The isolation and inaccessibility of the highlands played a major role in the sequential processes of formation of large territorial entities. The area was not easily penetrated by lowlands local forces and was remote from the Egyptian sphere of interests along the international routes. In this sense, the final conquest of the highlands frontier for habitation in early Iron Age II and the consequent intensification of oil and wine production were the seeds of the future calamities. The collapse of the isolation barriers and the accumulation of industrial capital opened the way to foreign intervention in late Iron Age II.

The truly exceptional event in the highlands in the late second millennium BCE was not the 'Israelite Settlement', but the emergence of the United Monarchy—the unification of the entire central hill country and most of the lowlands under one rule. But the United Monarchy was a short episode that eventually led to reversion to the traditional system of two hill country polities. In any event, the fate of the cyclic processes of the third and second millennia BCE was sealed by the rise of national states throughout southern Levant. The later direct rule of foreign empires over the region tilted the balance from local ecological and socio-economic factors to extraneous interests and prevented the revival of these cyclic mechanisms.

The depiction of the 'Israelite Settlement' as a singular event in the history of the country turned up centuries after it took place. It was shaped in accordance with later developments in the Iron Age and with the ideology and interests of the Deuteronomistic historian. His convictions had such an impact on Western civilization that they have continued to dominate scholarly research almost to the present day.[75]

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75   For an elaborate version of the model presented in this paper see I. Finkelstein, 'The Great Transformation: The "Conquest" of the Highlands Frontier and the Rise of Territorial States', forthcoming in T. Levi (ed.), *The Archaeology of Society in the Holy Land.*

Socio-Political Transformations in the Central Hill Country in the Late Bronze-Iron I Transition *

SHLOMO BUNIMOVITZ

> *The longue durée, the conjuncture, the event all fit into each other neatly and without difficulty, for they are all measured on the same scale. Equally, to be able to achieve an imaginative understanding of one of these time spans is to be able to understand them all.*
>
> (F. Braudel)[1]

INTRODUCTION

Recent archaeological and historical research of the Bronze and Iron Ages in the southern Levant has been heavily influenced by the work of the great French historian Fernand Braudel, a leading figure in the *Annales* school after World War II.[2] Braudel's 'paradigm', which examines long-term historical changes within their geographical-ecological setting, and favors the 'longue durée' over short-perspective 'history of events', concurs with some of the new trends in archaeology, such as environmentally oriented studies of social processes, and the search for general patterns of culture change.[3] Moreover, the *Annales* school's

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1   F. Braudel, 'History and the Social Sciences', *On History,* London 1980, p. 48.

2   See, for instance, L. Marfoe, 'The Integrative Transformation: Patterns of Sociopolitical Organization in Southern Syria', *BASOR,* 234 (1979), pp. 1-42; R.B. Coote and K.W. Whitelam, *The Emergence of Early Israel in Historical Perspective,* Sheffield 1987; in Mesopotamia: R. McC. Adams, 'Mesopotamian Social Evolution: Old Outlooks, New Goals', T. Earle (ed.), *On the Evolution of Complex Societies: Essays in Honor of Harry Hoijer 1982,* Malibu 1984, pp. 79-129.

3   For Braudel's historical method and the *Annales* school, see Braudel (above, n. 1), pp. 25-54; idem, *The Mediterranean and the Mediterranean World in the Age of Phillip II,* London 1972; M. Aymard, 'The *Annales* and French Historiography (1929-72)', *The Journal of European Economic History,* 1 (1972), pp. 491-511; J.H. Hexter, 'Fernand Braudel and the *Monde Braudelien...*', *The Journal of Modern History,* 44 (1972), pp. 480-539; T. Stoianovich, *French Historical Method: The 'Annales' Paradigm,* Ithaca 1976; R. Forester, 'Achievments

interest in the 'silent majority'—the rural backbone of all past societies, usually ignored by official correspondence—accords with the meticulous modern field surveys, which document all forms of human occupations, from urban centers through rural settlements to the smallest hamlets.[4]

A 'Braudelian' paradigm has long been practiced in the study of the 'Israelite Settlement' in Canaan, in the guise of A. Alt's *Territorialgeschichte*. As early as 1925 Alt had established the following principle:

> Throughout history territorial divisions, ultimately dependent on the lie of the land, are extremely persistent... In studying their development, then, it is always best to cover as long a period as possible at once, in order to distinguish the constant features and the gradual variations in the territorial divisions of the area in question....[5]

Using this principle, Alt hoped to replace the incomplete and subjective biblical 'history of events' of the Israelite Settlement in Canaan with a more reliable reconstruction. Though couched in concepts of the 1920's, Alt's perspective seems today astonishingly updated. But in the absence of archaeological data at that time, his reconstruction of the settlement patterns and political-territorial divisions in second millennium BCE Palestine was based almost solely on Egyptian texts. The comprehensive archaeological surveys which have been undertaken in the central hill country in recent years enable us to reexamine the 'Israelite Settlement' process in relation to changes in the natural environment and social landscape, from the Middle Bronze to the Iron Age. These 'longue durée-oriented' studies filled Alt's perceptions with archaeological substance.[6]

The advantages of the Braudelian model, besides its correspondence to the broad time-scales used in archaeology, are obvious. Nevertheless, we should not allow our engagement with long-term changes (Alt's 'gradual variations'), and with the search for general and cyclic patterns in cultural processes, to overpower

of the *Annales* School', *The Journal of Economic History*, 38 (1978), pp. 58-76; S. Kinser, '*Annaliste* Paradigm? The Geohistorical Structuralism of Fernand Braudel', *The American Historical Review*, 86 (1981), pp. 63-105; for the close relationship between the 'New Archaeology' and Braudel's method, see, for example, C. Renfrew, 'Transformations', C. Renfrew and K.L. Cooke (eds.), *Transformations: Mathematical Approaches to Culture Change*, New York 1979, p. 6; idem, *Approaches to Social Archaeology*, Edinburgh 1984, pp. 14-21, 358-365; L.R. Binford, 'Behavioral Archaeology and the "Pompeii Premise"', *The Journal of Anthropological Research*, 37 (1981), pp. 195-208.

4   See, for example, Adams (above, n. 2), pp. 81-83, 95; idem, *Heartland of Cities*, Chicago 1981, p. 131.

5   A. Alt, 'Die Landnahme der Israeliten in Pälastina', *Reformationsprogramm der Universität Leipzig*, Leipzig 1925, English translation: A. Alt, *Essays in Old Testament History and Religion* (trans. R.A. Wilson), Oxford 1966, pp. 135-169.

6   M. Kochavi (ed.), *Judaea, Samaria and the Golan: Archaeological Survey 1967-1968*, Jerusalem 1972 (Hebrew); see mainly A. Zertal, *The Israelite Settlement in the Hill Country of Manasseh*, Haifa 1988 (Hebrew); idem, 'Israel Enters Canaan—Following the Pottery Trail', *BAR*, 17/5 (1991), pp. 28-49; I. Finkelstein, *The Archaeology of the Israelite Settlement*, Jerusalem 1988; idem, 'Excavations at Shiloh 1981-1984: Preliminary Report', *Tel Aviv*, 12 (1985), pp. 123-180; idem, 'The Land of Ephraim Survey 1980-1987: Preliminary Report', *Tel Aviv* 15-16 (1988-1989), pp. 117-183; A. Ofer's essay in this volume.

our interest in short-term, particular and unexpected non-ecological changes.[7] This article examines the main socio-political transformations that took place in the central hill country during the seventeenth-twelfth centuries BCE. It will demonstrate how a conscious combination of the 'longue durée' and the 'event' can make the archaeological picture of this period more intelligible.

THE COLLAPSE OF THE SOCIO-POLITICAL SYSTEMS AT THE END OF THE MIDDLE BRONZE AGE

During the Middle Bronze Age dozens of walled towns and hundreds of unfortified settlements had been established all over Palestine. This highly diversified and hierarchical pattern of settlement signifies the demographic zenith of the Bronze Age, and faithfully reflects socio-political and economic developments within Canaanite society during the first half of the second millennium BCE.[8] At the end of the seventeenth century and in the course of the sixteenth century BCE, this system had been changed as a result of a long series of destructions and abandonments of sites. These destructions were traditionally related to the conquest of Canaan by the first Pharaohs of the Eighteenth Dynasty, but doubts concerning this explanation have been recently voiced, claiming that Egyptian texts do not support it. Alternative explanations, at least for some of the destructions, should therefore be sought.[9] Kempinski suggested that the destruction and desertion of the central hill country resulted from the establishment, during the days of the Fifteenth 'Hyksos' Dynasty, of a densely populated urban bloc on the southern coastal plain, and from the consequent shift of the population center of gravity to that area.[10] Zertal preferred an ecologically oriented interpretation of the drastic changes that took place in the hill country.[11]

Weinstein pointed out that the geographical distribution of sites which,

7   Adams (above, n. 2), pp. 87-88; idem (above, n. 4—1981), p. 51.

8   For recent summaries, see N. Na'aman, 'Eretz-Israel in the Canaanite Period: the Middle Bronze and Late Bronze Ages (ca. 2000-1200 B.C.)', I. Eph'al (ed.), *The History of Eretz-Israel*, Vol. I: *Introductions; the Early Periods*, Jerusalem 1982, pp. 131-175 (Hebrew); W.G. Dever, 'The Middle Bronze Age' *BA*, 50 (1987), pp. 149-177; for the central hill country in this period, see Zertal (above, n. 6—1988); Finkelstein (above, n. 6); A. Ofer's essay in this volume.

