB	Pottery
2	Tell Hesban	2264.1343	Tell	IR	Architect.
3	Kh. Umm ad-Danunir	2272.1660	Tell	LB	Architect.
4	Jebel al-Qesir	2272.1655	Tomb	LB	Pottery
5	Jebel al-Hawayah	2282.1663	Tomb	LB	Pottery
5	Jebel al-Hawayah	2282.1663	Tomb	IR	Pottery
6	Tell Safut	2285.1608	Tell	LB	Layer
6	Tell Safut	2285.1608	Tell	IR	Layer
7	Rujm el-Henu	2288.1661	Tell	LB	Architect.
8	Rujm al-Malfuf S.	231.151	Tower	IR	Architect.
9	Tell el-Umeiri	2342.1420	Tell	LB	Architect.
9	Tell el-Umeiri	2342.1420	Tell	IR	Architect.
10	Tell Jawa	2382.1408	Tell	LB	Pottery
10	Tell Jawa	2382.1408	Tell	IR	Pottery
11	Amman Citadel	2390.1510	Tell	IR	Layer
12	Amman Airport Str.	244.152	Tem. (?)	LB	Architect.
13	Sahab	2451.1425	Tell	LB	Architect.
13	Sahab	2451.1425	Tell	IR	Architect.
14	Jabal Nuza Tomb	unknown	Tomb	LB	Pottery
14	Jabal Nuza Tomb	unknown	Tomb	IR	Pottery
15	Khirbet al-Hajjar	unknown	Tell	IR	Architect.
16	Raghdan R. P. Tomb	unknown	Tomb	IR	Pottery

APPENDIX 2

SURVEYED AND EXCAVATED SITES IN MOAB

Late Bronze Age Surveyed Sites

Abu er-Ruzz (Brünnow and Domaszewski 1905; Musil 1907-8; Smith 1904-5; Miller 1991)

Adir (Burckhardt 1983; Hornstein 1989; Wilson 1899; Brünnow and Domaszewski 1905; Musil 1907-8; Albright 1924; Glueck 1934a; Canova 1954; Miller 1991)

'Ai (Seetzen 1854; Musil 1907-8; Donner 1964; Miller 1991)

'Ainun (Canova 1954; Miller 1991)

'Alaqan (Burckhardt 1983; Miller 1991)

'Awarwareh (Miller 1991)

Beit Sahn (Musil 1907-8; Miller 1991)

Bteiyir (Seetzen 1854; Worschech 1985b)

Dhat Ras (Burckhardt 1983; Irby and Mangles 1823; Mauss and Sauvaire 1867; Tristram 1873; Doughty 1888; Hornstein (1898; Germer-Durand 1897; Vincent 1898; Wilson 1899; Vailhé (1899; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Savignac 1936; Canova 1954; Miller 1991)

Dleiqā (Musil 1907-8; Miller 1991)

ed-Dabbakah (Tristram 1873; Musil 1907-8; Glueck 1939; Miller 1991)

- ed-Deir** (Seetzen 1854; Musil 1907-8; Canova 1954; Miller 1991; Worschech 1990)
- ed-Dimnah** (Tristram 1873; Musil 1907-8; Miller 1991)
- el-Franj** (Burckhardt 1983; Irby and Mangles 1844; Bliss 1895; Brünnow and Domaszewski 1905; Musil 1907-8; Canova 1954; Miller 1991)
- el-Haddadah** (Seetzen 1854; Burckhardt 1983; Tristram 1873; Musil 1907-8; Miller 1991)
- el-Jauza** (Musil 1907-8; Miller 1991)
- el-Khari** (Seetzen 1854; Tristram 1873; Miller 1991)
- el-Mahri** (Musil 1907-8; Brünnow and Domaszewski 1905; Glueck 1939; Miller 1991)
- el-Minqat'ah** (Miller 1991)
- el-Qasr** (Miller 1991)
- el-'Umyan** (Miller 1991)
- Emory Survey Site 32** (Miller 1991)
- Emory Survey Site 40** (Miller 1991)
- Emory Survey Site 42** (Miller 1991)
- Emory Survey Site 155** (Miller 1991)
- Emory Survey Site 177** (Miller 1991)
- Emory Survey Site 275** (Miller 1991)
- Emory Survey Site 277** (Miller 1991)
- Emory Survey Site 296** (Miller 1991)
- Emory Survey Site 306** (Miller 1991)
- Emory Survey Site 309** (Miller 1991)
- Emory Survey Site 337** (Miller 1991)

- Emory Survey Site 338** (Miller 1991)
- Emory Survey Site 347** (Miller 1991)
- Emory Survey Site 352** (Miller 1991)
- Emory Survey Site 360** (Miller 1991)
- Emory Survey Site 362** (Brünnow and Domaszewski 1905; Glueck 1939; Miller 1991)
- Emory Survey Site 365** (Miller 1991)
- Emory Survey Site 398** (Miller 1991)
- Emory Survey Site 413** (Miller 1991)
- Emory Survey Site 425** (Miller 1991)
- Emory Survey Site 429** (Miller 1991)
- eth-Thaniyyah** (Seetzen 1854; Burckhardt 1983; Klein 1880; Tristram 1873; Brünnow and Domaszewski 1905; Musil 1907-8; Canova 1954; Miller 1991)
- Fqeiqes** (Musil 1907-8; Glueck 1939; Miller 1991)
- Ghuweir** (Klein 1879; Miller 1991)
- Habash/Habaj** (de Saulcy 1853-4; Musil 1907-8; Miller 1991)
- Himneh** (de Saulcy 1853-4; Palmer 1871; Musil 1907-8; Miller 1991)
- Hmeimat (SE)** (Miller 1991)
- Hujfah** (Seetzen 1854; Burckhardt 1983; Tristram 1873; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; Miller 1991:)
- Imra'** (Burckhardt 1983; de Saulcy 1953-4; Musil 1907-8; Glueck 1934a; Miller 1991)
- Jweir** (Glueck 1939; Canova 1954; Miller 1991)

- Kerak** (Seetzen 1854; Burckhardt 1983; Irby and Mangles 1844; Layard 1887; Lynch 1848; de Saulcy 1853-4; de Luynes 1871-6; Mauss and Sauvaire 1867; Klein 1869; 1879; Tristram 1873; Doughty 1888; Hill 1891; 1896; Bliss 1895; Hornstein 1898; Musil 1907-8; Lagrange 1897; Gautier 1901; Bacher 1901; Wilson 1847; Libby and Hoskins 1905; Albright 1924; Glueck 1934a; 1939; Canova 1954; Miller 1991)
- Kfeir** (Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Miller 1991)
- Kfeiras** (Burckhardt 1983; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Canova 1954; Miller 1991)
- Khaneg en-Nasara** (Miller 1991)
- Khirbet 'Arbid** (Brünnow and Domaszewski 1905; Musil 1907-8; Koucky 1987b; Miller 1991)
- Khirbet Dubab** (Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet ed-Dweibi** (Musil 1907-8; Miller 1991)
- Khirbet el-'Akuzeh** (Irby and Mangles 1823; Brünnow and Domaszewski 1905; Glueck 1939; Miller 1991)
- Khirbet el-Hawiyyah** (Irby and Mangles 1823; Klein 1879; Tristram 1983; Doughty 1888; Musil 1907-8; Miller 1991)
- Khirbet el-Hinu** (Miller 1991)
- Khirbet el-Kharsiyyah** (Miller 1991)
- Khirbet el-Qaryatein** (Klein 1880; Tristram 1873; Musil 1907-8; Glueck 1939; Canova 1954; Miller 1991)

- Khirbet en-Nuqqas** (Seetzen 1854; Klein 1880; Tristram 1873; Doughty 1888; Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet en-Nsheinish** (Tristram 1873; Doughty 1888; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; Miller 1991)
- Khirbet esh-Shqeirah** (Mauss and Sauvaire 1867; Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet et-Talisah** (Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet et-Tur** (Seetzen 1854; Irby and Mangles 1823; Brünnow and Domaszewski 1905; Musil 1907-8; Miller 1991)
- Khirbet Fqeiqes** (Musil 1907-8; Miller 1991)
- Khirbet Freiwan** (Glueck 1934a; Miller 1991; Worschech 1985b)
- Khirbet 'Isra** (Tristram 1873; Brünnow and Domaszewski 1905; Miller 1991)
- Khirbet Mediner er-Ras** (Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet Qamarein** (Tristram 1873; Doughty 1888; Brünnow and Domaszewski 1905; Musil 1907-8; Miller 1991)
- Khirbet Sakka** (de Saulcy 1853-4; Musil 1907-8; Miller 1991)
- Khirbet Shiha** (Miller 1991)
- Khirbet Um 'Alanda** (Irby and Mangles 1823; Musil 1907-8; Miller 1991)
- Khirbet Um el-Qseir** (Musil 1907-8; Glueck 1939; Miller 1991)
- Khirbet Zabdah** (Musil 1907-8; Glueck 1939; Miller 1991)
- Mauta** (Seetzen 1854; Burckhardt 1983; Irby and Mangles 1823; Mauss and Sauvaire 1867; Klein 1879; Tristram 1873;