9   See most recently J.K. Hoffmeier, 'Reconsidering Egypt's Part in the Termination of the Middle Bronze Age in Palestine', *Levant*, 21 (1989), pp. 181-193, and bibliography there; for the debate following this article, see W.G. Dever, '"Hyksos", Egyptian Destructions, and the End of the Middle Bronze Age', *Levant*, 22 (1990), pp. 75-81.; J. Weinstein, 'Egypt and the Middle Bronze IIC/Late Bronze IA Transition in Palestine', *Levant*, 23 (1991), pp. 105-115; J.K. Hoffmeier, 'Some Thoughts on William G. Dever's "Hyksos, Egyptian Destructions, and the End of the Palestinian Middle Bronze Age"', *Levant*, 22 (1990), pp. 83-89; idem, 'James Weinstein's "Egypt and the Middle Bronze IIC/Late Bronze IA Transition": A Rejoinder' *Levant*, 23 (1991), pp. 117-124.

10   A. Kempinski, *Syrien und Palästina (Kanaan) in der letzten Phase der Mittlebronze IIB-Zeit (1650-1570 v. Chr.)*, Wiesbaden 1983, pp. 222-223.

11   Zertal (above n. 6—1988), pp. 183-184, 208, 210, 222.

according to his analysis, had been destroyed at the end of the Middle Bronze Age/beginning of the Late Bronze Age (mainly in southern and inland Palestine) coincides with the main concentration of Hyksos royal scarabs. These regions were therefore proposed as the major centers of Hyksos power, devastated by the avenging first Pharaohs of the Eighteenth Dynasty.[12] However, Weinstein's analysis of the archaeological data is questionable, and so are some of his conclusions concerning the 'Hyksos' royal scarabs.[13] He failed to present a fresh stratigraphical evaluation of Palestinian sites during the period under discussion.[14] It is clear that destruction layers from the end of the seventeenth and the beginning of the sixteenth centuries BCE were arbitrarily related to Ahmose or his successors, thus subjugating the archaeological facts to vague historical events.[15] The following brief review of the Middle Bronze/Late Bronze transition in the main hill country sites exemplifies the strong tendency in Palestinian archaeology to fit new data into what is already 'known'.[16]

Shechem. The Drew-McCormic expedition to Tell Balatah determined that the fortified MB III city had been violently razed in two successive destructions: the first, ca. 1550 BCE, was attributed to Ahmose, while the second, ca. 1540 BCE, was associated with his son and successor Amenhotep I.[17] But only few finds from the destruction layers, which may support these postulations, have been published so far.[18] The pottery assemblage belongs to the end of MB III and includes a few pieces of 'Chocolate-on-White' ware; it contains no Bichrome ware or imported Cypriote vessels.[19] This assemblage can therefore be dated to the very beginning

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12 J. Weinstein, 'The Egyptian Empire in Palestine: A Reassessment', *BASOR*, 241 (1981), pp. 1-10.
13 For the scarabs issue, see P. Bienkowski, *Jericho in the Late Bronze Age*, Warminster 1986, p. 127; Hoffmeier (above, n. 9 — 1989), p. 189; Weinstein (above, n. 9), pp. 107-108. One may agree with Weinstein that the high concentration of Hyksos royal scarabs in the southern coastal plain hints at a special relationship between this region and the Hyksos. However, there seems to be no direct link between sites containing even a large number of such scarabs and early destructions. This is indicated by the case of Gezer (three scarabs), which was apparently destroyed only in the second half of the fifteenth century BCE.
14 Weinstein (above, n. 12), pp. 2-5.
15 S. Bunimovitz, 'The Land of Israel in the Late Bronze Age: A Case Study of Socio-Cultural Change in a Complex Society' (Ph.D. thesis), Tel Aviv University, Tel Aviv 1989, Ch. 1 (Hebrew).
16 H.J. Franken, 'The Problem of Identification in Biblical Archaeology', *PEQ*, 108 (1976), p. 9; for 'historical' explanations as a *'deus ex machina'*, see, for instance, L.R. Binford, 'Some Comments on Historical Versus Processual Archaeology', *An Archaeological Perspective*, New York 1972, pp. 114-121; W.G. Dever, 'The Collapse of the Urban Early Bronze Age in Palestine: Toward a Systemic Analysis', P. de Miroschedji (ed.), *L'urbanisation de la Palestine à l'âge du Bronzer ancien* (*BAR International Series*, 527), Oxford 1989, p. 232.
17 G.E. Wright, *Shechem: The Biography of a Biblical City*, New York 1965, p. 75; J.D. Seger, 'The MB II Fortifications at Shechem and Gezer: A Hyksos Retrospective', *Eretz-Israel*, 12 (1975), pp. 38*, 43*, 45*.
18 J.D. Seger, 'The Middle Bronze IIC Date of the East Gate at Shechem', *Levant*, 6 (1974), pp. 123-130; W.G. Dever, 'The MB IIC Stratification in the Northwest Gate Area at Shechem', *BASOR*, 216 (1974), pp. 31-52.
19 Claims that Cypriote Base-Ring sherds were found in the destruction deposits at Shechem

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of the sixteenth century BCE. Moreover, it seems that during the MB III, prior to the above-mentioned destructions, Shechem had already been destroyed at least once under obscure historical circumstances.[20]

Shiloh. The MB III settlement at Shiloh (Stratum VII) had been destroyed at the end of that period. Typical Late Bronze I pottery was missing from the destruction deposits, while a few pieces of 'Choclate-on-White' ware had been found. It can be assumed, therefore, that the site was destroyed at the beginning of the 16th century BCE.[21]

Bethel. The destruction of the MB II-III settlement at this site was dated by its excavators to ca. 1550 BCE, or slightly later, and was attributed to the Egyptians.[22] Dever contended that Bethel was extensively occupied and strongly fortified for the first time in MB III.[23] Indeed, the MB II pottery assemblage from the site closely resembles that of Stratum D in Tell Beit Mirsim. Apparently for that reason, the date and historical circumstances of Bethel's destruction/desertion were affiliated with those of Tell Beit Mirsim. A heavy destruction, which was inflicted on Bethel already during MB III, illustrates that inter-regional hostilities were common in the hill country at that period.[24]

Gibeon. The limited data on the MB II-III settlement at Gibeon come from two sounding squares.[25] A burnt storeroom excavated in one of these squares was dated by Pritchard to the seventeenth century BCE.[26] The pottery was treated as a homogeneous assemblage, though it originated from both the destruction level (4a) and the level underneath (4b).[27] The date postulated by Pritchard for Gibeon's destruction was therefore effected by the presence of early types, and may be lowered. One should note, however, the absence of any Late Bronze forerunners in the ceramic assemblage of the upper level.

Beth-Zur. Following the second season of excavations at the site (1957), Funk suggested that Beth-Zur had been established as a stronghold in a later phase of the Middle Bronze, and that it was destroyed at the end of the fifteenth century

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have been shown to be unsound. See B.M. Gittlen, 'The Cultural and Chronological Implications of the Cypro-Palestinian Trade during the Late Bronze Age', *BASOR*, 241 (1981), p. 50. For dating problems concerning the 'Chocolate-on-White' ware, see below, n. 35.
20 Traces of this destruction were located at the East Gate (Seger, above, n. 18, p. 122), and presumably also at the Northwest Gate area, at the end of Phase 3 (Dever, above, n. 18, pp. 37, 41, Table 1). It seems therefore to be more widespread than a "localized conflagration" as Dever defined it (ibid., p. 48).
21 Finkelstein (above, n. 6 — 1985), p. 160.
22 J.L. Kelso, The Excavation of Bethel (1934-1960) (*AASOR*, 39), 1968, pp. 23-24, 46, 58.
23 W.G. Dever, 'Archaeological Methods and Results: A Review of Two Recent Publications', *Orientalia*, 40 (1971), pp. 466-468.
24 Kelso (above, n. 22), pp. 25, 27.
25 J.B. Pritchard, *Winery, Defenses, and Soundings at Gibeon*, Philadelphia 1964, pp. 42-47.
26 Ibid., pp. 46-47.
27 Ibid., p. 43.

BCE, or even later.[28] The lower date for the site's destruction was refuted by Lapp and by Dever, who argued that it should be raised to the days of Thutmose III.[29] Due to these critiques Funk redated Beth-Zur's destruction to the mid-sixteenth century BCE.[30] The embarrassment concerning the destruction of the Middle Bronze fortified settlement of Beth-Zur seems to stem from the presence of some Late Bronze sherds in the ceramic assemblage. However, *contra* to Funk and Dever, who adhered to this pottery in order to 'extend' the settlement's life till the end of the sixteenth or even the fifteenth century BCE, it seems that the assemblage is mixed and that the few Late Bronze Age sherds should be separated from the main Middle Bronze group. The Late Bronze finds testify to occasional activity at the site (encampment, seasonal settlement, etc.) in a late phase of the Late Bronze Age, rather than at its beginning.[31] Funk's conclusion seems therefore to have approached reality: '...the decision to destroy a fortified town such as Beth-zur would depend on local contingencies and need not have taken place under Amosis I or even Amenophis I'.[32]

Three other important Middle Bronze sites were excavated in the central hill country — Tell el-Far'ah, Jerusalem and Hebron. But the data gathered in all of them hardly contribute to our discussion.[33]

The above review makes it clear that we still lack the data needed for a precise dating of the late Middle Bronze-early Late Bronze Age strata in the central hill country. The dates proposed in the past are based on comparisons with key sites, such as Tell Beit Mirsim, Megiddo and Jericho. However, none of these sites provides a solid, unquestionable historical synchronism; moreover, their stratigraphy at that time is still debatable.[34] Any reconstruction of the situation in the central hill country at the Middle Bronze-Late Bronze transition should begin by building a relative sequence of events, based on a meticulous comparison of the archaeological assemblages found in the region. The fact that the data from these

28 O.R. Sellers et al. The 1957 Excavations at Beth-Zur (*AASOR,* 38), 1968, pp. 4, 37, 41.
29 Ibid., p. iii; Dever (above, n. 23), p. 460.
30 R.W. Funk, 'Beth-Zur', *EAEHL,* I, pp. 263, 265. A similar date had already been suggested by Sellers in 1933 — O.R. Sellers, *The Citadel of Beth-Zur,* Philadelphia 1933, pp. 9, 33.
31 Ibid., p. 9. The Late Bronze pottery includes a few sherds of Cypriote imports (White Slip II milk-bowls, Base-Ring 'bilbils', White Shaved dipper juglets), as well as few local cooking pots, 'Canaanite jar' bases and a lamp. A Nineteenth/Twentieth Dynasty scarab had also been found; see ibid. pp. 33-35, Figs. 26, 50:6, 51, Pl. 8; Sellers et al. (above, n. 28), p. 22, Figs. 4, 10; Pl. 20:19. These finds may actually belong to the reoccupation of the site at the beginning of the twelfth century BCE.
32 Sellers et al. (above, n. 28), p. 4, n. 2.
33 For Tell el-Far'ah, see K.M. Kenyon, 'Palestine in the Middle Bronze Age', *CAH* II/1 (1973), pp. 108-110; idem, 'Palestine in the Time of the Eighteenth Dynasty', *CAH* II/1 (1973), p. 543; Kempinski (above, n. 10), pp. 121-122; J. Mallet, *Tell el Far'ah II.1: le bronze moyen,* Paris 1987; idem, *Tell el Far'ah II.2: le bronze moyen,* Paris 1988; for Jerusalem, see Y. Shiloh, *Excavations at the City of David, I, 1978-1982: Interim Report of the Five First Seasons* (*Qedem,* 19), Jerusalem 1984, p. 26; for Hebron, see Ofer's essay in this volume.
34 For Megiddo, see R. Gonen, 'Megiddo in the Late Bronze Age: Another Reassessment', *Levant,* 19 (1987), pp. 83-110; for Tell Beit Mirsim and Jericho, see below, n. 36.

sites are meager and fragmentary prevent the realization of this goal.[35]

Nevertheless, there seem to be enough clues to indicate that the major sites of the region and its periphery had not been devastated contemporaneously, but rather in a long process which lasted from the end of the seventeenth to mid/end of the sixteenth century BCE.[36] Even though the agents of this destruction process are as yet unidentified, Kenyon's general assertion that 'there are no certain criteria for connecting the stratigraphical sequence in most sites with the reconquest of Palestine by the Egyptian rulers of the Eighteenth Dynasty' seems to fit best the situation in the hill country.[37] As shown above, traces of hostilities were found in many of the sites prior to their final destruction. In this connection, note should also be made of the strong defenses which characterized the main sites in the central hill country at the end of the Middle Bronze Age, and of their repeated renovation and improvement.[38] The growth of militarism, instability and insecurity in the region during this period may also be reflected in the gradual(?) abandonment of many of its small unfortified sites.[39] In short, the impression is

35 For the 'Chocolate-on-White' ware, see J.B. Hennessy, 'Chocolate-on-White Ware at Pella', J.N. Tubb (ed.), *Palestine in the Bronze and Iron Ages: Papers in Honour of Olga Tufnell,* London 1985, pp. 100-113. The chronology of this pottery is still too loose to facilitate its use as a decisive criterion for dating.
36 According to Kempinski (above, n. 10), pp. 123-125, 222-223, 225, the MB II destruction at Jericho should be dated to the second half of the seventeenth century BCE. His suggestion, based on a critical approach to Kenyon's analysis of the Middle Bronze tombs as well as on Garstang's excavations at the site, has been confirmed by the final report on Kenyon's work; see K.M. Kenyon and T.A. Holland, *Excavations at Jericho, V,* London 1983, pp. 442-460. Albright found it difficult to determine the destruction date of Stratum D at Tell Beit Mirsim. Consequently, his decision was merely historical and only later was supported by an archaeological fact — the absence of Bichrome Ware in this stratum — W.F. Albright, The Excavation of Tell Beit Mirsim in Palestine I: The Pottery of the First Three Campaigns (*AASOR,* 12), 1932, p. 35; idem, The Excavation of Tell Beit Mirsim II: The Bronze Age (*AASOR,* 17), 1938, p. 59. According to Tufnell and Kempinski, the destruction date of Stratum D should be raised to the second half of the seventeenth century BCE; see O. Tufnell, *Lachish IV: The Bronze Age,* London 1958, pp. 34, 47, 63-64, 67; Kempinski (above, n. 10), pp. 222, 225.
37 Kenyon (above, n. 33), p. 531.
38 For a review of the region's fortifications during this period, see Z. Lederman, 'The Middle Bronze IIC Defense System', in Finkelstein (above, n. 6 — 1985), pp. 144-146. The most celebrated example is of course the fortification system at Shechem — Seger (above, n. 17), pp. 34*-38*. For a different interpretation of this system, see Finkelstein (above, n. 6 — 1985), pp. 164-165; Z. Lederman, 'The Building Technique at Shiloh in the Middle Bronze Age II and the "Millo" of Shechem', *Eleventh Archaeological Conference in Israel: Abstracts of Lectures,* Jerusalem 1985, p. 38 (Hebrew); D. Ussishkin, 'Notes on the Fortifications of the Middle Bronze II Period at Jericho and Shechem', *BASOR,* 276 (1989), pp. 41-50. In any event, Dever's description of Palestine at the end of the Middle Bronze Age as a peaceful country, with its formidable fortifications aimed against a possible Egyptian threat, above, n. 8, pp. 174-175; idem, 'Relations Between Syria-Palestine and Egypt in the "Hyksos" Period', J.N. Tubb (ed.), *Palestine in the Bronze and Iron Ages: Papers in Honour of Olga Tufnell,* London 1985, pp. 73-74, is difficult to accept. For a more realistic description see W.F. Albright, *The Archaeology of Palestine,* Harmondsworth 1960, pp. 90-91.
39 Finkelstein (above, n. 6 — 1988), pp. 340, 342.

that at the end of the Middle Bronze Age the central hill country was troubled mainly by internal problems.