- Hornstein 1898; Brünnow and Domaszewski 1905; Musil 1907-9; Glueck 1939; Savignac 1936; Canova 1954; Miller 1991)
- Mdeibi** (Doughty 1888; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; 1939; Miller 1991)
- Mhai** (Seetzen 1854; Tristram 1873; Doughty 1888; Mauss and Sauvaire 1867; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Miller 1991)
- Mharragat (N)** (Miller 1991)
- Middin** (Seetzen 1854; Burckhardt 1983; Klein 1879; Tristram 1873; Doughty 1888; Musil 1907-8; Miller 1991)
- Mihna** (Seetzen 1854; Irby and Mangles 1823; Mauss and Sauvaire 1867; Klein 1879; Tristram 1873; Doughty 1888; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Canova 1954; Miller 1991)
- Mirwid** (Irby and Mangles 1823; Doughty 1888; Musil 1907-8; Miller 1991)
- Mis'ar** (Seetzen 1854; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; Miller 1991)
- Kisna** (Tristram 1873; Musil 1907-8; Glueck 1934; Miller 1991)
- Mseintah (N)** (Miller 1991)
- Nakhl** (Seetzen 1854; Irby and Mangles 1823; Tristram 1873; Doughty 1888; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; Miller 1991)
- Nasir** (lueck 1939; Miller 1991)

- Qasr el-Himneh** (de Saulcy 1853-4; Miller 1991)
- Qfeiqef** (Mauss and Sauvaire 1867; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1939; Miller 1991)
- Qmeir** (Musil 1907-8; Miller 1991)
- Qreifilla** (Seetzen 1854; Burckhardt 1883; Tristram 1873; Brünnow and Domaszewski 1905; Musil 1907-8; Smith 1904-5; Miller 1991)
- Rakin** (Seetzen 1854; Tristram 1873; Musil 1907-8; Miller 1991)
- Rujm Birjis** (Musil 1907-8; Miller 1991)
- Rujm el-Awsaj** (Miller 1991)
- Rujm el-Baqr** (Glueck 1939; Miller 1991)
- Rujm el-Hleileh** (Glueck 1939; Miller 1991)
- Rujm el-Misnar** (Miller 1991)
- Rujm Eshqah** (Musil 1907-8; Glueck 1939; Miller 1991)
- Rujm Mes'id** (Glueck 1939; Miller 1991)
- Rujm Um 'Alanda** (Musil 1907-8; Glueck 1939; Miller 1991)
- Rujm Um el-'Atat** (Musil 1907-8; Glueck 1939; Miller 1991)
- Samra'** (Seetzen 1854; Tristram 1873; Musil 1907-8; Glueck 1939; Canova 1954; Miller 1991)
- Sul** (Seetzen 1854; Irby and Mangles 1823; Mauss and Sauvaire 1867; Tristram 1873; Brünnow and Domaszewski 1905; Musil 1907-8; Canova 1954; Miller 1991)
- Tadun** (de Saulcy 1853-4; Musil 1907-8; Glueck 1934a; Miller 1991; Worschech 1985a; 1990)
- Um el-Habaj** (Miller 1991)

Um el-Qleib (Glueck 1934a; Miller 1991)

Um Hamat (Tristram 1873; Brünnow and Domaszewski 1905; Musil
1907-8; Canova 1954; Miller 1991)

Zeitā (Miller 1991)

Zweihirah (Seetzen 1854; Tristram 1873; Smith 1904-5; Miller
1991)

Iron Age I Sites

Abu er-Ruzz (Miller 1991)

Adir (Miller 1991)

'Ai (Miller 1991)

'Ainun (Miller 1991)

'Alaqan (Miller 1991)

'Ayun Musa (Saller 1941; Conder 1889; Glueck 1935; Ibach
1987)

Dhat Ras (Miller 1991)

ed-Deir (Miller 1991)

el-Misdah (Tristram 1873; Brünnow and Domaszewski 1905;
Smith 1904-5; Miller 1991)

el-Mushaqqar (Glueck 1939; Ibach 1987)

el-Qabu (Miller 1991; Worschech 1985b)

el-Qasr (Miller 1991)

el-'Umian (Miller 1991)

Emory Survey Site 40 (Miller 1991)

Emory Survey Site 120 (Miller 1991)

Emory Survey Site 155 (Miller 1991)

Emory Survey Site 168 (Miller 1991).

Emory Survey Site 208 (Miller 1991)
Emory Survey Site 258 (Miller 1991)
Emory Survey Site 293 (Miller 1991)
er-Rabbah (Seetzen 1854; Burckhardt 1983; Irby and Mangles
 1823; Macmichael 1819; de Saulcy 1853; Klein 1869;
 Tristram 1873; Doughty 1888; Hill 1891; 1896; Bliss
 1895; Wilson 1899; Libby and Hoskins 1905; Brünnow and
 Domaszewski 1905; Musil 1907-8; Smith 1904-5; Glueck
 1934a; 1939; Canova 1954; Miller 1991)
es-Snakiyyah (Seetzen 1854; Tristram 1873; Musil 1907-8;
 Glueck 1934a; Canova 1954; Miller 1991)
eth-Thaniyyah (Miller 1991)
es-Zarra'ah (Seetzen 1854; Tristram 1873; Musil 1907-8;
 Brünnow and Domaszewski 1905; Miller 1991)
HSS 107 (Ibach 1987)
Himneh (Miller 1991)
Hmeimat (NW) (Seetzen 1854; Burckhardt 1983; Palmer 1871a;
 Tristram 1873; Brünnow and Domaszewski 1905; Musil
 1907-8; Smith 1904-5; Miller 1991)
Hmeimat(SW) (Miller 1991)
Hmeimat (SE) (Miller 1991)
Hujfah (Miller 1991)
Imra (Miller 1991)
Kerak (Miller 1991)
Khirbet Dubab (Miller 1991)
Khirbet ed-Dweibi (Miller 1991)

- Khirbet el-Hawiyyah** (Miller 1991)
- Khirbet el-Labun** (Doughty 1888; Glueck 1939; Miller 1991)
- Khirbet el-Meidan** (Irby and Mangles 1823; Musil 1907-8; Brünnow and Domaszewski 1905; Glueck 1939; Miller 1991)
- Khirbet en-Naqqas** (Miller 1991)
- Khirbet es-Sa'aduni** (Tristram 1873; Musil 1907-8; Glueck 1934a; Miller 1991)
- Khirbet esh-Shqairah** (Miller 1991)
- Khirbet et-Talisah** (Miller 1991)
- Khirbet 'Isra** (Miller 1991)
- Khirbet Mdeinet 'Aliya** (Glueck 1934a; Miller 1991)
- Khirbet Sakka** (Miller 1991)
- Khirbet Sarah** (Burckhardt 1983; de Saulcy 1853; Glueck 1939; Miller 1991)
- Khirbet Shihan** (Miller 1991; Worschech 1985b)
- Khirbet Um 'Alanda** (Miller 1991)
- Khirbet Zabdah** (Miller 1991)
- Majdalein** (Seetzen 1854; Burckhardt 1983; de Saulcy 1853; Palmer 1871b; Tristram 1873; Musil 1907-8; Glueck 1934a; Miller 1991; Worschech 1985a)
- Majra** (Musil 1907-8; Glueck 1939; Canova 1954; Miller 1991)
- Manja** (Ibach 1987)
- Mauta** (Miller 1991)
- Meidan (SE)** (Irby and Mangles 1823; Musil 1907-8; Brünnow and Domaszewski 1905; Glueck 1939; Miller 1991)
- Mhai** (Miller 1991)

- Kharrāqat (N)** (Miller 1991)
- Kharrāqat (S)** (Tristram 1873; Smith 1904-5; Miller 1991)
- Middin** (Miller 1991)
- Mihna** (Miller 1991)
- Misna** (Miller 1991)
- Mudeyneh** (Worschech 1986)
- Nasib** (Tristram 1873; Brünnow and Domaszewski 1905; Musil 1907-8; Glueck 1934a; Miller 1991)
- Nasir** (Miller 1991)
- Rakin** (Miller 1991)
- Rujm Abu Za'rurah** (Miller 1991)
- Rujm Birjis** (Miller 1991)
- Rujm el-Awsaj** (Miller 1991)
- Rujm el-Baqr** (Miller 1991)
- Shahtur** (Musil 1907-8; Miller 1991)
- Sul** (Miller 1991)
- Tadun** (Miller 1991)
- Um Hamat** (Miller 1991)
- Um-Najil** (Miller 1991)
- Umm el-Amad** (Abel 1938; Simons 1959; Glueck 1934a; Ibach 1987)
- Umm Qal'a** (Musil 1907-8; Worschech 1985b)
- Late Bronze Age Excavated Sites**
- Khirbet el-Balu'** (Seetzen 1854; Burckhardt 1883; Bliss 1895; Brünnow and Domaszewski 1904; Musil 1907-8; Horsfield

and Vincent 1932; Glueck 1934a; Crowfoot 1934; Miller 1991; Worschech and Ninow 1994)

Madaba (Harding 1953; Isserlin 1953)

Tell Jalul (Tristram 1873; Albright 1933; Glueck 1934b; Ibach 1978a; 1978b; Younker et al 1993; Gregor 1994; 1995)

Iron I Age Excavated Sites

'Ara'ir (Brünnow and Domaszewski 1904; Musil 1907-8; Albright 1933; Glueck 1934a; Abel 1938; Savignac 1936; Olávari 1965; 1969; Olávari 1993)

Dhiban (Seetzen 1854; Clermont-Ganneau 1870-71; Brünnow and Domaszewski 1904; Mackenzie 1913; Albright 1933; Savignac 1936; Musil 1907-8; Glueck 1934a; 1939; Abel 1938; Winnett 1964; Reed 1964; Tushingham 1972; Morton 1989)