A panoramic perception, in the spirit of the 'longue durée', seems to be fruitful in this case, since the similarity (as well as the differences) between the settlement crises in the hill country at the end of the Early Bronze Age and at the end of the Middle Bronze Age are presumably not fortuitous. In both cases important insight can be gained by analogy to the collapse of other social systems.[40] Without elaborating on this subject, suffice it to say that abrupt changes in settlement patterns or in the evolutionary trajectories of cultural systems can now be explained by gradual processes. Furthermore, it has become obvious that an explanation for the collapse of cultural systems can not be found in overly-simple, unicausal factors.[41] The repeated disintegration of the social fabric in the hill country during the Bronze Age is of special interest due to the fact that it happened under similar environmental and demographic conditions.[42] It is possible, then, that at least part of the seemingly cyclic problems which troubled the inhabitants of the hill country during the third and second millennia BCE had derived from the incompetence of the socio-political organization to cope with a population growth beyond a certain threshold.[43] In any event, it seems that in working out an alternative explanation for the collapse of the socio-political system of the hill country in MB III, it is important first to identify the reasons for its instability and weakness, due to which it could not withstand long-term pressures.[44]

40 Dever (above, n. 16); T.P. Culbert, *The Classic Maya Collapse*, Albuquerque 1973; N. Yoffee, 'The Decline and Rise of Mesopotamian Civilization: An Ethnoarchaeological Perspective on the Evolution of Social Complexity', *American Antiquity*, 44 (1979), pp. 5-35; N. Yoffee and G. Cowgill (eds.), *The Collapse of Ancient States and Civilizations*, Tucson 1988.
41 C. Renfrew, 'Trajectory Discontinuity and Morphogensis: The Implications of Catastrophe Theory for Archaeology', *American Antiquity*, 43 (1978), pp. 203-222; idem, 'Holistic Behavior and Catastrophe Theory', in Renfrew and Cook (above, n. 3), pp. 419-423; idem, 'Systems Collapse as Social Transformation: Catastrophe and Anastrophe in Early State Societies', ibid., pp. 481-506; idem,'Discontinuity and Long-Term Change', Renfrew (above, n. 3—1984), pp. 358-365; C. Renfrew and T. Poston, 'Discontinuities in the Endogenous Change of Settlement Pattern', Renfrew and Cook (above, n. 3), pp. 437-446.
42 See Finkelstein's article in this volume.
43 For a theoretical discussion of such issues, see Y. Portugali, 'Theories of Population and Settlement and Their Significance to Demographic Research in Palestine', S. Bunimovitz, M. Kochavi and A. Kasher (eds.), *Settlement, Population and Economy in Ancient Palestine*, Tel Aviv 1988, pp. 4-38 (Hebrew); see also R. Gophna and Y. Portugali, 'Settlement and Demographic Processes in Israel's Coastal Plain from the Chalcolithic to the Middle Bronze Age', *BASOR*, 269 (1988), pp. 20-21. One may assume that in addition to the political transformation, other factors, such as technological advances in agriculture (the use of iron, terracing, etc.), enabled a stable growth in the hill country population.
44 The supporters of the historical explanation are not free from such an investigation; the disability of the hill country's strongholds to oppose their presumed Egyptian conquerors must also be questioned.

POLITICAL-TERRITORIAL TRANSFORMATIONS IN THE SECOND MILLENNIUM BCE

Alt identified two different, coexisting political-territorial formations in Palestine of the Late Bronze Age: a crowded network of city-states in the plains and valleys, and large territorial kingdoms in the mountainous regions.[45] According to Alt, this situation was an outcome of the Hyksos rule, since the postulated feudal character of their military-aristocratic regime caused territorial as well as political fragmentation.

Environment aspects are also important here: the continual preference of the fertile plains and valleys for settlement increased their political-territorial fragmentation, while a framework of large areas under unified rule persisted for many generations in the thinly populated mountainous regions. The abundance of new archaeological data, gathered all over the hill country in recent years, encourages a reexamination of Alt's hypotheses.

In their attempts to reconstruct the political map of Palestine during the Middle Bronze Age without direct historical documentation, scholars usually relied on analogy to neighboring countries or on 'backward reconstruction', assuming continuity in the political organization of the country from Middle Bronze II through the Late Bronze Age to the twelfth century BCE.[46] However, both methods are no more than mere hypotheses unless properly confirmed.[47] Moreover, a mechanical employment of the above-mentioned procedures, ignoring the fact that socio-political organizations are products of particular historic conditions, denies the likely coexistence of a variety of political formations and the possibility of their dynamic transformation in the wake of historical, social and economic changes. Recent attempts to cope with the problem of reconstructing ancient 'landscapes of power', that is, the restoration of territorial boundaries and spatial dominance of past socio-political organizations from archaeological data, are therefore of much relevance to our discussion.[48]

The most practical model, based on analysis of settlement rank-size distribution in a given area, has been suggested by Johnson.[49] Ancient and modern settlement

45 Alt (above, n. 5), pp. 138-157.
46 Na'aman (above, n. 8), p. 158; R. Gophna and P. Beck, 'The Rural Aspect of the Settlement Pattern of the Coastal Plain in the Middle Bronze Age II', *Tel Aviv*, 8 (1981), pp. 76-78.
47 S. Bunimovitz, 'The Changing Shape of Power in Bronze Age Canaan', proceedings of the Second International Congress on Biblical Archaeology. Jerusalem, June 1990 (forthcoming).
48 S. Bunimovitz, 'Reconstructing Political Systems by Spatial Analysis', in Bunimovitz et al. (above, n. 43), pp. 39-56.
49 G.A. Johnson, 'Aspects of Regional Analysis in Archaeology', *Annual Review of Anthropology*, 6 (1977), pp. 496-501; idem, 'Rank-Size Convexity and System Integration: A View from Archaeology', *Economic Geography*, 56 (1980), pp. 234-247; idem, 'Monitoring Complex System Integration and Boundary Phenomena with Settlement Size Data', S.E. van der Leeuw (ed.), *Archaeological Approaches to the Study of Complexity*, Amsterdam 1981, pp. 144-187; idem, 'The Changing Organization of Uruk Administration on the Susiana Plain', F. Hole (ed.), *The Archaeology of Western Iran*, Washington D.C. 1987, pp. 107-139.

systems can be characterized by the classification of their sites' sizes according to the rank-size rule.[50] Settlement hierarchies are the combined product of a variety of factors—ecological, economic, political, administrative and cultural—and their study within the proper historical context can shed light on the social structure behind the settlement system.

In a standard rank-size analysis the settlements size hierarchy of a given system is compared with its 'ideal' log-linear distribution. A most common 'deviation' is the concave, or 'primate' distribution, in which the main city is much larger than the settlements ranked below it. A second type of deviation, more important to our discussion, is the convex distribution, in which sites below the size of the largest settlement in the system are markedly larger than the log-linear model would predict. Investigation of a great number of case studies, diversified both chronologically (fourth millennium BCE to present) and geographically, has demonstrated that convex distributions are indicative of a relatively low degree of integration among the settlements. This condition may be the product of the combination of two or more relatively autonomous settlement systems in the same analysis, or of spatial marginality in a dendritic settlement system. Furthermore, diachronic analyses of settlement patterns indicated that increasing integration in a settlement system—usually a result of political/administrative unification—was followed by decreasing convexity of the rank-size distribution.[51] Though integration in ancient settlement systems is not easy to define, it can be determined that low integration implies relative autonomy or independence of the parts of a system (decentralized polities), while high integration means a high degree of interdependence (centralized government).

50 According to this rule (usually considered to be an empirical generalization), when settlements of an urban system are ranked in a descending order of population size, a settlement of rank *r* has a population equal to 1/*r* that of the largest settlement in the system. This relationship is lognormally distributed, so that a linear plot is produced when the relationship is graphed on full-logarithmic paper. For a more elaborate discussion of the rule and bibliography, see Johnson (above, n. 49—1977, 1981).

51 See mainly Johnson (above, n. 49—1977, 1980, 1981, 1987); Adams (above, n. 4—1981), pp. 73-75; Gophna and Portugali (above, n. 43); C.D. Harris, *Cities of the Soviet Union*, Washington D.C. 1970, Ch. 5; G.W. Skinner, 'Regional Urbanization in Ninteenth-Century China', G.W. Skinner (ed.), *The City in Late Imperial China*, Stanford 1977, pp. 236-243; H. Weiss, 'Periodization, Population and Early State Formation in Khuzistan', T.C. Young and L.D. Levine (eds.), *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia*, Malibu 1977, pp. 364-366; R.G. Fox and C.A. Smith, 'Introduction: The Evolution and Diversity of Urban Systems', *Comparative Urban Research*, 9 (1982), pp. 5-7; C.A. Smith, 'Placing Formal Geographical Models into Cultural Contexts: The Anthropological Study of Urban Systems', ibid., pp. 50-59; idem, 'Modern and Premodern Urban Primacy', ibid., pp. 79-96; S.A. Kowalewski, 'The Evolution of Primate Regional Systems', ibid., pp. 60-78; H. Carter, *An Introduction to Urban Historical Geography*, London 1983, Ch. 5; R.W. Paynter, 'Expanding the Scope of Settlement Analysis', J.A. Moore and A.S. Keene (eds.), *Archaeological Hammers and Theories*, New York 1983, pp. 233-275; S.N. Eisenstadt and A. Shachar, *Society Culture and Urbanization*, Beverly Hills 1987, pp. 39-49; W.R. Kotter, 'Spatial Aspects of the Urban Development of Palestine during the Middle Bronze Age' (Ph.D. thesis), University of Arizona, Tucson 1986, pp. 318-344.

Rank-size distributions may therefore imply the existence of a single, integrative settlement system or several autonomous systems within the examined region. Furthermore, a diachronic study of rank-size distributions in a given area may also monitor changes in its social, political and economical organization.

Figure 1 presents the Middle Bronze II-III and Late Bronze II rank-size distributions of the sites surveyed in the hill country of Manasseh.[52] During both periods this region was more densely settled than any other part of the central hill country. Since its Late Bronze political-territorial structure can be deduced from the Amarna letters, it can help us to monitor transformations in the political organization of the hill country.

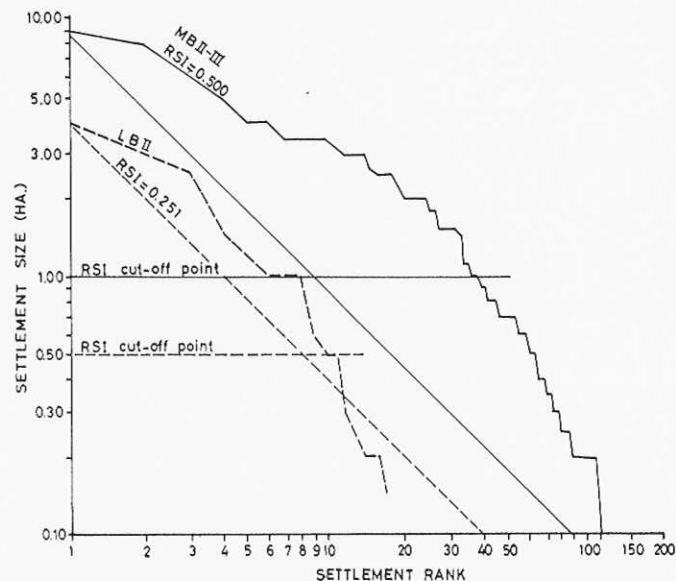The highly convex Middle Bronze II-III plot (RSI = 0.50)[53] implies the

Fig. 1. Middle Bronze II-III and Late Bronze II rank size distributions in northern Samaria

52 The plots are based, with minor alterations, on the site list of the survey of Manasseh—Zertal (above, n. 6—1988), pp. 90-173.

53 RSI = Rank-Size Index was calculated according to Johnson (above, n. 49—1980), p. 239; idem (above, n. 49—1981), pp. 154-155; idem (above, n. 49—1987), p. 109. In this method, a very highly convex distribution would have an associated rank size index value approaching 1.0, while a log-linear ('ideal') distribution would have an index value approaching 0.0.

coexistence of several autonomous settlement systems. This convexity diminished during the Late Bronze Age (RSI = 0.251). One may assume that the 'straightening' of the plot simply reflects the disappearance of many sites following the settlement crisis in the hill country at the end of the Middle Bronze Age,[54] but the change seems to indicate a transformation from a collection of small, autonomous settlement systems to larger, more integrated ones.

This conclusion concurs with Alt's perception of Shechem as a large territorial kingdom during the Late Bronze Age, a hypothesis which is also confirmed by the delineation of Shechem's territorial boundaries according to the Amarna letters.[56] Shechem's central position in the hill country in particular and in Canaan in general, as reflected by the intensive activity of its notorious ruler Laba'yu, implies a relatively high level of integration within its confines. Hence, contentions about ecological and social isolation in the central hill country during the Late Bronze Age seem to be far too exaggerated.[57] Though the exact meaning of integration in ancient settlement systems is still under discussion,[58] the importance of a central administration for the unification of a socio-politically segregated area is apparent. The ruling elite, anxious to create a strong dependency on the central government, employed a variety of strategies to augment its influence on the polity's periphery, to increase the economic attraction of its territory, and to enhance integration between the various constituents of the settlement system.[59] Though we lack information concerning the measures taken by the House of Laba'yu in order to control both the sedentary population and the nomadic elements (uprooted and others) within its territory, apparently they were successful.[60] One may assume that the integrative actions could have taken place only after the collapse of the political structure which characterized the hill country during Middle Bronze II-III.

In that period, several fortified centers, each surrounded by ten to twenty rural

settlements, were established in the intermontane valleys of the Shechem Basin.[61] A similar pattern has been identified in the hill country of Ephraim (e.g., around Shiloh and Bethel), and to a lesser degree in the Judean Hills (the strongholds of Beth-Zur and Hebron probably lacked a rural hinterland).[62] Various interpretations of this unique Middle Bronze III settlement pattern, which no longer existed in the Late Bronze and Iron I periods, have been proposed: a network of city-states, providing political, economic and military protection for the rural settlements around each of them,[63] sacred *temenoi*,[64] or centers of 'dimorphic chiefdoms'.[65]

In any event, the Middle Bronze II-III rank-size distribution in the hill country of Manasseh contradicts the assumption of a large, supra-local polity in this region—an alleged Hyksos Shechemite kingdom contemporaneous with the southern coastal plain polity that emerged under the rule of the Fifteenth Dynasty.[66] Furthermore, contrary to Weinstein's contention that inland Palestinian sites had close relations with Egypt during the Middle Bronze III, and that they served as Hyksos power bases, no royal scarabs of the Fifteenth Dynasty have been found in the hill country, and of special interest is their absence from Shechem.[67] It is difficult to accept the idea that Shechem ruled over a large group of fortified settlements and their satellites without leaving any impression on the regional rank-size distribution.[68] It should be emphasized that the Middle Bronze II-III rank-size distribution of the hill country is very different from that of the Upper Jordan Valley sites, which were ruled by the primate center of Hazor, or from that of the Jezreel Valley, with its two large cities—Shim'on (Tel Shimron) and Megiddo.[69] Despite its fortifications and temple, Shechem was not an outstanding site in the hill country in the last phase of the Middle Bronze

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54   See, for example, the simulations conducted by R.W. Paynter (above, n. 51—1983), pp. 246-253, in order to study the effects of hypothetical biasing processes (the omission of various size sites from the analysis) on rank-size distributions.

55   Bunimovitz (above, n. 15), Ch. 2.

56   Alt (above, n. 5), pp. 153-155; N. Na'aman, 'The Political Disposition and Historical Development of Eretz-Israel According to the Amarna Letters' (Ph.D. thesis), Tel Aviv University, Tel Aviv 1975, pp. 27-46 (Hebrew); idem, 'The Canaanite City-States in the Late Bronze Age and the Inheritances of the Israelite Tribes', *Tarbiz*, 55 (1986), pp. 463-488 (Hebrew); Zertal (above, n. 6—1988), pp. 220-221; G. Buccellati, *Cities and Nations of Ancient Syria (Studi Semitici*, 26), Rome 1967, pp. 69-72.

57   Zertal (above, n. 6—1988), pp. 207-211; see, however, p. 221.

58   See, for instance, Johnson (above, n. 49—1981); Smith (above, n. 51); Kowalewski (ibid.).

59   See, for example, G.A. Johnson, *Local Exchange and Early State Development in Southwestern Iran (Anthropological Papers*, 51), Ann Arbor 1973; idem (above, n. 49—1987); H.T. Wright and G.A. Johnson, 'Population, Exchange and Early State Formation in Southwestern Iran', *American Anthropologist*, 77 (1975), pp. 267-289; Adams (above, n. 4—1981).

60   For the delicate manipulation of power and ideology needed in Late Bronze Age Canaan in order to maintain governmental authority, see Bunimovitz (above, n. 15), pp. 157-160.

61   Zertal (above, n. 6—1988), pp. 188-190, 197.

62   Finkelstein (above, n. 6—1985), pp. 164-165; A. Ofer's essay in this volume.

63   Zertal (above, n. 6—1988), pp. 188-190, 197.

64   Finkelstein (above, n. 6—1985), pp. 164-165; see also Zertal (above, n. 6—1988), p. 194.

65   I. Finkelstein, 'Pastoralism in the Highlands of Canaan in the 3rd and 2nd Millennium B.C.E.', O. Bar-Yosef and A. Khazanov (eds.), *Pastoralism in the Levant: Archaeological Materials in Anthropological Perspectives* (forthcoming), following M.B. Rowton, 'Urban Autonomy in a Nomadic Environment', *JNES*, 32 (1973), pp. 201-215; idem, 'Dimorphic Structure and the Tribal Elite', *al-Bahit: Festschrift Joseph Henninger (Studia Instituti Anthropos*, 28), St. Augustin bei Bonn 1976, pp. 219 257.