Khirbet Mdeinet el-Mu'rrajeh (Sauer 1979; Miller 1991; Olávarri 1977-8; 1983; Menandez 1983)

Tell Jalul (Younker et al 1993; Gregor 1994; 1995)

Surveyed Sites on Moabite Territory

Num	Name	Grid	Type	Period	Pottery
1	Kh. Medinet er-Ras	2059.0511	Ruins	LB	1
2	Khirbet el-Meidan	2077.0608	Tell	IR	1
3	Meidan (SE)	2079.0605	Building	IR	3
4	Beit Sahn	2089.0539	Ruins	LB	2
5	ESS 177	2098.0659	Ruins	LB	16
6	Khirbet ed-Dweibi	2101.0622	Scatter	LB IR	16 1
7	ESS 398	2103.0494	Scatter	LB	1
8	Khirbet Dubab	2105.0494	Tell	LB IR	38 24
9	ESS 155	2105.0721	Building	LB IR	10 5
10	Khaneq en-Nasara	2108.0508	Ruins	LB	46
11	ESS 293	2110.0552	Scatter	IR	15
12	'Ai	2110.0604	Tell	LB IR	10 5
13	el-'Umyan	2110.0637	Tell	LB IR	3 1
14	Fqeiqes	2113.0549	Scatter	LB	1
15	Zeita	2114.0668	Ruins	LB	1
16	Khirbet Fqeiqes	2115.0538	Ruins	LB	1
17	'Alaqan	2117.0614	Ruins	LB IR	3 4
18	Umm Qal'a	2118.0783	Ruins	IR	X
19	Samra'	2122.0675	Tell	LB	1
20	ed-Dabbakah	2123.0524	Tell	LB	2
21	ESS 258	2123.0616	Ruins	IR	1
22	Khirbet Sakka	2125.0690	Building	LB IR	3 6
23	Khirbet Zabdah	2128.0562	Ruins	LB IR	1 3
24	Rujm Mes'id	2130.0548	St. heap	LB	1
25	Rujm el-Hleileh	2131.0508	Tell	LB	1
26	Kfeiraz	2133.0576	Tell	LB	3

27	Rujm Um el-'Atat	2135.0545	Ruins	LB	3
28	Mscimtah (N)	2136.0651	Tell	LB	2
29	el-Jauza	2138.0519	Tell	LB	7
30	Rujm el-Baqr	2138.0540	Ruins	LB IR	2 4
31	ESS 296	2140.0556	Ruins	LB	4
32	ESS 275	2141.0587	Tell	LB	2
33	ESS 277	2145.0580	Tell	LB	16
34	Himmeh	2145.0820	Ruins	LB IR	2 1
35	ed-Deir	2148.0733	Tell	LB IR	5 14
36	Habash/Habaj	2149.0699	Tell	LB	1
37	Majra	2151.0483	Tell	IR	3
38	'Aimun	2152.0627	Tell	LB IR	3 4
39	Khirbet el-Labun	2153.0620	Tell	IR	2
40	Imra'	2153.0845	Tell	LB IR	1 3
41	el-Franj	2156.0645	Spring	LB	1
42	ESS 413	2157.0507	St. heap	LB	17
43	Rujm Um 'Alanda	2157.0566	St. heap	LB	2
44	Jweir	2159.0481	Tell	LB	3
45	ESS 168	2159.0698	Building	IR	1
46	Mihna	2160.0590	Tell	LB IR	1 1
47	el-Qabu	2160.0740	Ruins	IR	1
48	Khirbet et-Talisah	2161.0620	Building	LB IR	3 1
49	ESS 425	2162.0480	Tell	LB	1
50	Khirbet 'Izra	2163.0631	Ruins	LB IR	8 5
51	Khirbet Sarah	2163.0673	Building	IR	1
52	Rujm Eshqah	2165.0505	Building	LB	4
53	Rujm al-Awsaj	2166.0504	St. heap	LB IR	9 1
54	Mauta	2167.0558	Tell	LB IR	2 3
55	Kerak	2170.0660	Tell	LB IR	15 15
56	Khirbet en-Neqqaz	2171.0627	Ruins	LB IR	6 7