66   Zertal (above, n. 6—1988), pp. 198-200; Kempinski (above, n. 10), p. 64.

67   Weinstein (above, n. 12), p. 10. Quite a number of such scarabs are known from the Shephelah and the coastal plain as far north as the Mount Carmel-Jezreel Valley line (ibid., pp. 8-10 and Fig. 3). It is noteworthy that the Egyptian interest in Shechem in Middle Bronze I, when the hill country was virtually empty of settlements, declined in Middle Bronze II-III, just when the region's settlement intensified. Regarding this aspect, Shechem is distinctly different from the main sites of the Shephelah and the southern coastal plain, such as Tell el-'Ajjul and Gezer. In my opinion this may also point to differences in regional socio-political organization and political orientation in the Middle Bronze II-III, especially in its last phase.

68   See above, n. 51.

69   Bunimovitz (above, n. 15), pp. 60-70.

Age.[70] This situation had changed in the Late Bronze Age, when many of the region's fortified sites (Hebron, Beth-Zur, Gibeon, Bethel, Shiloh) were abandoned or lost power.

As mentioned above, the Middle Bronze II-III settlement patterns in Ephraim and in the Judean Hills were much the same as in Manasseh, although the number of fortified centers and their satellites — autonomous polities in our opinion — as well as the overall number of settlements, decreases as one goes south. In these regions too, following the socio-political collapse at the end of the Middle Bronze Age, large territories were taken over by few centers;[71] but these territories were almost empty of small settlements. Interestingly enough, archaeology has shown Laba'yu's kingdom to be the most 'urban' among the central hill country Late Bronze entities, though he is usually considered to have been heavily involved with the 'Apiru and other non-sedentary elements.[72]

The segregation of the hill country in the Middle Bronze Age into a host of small, autonomous (or semiautonomous) polities may explain the instability and hostilities which characterized the region at that time. It may also account for the 'domino effect' which apparently marked the collapse of these polities, though it can not shed light on the specific causes of the collapse. Positive and negative interactions between neighboring peer polities, sharing the same culture and social structure, and having identical territorial extent, have been recently discussed at length in order to clarify the processes behind their interdependent emergence and collapse.[73] A most illuminating conclusion of this discussion was

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70 See above, notes. 61, 62.
71 Na'aman suggested that the hill country south of the kingdom of Shechem was divided between the kingdom of Jerusalem and the kingdom of Debir (Khirbet Rabud), which was established in the fourteenth century BCE: Na'aman (above, n. 8), p. 215; idem (above, n. 56— 1986), p. 471; idem, 'The Boundaries of the Kingdom of Jerusalem in the Second Millennium BCE', *Zion*, 56 (1991), pp. 361-380 (Hebrew). But the silence of 'Abdi-Heba, king of Jerusalem, regarding his presumed southern neighbor is disturbing, especially in light of the border disputes with his other neighbors — Gezer and Shechem (for the Amarna letters from Jerusalem and for its boundaries, see Na'aman, above, n. 56—1975, pp. 104-119; idem, above — 1991). The limited amount of material revealed in the small-scale excavations at Khirbet Rabud made it difficult to accurately date the Late Bronze Age strata, and they were related in a general way to the fourteenth and thirteenth centuries BCE: M. Kochavi, 'Khirbet Rabud = Debir', *Tel Aviv*, 1 (1974), p. 10. It therefore seems better to date Debir's foundation to the end of the fourteenth century BCE, and to associate it with the resedentarization of the hill country's shepherds/nomads during the post-Amarna period (below). Settlement at the site was sparse (see Ofer's essay in this volume), and it may have not been fortified; remains of a 'Canaanite wall' were related to the Late Bronze Age only by a logical deduction — Kochavi, ibid., p. 55; I thank Z. Herzog for this observation.
72 Zertal (above, n. 6— 1988), p. 221; E.F. Campbell, 'Two Amarna Notes: The Shechem City-State and Amarna Administrative Terminology', F.M. Cross, W.E. Lemke and P.D. Miller (eds.), *Magnalia Dei: The Mighty Acts of God: Essays on the Bible and Archaeology in Memory of G. Ernest Wright*, Garden City NY 1976, pp. 39-45 (some of the data published there were proven to be erroneous in the course of the Land of Ephraim Survey).
73 C. Renfrew and J.F. Cherry (eds.), *Peer Polity Interaction and Socio-Political Change*, Cambridge 1986.

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that a variety of interactions, different from case to case, may cause the almost simultaneous collapse of such peer polities. Among them are exaggerated economic interdependence; exhausting, long-lasting hostilities; the fall of an elite, ruling over a group of polities through kinship connections; or a revolt spreading 'like wildfire'.[74]

THE SHIFTING FRONTIER

The collapse of the socio-political structure of the central hill country at the end of the Middle Bronze Age was responsible for a dramatic change in its settlement pattern — from 220 sites in Middle Bronze II-III to about twenty sites in Late Bronze I, with only minimal settlement recovery during Late Bronze II-III.[75] This drastic settlement decline raises the question as to the fate of most of the Middle Bronze population. It has recently been proposed that many fell by the sword or were sent to Egypt in mass deportations.[76] But such conjectures lack clear historical or cultural support, and cannot provide a lucid explanation for the sharp demographic decline.

A theory of greater interest, which also bears a possible solution to the question of the origin of the population which settled in the central hill country in Iron Age I, suggests that the disintegration of the network of permanent Middle Bronze settlements led to the nomadization of many of their inhabitants; an additional change in the political and socio-economic conditions at the end of the Late Bronze Age created new circumstances, which brought about the resedentariza-tion of this population.[77] The 'disappearance' of the inhabitants of the hill country at the beginning of the sixteenth century BCE and the 'appearance' of the Iron I settlers are thus understood, in a 'longue durée' perspective, as two phases in the cyclic settlement processes that took place in the hill country in the Bronze Age.[78] An important component of this proposal is the perception of the hill country as a frontier zone, in which crises in occupation are felt more acutely than in the lowlands. In times of a general decline in the country it is the first to be 'emptied' of its sedentary dwellers and 'filled' with a pastoral population.[79] An examination of the archaeological, anthropological and conceptual foundations of this

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74 C. Renfrew, 'Epilogue and Prospect', op. cit., p. 155; J.A. Sabloff, 'Interaction Among Classic Maya Polities: A Preliminary Examination', op. cit., pp. 109-126.
75 Data collected from Zertal (above, n. 6—1988); Finkelstein (above, n. 6— 1988-89); Ofer's essay in this volume. There are clear differences in the settlement recovery of the hill country's subregions, the details of which will not be listed here. In any event, Gonen's analysis of the settlement transformations in Canaan during the Late Bronze Age — R. Gonen, 'Urban Canaan in the Late Bronze Age', *BASOR*, 253 (1984), pp. 61-73 — is too general, and does not represent the situation in the hill country; see Bunimovitz (above, n. 15), Ch. 3.
76 Zertal (above, n. 6—1988), pp. 219-220.
77 Finkelstein (above, n. 6—1988), pp. 342, 345-347.
78 Finkelstein (above, n. 65).
79 Ibid.; idem (above, n. 6—1988), pp. 338-339.

hypothesis reveals some difficult problems; yet, the framework of this proposal will serve us as a basis for an alternative model for the socio-demographic transformations that took place in the hill country in the Late Bronze Age.

Though methodology concerning the archaeological analysis of pastoralism is still in its infancy,[80] it would appear that the dozens of very small Middle Bronze sites, some yielding only a scatter of sherds and lacking architectural remains, and the ca. twenty Middle Bronze cemeteries distant from permanent settlements, testify to the existence of a sizable pastoral element in the population of the central hill country (mainly in its central and southern sections) at that period.[81] In the Late Bronze Age, however, when an increase in pastoral activity could be expected, following the collapse of the majority of permanent settlements in the region, the evidence for pastoral groups decreases: the 'shepherds' sites' disappear, and the number of isolated cemeteries lessens.[82] The relatively limited number of Late Bronze II tombs found in the central part of the hill country, without connection to a contemporaneous settlement site, such as those of Gibeon and Naḥlat Aḥim,[83] emphasize the emptiness of the region in this period. They should not be regarded as 'tribal' cemeteries, since in each of these instances, the tombs served a single nuclear family during a limited period of time.[84] Isolated cult places have been mentioned as evidence for a considerable pastoral population in the hill country in the Late Bronze Age.[85] But the square temple at the foot of Mount Gerizim (Tananir), if indeed a 'tribal' shrine, is dated to

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80 See, for instance, C. Chang and H.A. Koster, 'Beyond Bones: Towards an Archaeology of Pastoralism', *Advances in Archaeological Method and Theory*, 9 (1986), pp. 97-148; J.E. Rafferty, 'The Archaeological Record on Sedentariness: Recognition, Development and Implications', *Advances in Archaeological Method and Theory*, 8 (1985), pp. 113-156. The term 'pastoralism' will be used in this discussion to describe population dependent for its livelihood mainly on animal husbandry.