57	cd-Dinnah	2171.0779	Tell	LB	1
58	Um-Najil	2172.0711	Scatter	IR	11
59	Rujm Birjis	2172.0739	Tell	LB IR	2 2
60	ESS 309	2173.0543	Scatter	LB	1
61	ESS 208	2173.0643	Ruins	IR	1
62	Rakin	2173.0704	Tell	LB IR	2 6
63	Khirbet el-Hawiyah	2175.0623	Tell	LB IR	20 9
64	Shahur	2175.0817	Building	IR	1
65	Khirbet el-Qaryatein	2177.0645	Ruins	LB IR	7 5
66	Khirbet et-Tur	2178.0537	Ruins	LB	4
67	Khirbet el-Kharziyy.	2180.0792	Ruins	LB	6
68	Majdalein	2181.0826	Ruins	IR	45
69	Qasr el-Himmeh	2182.0820	Ruins	LB	4
70	Bteiyir	2183.0735	Scatter	LB	1
71	ESS 306	2185.0554	St. heap	LB	2
72	Khirbet el-'Akuzeh	2186.0452	Ruins	LB	3
73	eth-Thamiyyah	2188.0641	Tell	LB IR	15 36
74	Zwehirah	2189.0671	Tell	LB	3
75	'Awarwareh	2190.0914	Scatter	LB	7
76	Dleiqa	2191.0495	Tell	LB	1
77	Mirwid	2191.0571	Tell	LB	1
78	ESS 429	2192.0460	St. heap	LB	2
79	el-Minqat'ah	2192.0726	Tell	LB	1
80	Tadun	2192.0812	Ruins	LB IR	2 23
81	Kfeir	2193.0452	Ruins	LB	8
82	Qreifilla	2194.0694	Tell	LB	1
83	ESS 338	2196.0653	Ruins	LB	1
84	Sul	2197.0524	Tell	LB IR	12 16
85	ESS 347	2197.0555	Scatter	LB	1
86	Middin	2197.0587	Tell	LB IR	29 21

87	Mudeyneh	2197.0932	Ruins	IR	X
88	Abu er-Ruzz	2200.0698	Tell	LB IR	1 1
89	Khirbet Um' Alanda	2201.0551	Ruins	LB IR	4 1
90	Khirbet Shiham	2201.0877	Ruins	LB IR	1 1
91	'Ayun Musa	2202.1317	Tell	IR	X
92	er-Rabbah	2203.0755	Tell	IR	22
93	Khirbet Freiwan	2207.0901	Tell	LB	4
94	ESS 337	2208.0571	Ruins	LB	11
95	el-Misdah	2209.0794	Tell	IR	1
96	el-Qasr	2212.0805	Tell	LB IR	3 2
97	el-Haddadah	2213.0655	Ruins	LB	1
98	Khirbet Qamarcin	2213.0707	Scatter	LB	1
99	Khirbet es-Sa'aduni	2214.0840	Tell	IR	1
100	Mis'ar	2215.0900	Tell	LB	56
101	Mharragat (N)	2216.0733	Ruins	LB IR	4 1
102	Khirbet Um el-Qseir	2217.0561	Ruins	LB	10
103	Mharragat (S)	2217.0729	Ruins	IR	7
104	Qseir	2220.0714	Ruins	LB	1
105	Ghuweir	2221.0611	Tell	LB	1
106	Khirbet en-Nsheinish	2223.0552	Ruins	LB	4
107	Misna	2223.0767	Tell	LB IR	12 13
108	Nasib	2224.0831	Tell	IR	14
109	ESS 352	2225.0551	St. heap	LB	4
110	Adir	2225.0685	Tell	LB IR	3 1
111	Hmeimat (NW)	2226.0803	Tell	IR	1
112	Dhat Ras	2228.0460	Tell	LB IR	2 1
113	Um Hamat	2228.0498	Tell	LB IR	8 5
114	ez-Zarra'ah	2230.0720	Tell	IR	1
115	Um el-Habaj	2230.0810	Tell	LB	5
116	Hmeimat (SE)	2232.0790	Tell	LB IR	3 2

117	Um el-Qleib	2233.0920	Ruins	LB	1
118	Rujm Abu Za'rurah	2239.0822	Ruins	IR	21
119	el-Mushaqqar	2239.1335	Tell	IR	X
120	Hujfah	2244.0710	Ruins	LB IR	1 1
121	Nakhl	2245.0523	Ruins	LB	1
122	Khirbet esh-Shqairah	2250.0434	Tell	LB IR	4 2
123	Khirbet el-Himu	2251.0768	Building	LB	1
124	ESS 32	2251.0868	Building	LB	1
125	Hmeimat (SW)	2257.0798	St. heap	IR	1
126	ESS 40	2257.0843	Tell	LB IR	2 3
127	Nasir	2263.0562	Building	LB IR	1 1
128	es-Smakiyyah	2265.0796	Tell	IR	1
129	el-Khari	2265.0815	Scatter	LB	1
130	Rujm el-Mismar	2268.0479	Building	LB	2
131	ESS 360	2269.0558	Building	LB	8
132	HSS 107	2270.1328	Ruins	IR	X
133	ESS 42	2277.0843	Building	LB	3
134	ESS 362	2287.0554	Building	LB	9
135	Khirbet 'Arbid	2292.0674	Ruins	LB	3
136	ESS 365	2294.0540	Building	LB	1
137	el-Mahri	2295.0537	Building	LB	1
138	ESS 120	2299.0816	Building	IR	1
139	Qfeiqef	2300.0444	Building	LB	1
140	Mdeibi	2306.0503	Ruins	LB	1
141	Manja	2310.1282	Ruins	IR	X
142	Mhai	2319.0449	Tell	LB IR	2 1
143	Kh. Mdeinet 'Aliya	2330.0745	Tell	IR	12
144	Umm el-Amad	2355.1328	Tell	IR	X

Excavated Sites on Moabite Territory

Num	Name	Grid	Type	Period	Material
1	Dhiban	2240.1010	Tell	IR	Pottery
2	Khirbet el-Balu'	2244.0855	Tell	LB/IR	Floor
3	Madaba	2251.1250	Tomb	LB/IR	Pottery
4	'Ara'ir	2282.0980	Fortress	IR	Archit.
5	Tell Jalul	2312.1254	Tell	LB	Pottery
	.	.	.	IR	Layer
6	Kh. Mdeinet el-Mur.	2322.0813	Tell	IR	Archit.

APPENDIX 3
SURVEYED SITES IN EDOM

Late Bronze Age Sites

Ash Shorabat (MacDonald 1988)

Khirbet 'Ain al Ghuslan (Glueck 1939; MacDonald 1988;
MacDonald, Banning, and Pavlish 1980)

Rabab (Glueck 1935; MacDonald 1988)

Ras Rihab (Glueck 1939; MacDonald 1988)

WHS Site 28 (MacDonald 1988)

WHS Site 64 (MacDonald 1988)

WHS Site 106 (MacDonald 1988)

WHS Site 168 (MacDonald 1988)

Iron Age I Sites

Ain ad Dahs (MacDonald 1988)

Al 'Addanin (MacDonald 1988)

Al Mabra (MacDonald 1982a)

Al Maqhas (MacDonald 1988)

'Ard al Haureh (MacDonald 1988; MacDonald, Rollefson, and
Roller 1982)

Ash Shorabat (MacDonald 1988)

Ed Dair (MacDonald 1988; MacDonald, Rollefson, and Roller
1982)

- Feifa West** (MacDonald 1992)
- Hiblan Salim** (MacDonald 1988)
- Huboul al Hardhoun** (MacDonald 1988)
- Khanasir** (Glueck 1935; Frank 1934; Rast and Schaub 1974)
- Khirbet Abu Banna** (Glueck 1935; MacDonald, Banning, Pavlish 1980; MacDonald 1988)
- Khirbet Abu Usba** (MacDonald 1988)
- Khirbet Ain al Ghuzlan** (MacDonald 1988)
- Khirbet al Faridiyyeh** (MacDonald 1988)
- Khirbet al-Ghuweib** (Glueck 1935; Hauptmann, Weisgerber, and Knauf 1985; Hauptmann 1986; Knauf and Lenzen 1987; MacDonald 1992)
- Khirbet al-Jariyeh** (Glueck 1935; Hauptmann, Weisgerber, and Knauf 1985; Knauf and Lenzen 1987; MacDonald 1992)
- Khirbet al Mdhaywit** (MacDonald 1988)
- Khirbet al-Nahas** (Musil 1907-8; Frank 1934; Glueck 1935; Bachmann and Hauptmann 1984; Hauptman, Weisgerber, and Knauf 1985; Hauptman 1986; Knauf and Lenzen 1987; MacDonald 1992)
- Khirbat al Oran** (MacDonald 1988)
- Khirbet el Bureis** (MacDonald 1988)
- Khirbet Jeradin** (MacDonald 1988)
- Khirbet Jumah** (Glueck 1935; MacDonald 1988)
- Khirbet Karaka** (Glueck 1935; MacDonald 1988)
- Khirbet Majadil** (MacDonald 1988)
- Khirbet Mleih** (MacDonald 1988)

Khirbet Naukha (Glueck 1935; MacDonald 1988)
Mashail/El Mushimmin (Glueck 1935; MacDonald 1988)
Moman (MacDonald 1988)
Rujm Karaka (Brünnow and Domaszewski 1904; Musil 1907-8;
Glueck 1935; MacDonald 1988; MacDonald, Banning, and
Pavlish 1980)
Rujm Khuneizir (MacDonald 1992)
Rujm Muhawish (MacDonald 1988)
SGNAS site 3 (MacDonald 1992)
SGNAS site 5 (MacDonald 1992)
SGNAS site 28 (MacDonald 1992)
SGNAS site 50 (MacDonald 1992)
SGNAS site 71 (MacDonald 1992)
SGNAS site 73 (MacDonald 1992)
SGNAS site 187 (MacDonald 1992)
SGNAS site 188 (MacDonald 1992)
SGNAS site 191 (MacDonald 1992)
SGNAS site 237 (MacDonald 1992)
Umm er Rih (MacDonald, Banning, Pavlish 1980; MacDonald
1988)
Umm Qerbeh (MacDonald 1988)
Umm Qreqarah (MacDonald 1988)
Umm Suwwaneh (MacDonald 1988)
WHS site 28 (MacDonald 1988)
WHS site 192 (MacDonald 1988)