81 Finkelstein (above, n. 65). This also hints that the socio-political organization of the hill country was different from that of the lowlands; Rowton and Finkelstein's dimorphic chiefdoms seem to fit this format.

82 Finkelstein (above, n. 6—1988), pp. 339-341. The major concentration of cemeteries is in the Judean Hills. Concerning the possible movement of a portion of the hill country shepherds/nomads toward the less sedentary end of the settlement continuum, see below, n. 103.

83 J.B. Pritchard, *The Bronze Age Cemetery at Gibeon*, Philadelphia 1963; R. Amiran, 'A Late Bronze Age II Pottery Group from a Tomb in Jerusalem', *Eretz-Israel*, 6 (1960), pp. 25-37 (Hebrew).

84 In Tomb 10 at Gibeon, eleven bodies were interred over a period of a hundred years at the most. According to the method conceived by M.J. Alden, *Bronze Age Population Fluctuations in the Argolid from the Evidence of Mycenaean Tombs*, Göteburg 1981, p. 15, the tomb served a population of about four people (the calculation is based on an average age at time of death of thirty-three years; see B. Arensberg, 'The Peoples in the Land of Israel from the Epipaleolithic to Present Times' [Ph.D. thesis], Tel Aviv University, Tel Aviv 1973, p. 96). A similar result is reached using a different calculation method; see T.M. Whitelaw, 'The Settlement at Fournou Korifi Myrtos and Aspects of Early Minoan Social Organization', O. Krzyszkowska and L. Nixon (eds.), *Minoan Society*, Bristol 1983, pp. 334-336.

85 Finkelstein (above, n. 6—1988), pp. 343-344.

Middle Bronze III,[86] and the cult place in Shiloh, which supposedly served pastoral groups active in the surrounding area, ceased to function at the end of, or even during, Late Bronze Age I.[87]

According to Finkelstein's hypothesis, the shepherds/nomads of the Late Bronze Age were compelled to return to a sedentary life due to the disintegration of the Canaanite city-states, with which they had maintained a symbiotic relationship. This disintegration presumably occurred as a result of Egyptian military campaigns, the economic exploitation of Canaan by the Pharaohs, internal conflicts, and pressure by the Sea Peoples. All these factors undermined the political and economic strength of Palestine and caused an unprecedented weakening of the urban and rural system.[88] But a much different picture emerges from recent research: at the end of the thirteenth century and the first half of the twelfth century BCE, the Nineteenth and Twentieth Egyptian Dynasties strengthened their hold on Palestine and overcame the threat of the Sea Peoples; until the final withdrawal of Egypt from Palestine in the mid-twelfth century BCE, there is noticeable settlement continuity, renewed building activity, and cultural prosperity in many central sites in the northern valleys and in the Shephelah.[89] Furthermore, even if it is not yet possible to exactly date the beginning of the renewed settlement process in the hill country, it probably commenced when the majority of the Canaanite centers in both the lowlands and the hill country were still in existence.[90]

Although some of the archaeological data do not accord with the hypothesis under examination, its anthropological basis cannot be discounted. The 'fluidity'

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86 R.G. Boling, 'Excavations at Tananir, 1968', G.M. Landes (ed.), *Report on Archaeological Work at Suwwanet eth-Thaniya, Tananir and Khirbet Minha (Munhata)* (*BASOR Supplement Studies*, 21) 1975, pp. 23-85; E.F. Campbell and G.E. Wright, 'Tribal League Shrines in Amman and Shechem', *BA*, 32 (1969), pp. 104-116.

87 Finkelstein (above, n. 6—1985), pp. 166-167; idem (above, n. 6—1988), pp. 219, 343.

88 Finkelstein (above, n. 6—1988), pp. 345-346.

89 Weinstein (above, n. 12), pp. 17-23; Na'aman (above, n. 8), pp. 241-255; E.D. Oren, '"Governor's Residencies" in Canaan under the New Kingdom: A Case Study of Egyptian Administration', *JSSEA*, 14 (1984), pp. 37-56; A. Kempinski, 'The Overlap of Cultures at the End of the Late Bronze Age and the Beginning of the Iron Age', *Eretz-Israel*, 18 (1985), pp. 399-407 (Hebrew); O. Negbi, 'The Continuity of the Canaanite Bronzework of the Late Bronze Age into the Early Iron Age', *Tel Aviv*, 4 (1974), pp. 159-172; D. Ussishkin, 'Levels VII and VI at Tel Lachish and the End of the Late Bronze Age in Canaan', J.N. Tubb (ed.), *Palestine in the Bronze and Iron Ages: Papers in Honour of Olga Tufnell*, London 1985, pp. 213-230; I. Singer, 'Merneptah's Campaign to Canaan and the Egyptian Occupation of the Southern Coastal Plain of Palestine in the Ramesside Period', *BASOR*, 269 (1988), pp. 1-10; idem, 'The Political Status of Megiddo VIIA', *Tel Aviv*, 15-16 (1988-1989), pp. 101-112; idem, essay in this volume; S. Bunimovitz, 'An Egyptian "Governor's Residency" at Gezer?—Another Suggestion', *Tel Aviv*, 15-16 (1988-1989), pp. 68-76; S. Geva, 'The Transition from Canaanite to Israelite Hegemony in Palestine—A Suggestion', *Eretz-Israel*, 20 (1989), pp. 149-153 (Hebrew). See also below, n. 111.

90 Finkelstein (above, n. 6—1988), pp. 320-321, 348-351. If the hill country sites had been destroyed previously, why would the region's shepherds/nomads choose to settle rather than attempt to maintain a symbiotic relationship with sites in the Shephelah, such as Lachish?

of the settlement-demographic continuum in the Middle East throughout history—nomadization of permanent dwellers as a result of economic, social, or political pressures and their renewed settlement as conditions change—is a well-known phenomenon.[91] In this respect it is reasonable to assume that the collapse of the socio-political and settlement systems in the central hill country (as well as in other regions of Palestine) at the end of the Middle Bronze Age indeed caused sizable segments of the permanent population to adapt to the new situation by changing their way of life; this shift apparently occurred in other periods as well.[92] It is difficult, however, to agree with the claim that the very same circumstances—the collapse of the socio-political and settlement systems—led to two opposed processes: nomadization at the end of the Middle Bronze Age and sedentarization at the end of the Late Bronze Age. It seems to me that the two processes were the result of different causes.

The attempt to understand the socio-demographic processes in the hill country in the spirit of the "longue durée" school, and its depiction as a geographic-ecological and human frontier, constitute an important step in the study of the region. But the overly static conception of the term 'frontier' should be reexamined.

In his study of the changing borders of imperial China, O. Lattimore demonstrated that the position of the frontier in ancient civilizations was dependent upon both external ecological factors and internal socio-political processes.[93] The further the Chinese civilization spread to barren areas, the more the settlers in these areas withdrew from urbanism and intensive agriculture, and adopted an extensive economy and a way of life close to that of shepherds/nomads. Due to the distance of the frontier areas from the centers of government and culture, during times of decline and weakness of the central government the connection with these areas was lost, and their inhabitants preferred to come under the aegis of their pastoral neighbors rather than be subjected to the high taxation and other obligations imposed on them by the urban civilization. Thus the lines of the frontier swung inwards and outwards in a

cyclic process deriving from the changing power of the ruling dynasties.

The model of the 'shifting frontier' was adopted and improved by Adams for the purpose of understanding the social transformations which accompanied the rise and fall of the Mesopotamian civilizations.[94] Marfoe emphasized its great importance for the Levant, and applied it in his research on the Lebanese Biqaʻ.[95] In practice, this model provides the underpinnings for Finkelstein's hypothesis, but the latter restricts the fluctuations of the frontier exclusively to the mountainous region. A long-term historical approach, from antiquity to the beginning of this century, reveals that the ecological and social frontier in Palestine could shift between very broad boundaries, depending on the capability and strength of its government.