**WHS site 239 (MacDonald 1988; MacDonald, Rollefson, and
Roller 1982)**

WHS site 242 (MacDonald 1988)

WHS site 255 (MacDonald 1988)

**WHS site 270 (MacDonald, Rollefson, Roller 1982; MacDonald
1988)**

WHS site 732 (MacDonald 1988)

Surveyed Sites on Edomite Territory

Num	Name	Grid	Type	Period	Pottery
1	SGNAS Site 28	1871.0095	Scatter	IR	1
2	SGNAS Site 50	1874.0058	Scatter	IR	4
3	SGNAS Site 187	1892.0244	Scatter	IR	2
4	SGNAS Site 188	1910.0238	Scatter	IR	1
5	Khirbet al-Nahas	1913.0100	Tell	IR	247
6	Rujm Khuneizir	1915.0340	Ruins	IR	1
7	Khirbet al-Jariyeh	1929.0111	Tell	IR	X
8	Feifa West	1935.0389	Tell	IR	36
9	SGNAS Site 237	1935.0392	Scatter	IR	X
10	Khirbet al-Ghuweib	1940.0113	Tell	IR	20
11	SGNAS Site 191	1940.0224	Scatter	IR	5
12	SGNAS Site 3	1959.0473	Cemetery	IR	4
13	SGNAS Site 71	1963.0395	Ruins	IR	19
14	SGNAS Site 5	1965.0471	Cemetery	IR	4
15	SGNAS Site 73	1971.0393	Building	IR	1
16	Khirbet Mleih	2033.0388	Tell	IR	8
17	Umm Suwwaneh	2050.0392	Tell	IR	25
18	Moman	2057.0370	Ruins	IR	8
19	Al 'Addanin	2059.0373	Tell	IR	57
20	Al Maqbaz	2061.0359	Building	IR	28
21	Rabab	2066.0381	Tell	LB	4
22	Hiblan Salim	2082.0392	Tell	IR	35
23	Ras Ribab	2083.0381	Tell	LB IR	3 10
24	Khirbet Jummah	2089.0352	Tell	IR	26
25	Umm er Rih	2091.0338	Ruins	IR	86
26	Huboul al Hardboun	2091.0360	Ruins	IR	56
27	WHS Site 28	2104.0296	Scatter	LB IR	5 56
28	Khirbet Majadil	2111.0322	Tell	IR	22

29	WHS Site 64	2112.0416	St. heap	LB	15
30	Khirbet Naukha	2114.0300	Tell	IR	23
31	Khirbet el Burcis	2114.0314	Tell	IR	72
32	WHS Site 192	2121.0316	Scatter	IR	10
33	Ain ad Dahs	2121.0416	Cemetery	IR	19
34	Umm Qerbeh	2122.0368	Ruins	IR	4
35	Mashmil/el Mushimmin	2131.0332	Tell	IR	21
36	WHS Site 168	2131.0442	Cemetery	LB	11
37	Khirbet Karaka	2133.0350	Building	IR	21
38	Rujm Karaka	2138.0343	Building	IR	71
39	Kh. 'Ain al Ghuzlan	2140.0411	Tell	LB IR	12 6
40	Khirbet Jeradin	2145.0343	Ruins	IR	18
41	Rujm Muhawish	2147.0306	Ruins	IR	5
42	Khirbet Abu Banna	2147.0316	Tell	IR	61
43	WHS Site 106	2147.0375	Ruins	LB	16
44	Ash Shorabat	2150.0424	Ruins	LB IR	15 35
45	Umm Qrejarah	2152.0388	Building	IR	35
46	'Ard al Hureh	2159.0432	Ruins	IR	20
47	WHS Site 242	2161.0342	Building	IR	4
48	Khirbet al Mdhaywit	2166.0308	Ruins	IR	1
49	Ed Dair	2166.0351	Tell	IR	295
50	Khirbet Abu Usba	2176.0314	Building	IR	26
51	WHS Site 255	2176.0354	Tell	IR	5
52	WHS Site 270	2183.0369	Ruins	IR	19
53	WHS Site 239	2194.0420	Ruins	IR	4
54	Khirbet al Oran	2199.0362	Tell	IR	5
55	Kh. al Faridiyyeh	2217.0351	Tell	IR	11
56	Al Mabra	2271.0354	Ruins	IR	X
57	WHS Site 732	2355.0283	Scatter	IR	3
58	Khanazir	?	Tell	IR	8

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