Beginning with the Islamic conquest and continuing until the end of the Ottoman rule, there were ongoing processes in Palestine, of settlement depletion, agricultural degeneration, and expansion of the desert and the swamps at the expense of cultivated lands, accompanied by a considerable penetration of a nomadic population from the fringes of the settled regions to their heartland.[96] As a result of these processes, the coastal plain and the northern valleys were transformed into swampland frontier zones inflicted with malaria, and populated by Bedouin tribes and marginal social elements, while the permanent population retreated to the hill country.[97] It therefore follows that under proper conditions of regional development and public security, the Palestinian frontier was pushed away to the east and south, with the lowlands enjoying a great deal of settlement stability and a corresponding degree of importance. In the absence of these conditions the opposite was true: the lowlands turned into a frontier, and the importance of the central hill country rose at their expense.[98] The exact reasons for the neglect of Palestine in the post-Byzantine periods are not the concern of this essay, but it is clear that they are constituted of a recurring pattern: an inefficient and corrupt government, or one which had limited interest in the country, weakened the permanent inhabitants (who were concentrated mainly in

91 In addition to the bibliography cited in Finkelstein (above, n. 6—1988), p. 342, see also R. McC. Adams, 'The Mesopotamian Landscape: A View from the Frontier', C.B. Moore (ed.), *Reconstructing Complex Societies*, Cambridge Mass. 1974, pp. 1 20; idem, 'Strategies of Maximization, Stability, and Resilience in Mesopotamian Society, Settlement, and Agriculture', *Proceedings of the American Philosophical Society*, 122 (1978), pp. 329-335; P.C. Salzman, 'Introduction: Processes of Sedentarization as Adaptation and Response', P.C. Salzman (ed.), *When Nomads Settle*, New York 1980, pp. 1-19; N.N. Lewis, *Nomads and Settlers in Syria and Jordan, 1800-1980*, Cambridge 1987; Marfoe (above, n. 2).

92 For example in the Intermediate Bronze Age, according to the conception of Dever (above, n. 16); idem, 'From the End of the Early Bronze Age to the Beginning of the Middle Bronze', J. Amitai (ed.), *Biblical Archaeology Today: Proceedings of the International Congress on Biblical Archaeology, Jerusalem, April 1984*, Jerusalem 1985, pp. 113-135. See also I. Finkelstein, 'Further Observations on the Socio-Demographic Structure of the Intermediate Bronze Age', *Levant*, 21 (1989), pp. 129-140; idem, 'The Central Hill Country in the Intermediate Bronze Age', *IEJ*, 41 (1991), pp. 19-45; idem, (above, n. 65).

93 O. Lattimore, *Inner Asian Frontiers of China*, London 1940.

94 Adams (above, n. 4—1981); idem (above, n. 91—1974, 1978).

95 Marfoe (above, n. 2).

96 See, for instance, D.H.K. Amiran, 'The Pattern of Settlement in Palestine', *IEJ*, 3 (1953), pp. 192-209; D.H.K. Amiran and Y. Ben-Arieh, 'Sedentarization of Beduin in Israel', *IEJ*, 13 (1963), pp. 162-166; M. Sharon, 'Processes of Destruction and Nomadization in Palestine under Islamic Rule (633-1517)', M. Sharon (ed.), *Notes and Studies on the History of the Holy Land Under Islamic Rule*, Jerusalem 1976, pp. 7-32 (Hebrew); Y. Frankel, 'The Penetration of Beduin into Eretz-Israel in the Fatimid Period (969-1096 C.E.)', *Cathedra*, no. 11 (1979), pp. 86-108 (Hebrew); A. Shmueli, *Nomadism about to Cease*, Tel Aviv 1980, pp. 31, 71, 94-95, 128-130 (Hebrew); Y. Tsafrir, 'The Arab Conquest and the Gradual Decline of the Population of Eretz-Israel', *Cathedra*, no. 32 (1984), pp. 69-74 (Hebrew).

97 Amiran, op. cit., pp. 192-205; W. Hütteroth, 'The Pattern of Settlement in Palestine in the Sixteenth Century', M. Maʻoz (ed.), *Studies on Palestine during the Ottoman Period*, Jerusalem 1975, pp. 3-10.

98 Amiran (above, n. 96), p. 194. The case study of the Late Bronze Age shows that the frontier may spread to the lowlands without a corresponding rise in the importance of the hill country (see below).

the fertile lowlands), thus making possible the inward shift of the frontier into the settled regions.

In light of these observations, we turn back to the socio-demographic transformations that took place in the hill country in the Late Bronze Age.

Powerful socio-political systems existed in the lowlands in the Middle Bronze. Hundreds of sites have been located in the central hill country as well, but the nature of the socio-political organization and the economy there was apparently different from that of the lowlands, and better suited to a frontier zone. There were mainly rural settlement, with a limited number of small central sites and considerable pastoral activity. The northern sections of the hill country were more amenable to sedentary life, while pastoral activity increased toward the south. Although it may be assumed that pastoral groups were present also in the lowlands, in my opinion the movement of these elements was limited at that time mainly to the hill country.[99] The reason is that the socio-political entities in the lowlands were strong enough to push the frontier eastward to the mountainous regions, and southward to the Naḥal Besor-Naḥal Beer-Sheva basins.[100]

The collapse of the socio-political systems in the hill country at the end of the Middle Bronze Age and the takeover of Palestine by the Pharaohs of the Eighteenth Dynasty completely reversed these trends. During the course of the sixteenth-fifteenth centuries BCE the settlement fabric in the lowlands suffered serious damage, and did not regain its former strength until the end of the Late Bronze Age. The considerable settlement depletion and the change of government system created a new reality in these regions. The Amarna letters indicate that despite the Egyptian consolidation in Canaan, bands of ʿApiru were active not only on the fringes of the settled land, but also in the coastal plain, the Shephelah, and the northern valleys.[101] It should be emphasized that the term ʿApiru in the Amarna letters at times exceeds its social meaning (that is, 'uprooted'), and serves as a pejorative epithet; it seems that even its primary meaning is not impartial, and reflects an 'ideal' social dichotomy from the urban elite's point of view—city dwellers versus all the peripheral groups who did not constitute an integral part of the urban fabric. The labels attached by this elite to social elements outside its control therefore paint in black and white a quite complex social reality which possessed many intermediate shades.[102] In other words, we assume that the non-

99   For an interesting clue to pastoral specialization in the southwestern frontier of Palestine, see P. Wapnish and B. Hesse, 'Urbanization and the Organization of Animal Production at Tell Jemmeh in the Middle Bronze Age Levant', *JNES,* 47 (1988), pp. 81-94.

100 Naʾaman (above, n. 8), p. 166; idem, 'The Brook of Egypt and Assyrian Policy on the Border of Egypt', *Tel Aviv,* 6 (1979), pp. 68-90. According to Oren, the border of the settled land passed further north, along Naḥal Gerar and lower Naḥal Besor: E. Oren, 'The Settlement Map of the Western Negev during the Middle and Late Bronze Periods', *Thirteenth Archaeological Congress in Israel,* Beer-Sheva 1987, p. 11 (Hebrew).

101 Naʾaman (above, n. 8), pp. 235-236.

102 Ibid.; idem (above, n. 56—1975), pp. 145-153; for a recent discussion of the term ʿApiru' and earlier bibliography, see N. Naʾaman, 'Habiru and Hebrews: The Transfer of a Social Term to the Literary Sphere', *JNES,* 45 (1986), pp. 275-278. See also Adams (above, n. 91—1974), p. 2; idem (above, n. 91—1978), p. 334; Marfoe (above, n. 2), pp. 9-10.

sedentary population, which was active in the lowlands during the fifteenth fourteenth centuries BCE, was composed of former permanent dwellers who had become sojourners or shepherds/nomads, and of pastoral groups who had come down from the hill country.

The collapse of the socio-political and economic systems in the central hill country at the end of the Middle Bronze Age undermined the delicate symbiotic relationship between the sedentary population and the pastoral groups, and confronted the latter with severe existential problems. In contrast to what could be expected, however, the diminution of the permanent settlements in the hill country did not increase the pastoral activity there (even though it may be assumed that many of the sedentary people were compelled to leave their lands); at the same time it did not cause the hill country shepherds/nomads to settle and engage in cereal cultivation.[103] It seems that the inhabitants of the hill country lost no time in taking advantage of the fact that along with the destruction inflicted on their region, new opportunities opened in the lowlands, in which the Middle Bronze urban systems had disintegrated following the Egyptian conquest. As Bates and Lees have shown, the possibilities open to pastoral groups are intimately connected with surrounding circumstances; since the decline of agriculture in the hill country necessarily caused poor conditions for pastoral specialization,[104] it is reasonable to assume that at least part of the hill country shepherds/nomads chose to adapt to the new situation by integrating into the socio-economic systems of the lowlands. However, due either to the fact that the potential market for flock products in these regions was limited (since the urban sector was relatively small), or to other reasons, the shepherds/nomads apparently turned to hired work, military service, and robbery, though they probably did not completely abandon grazing and subsistence agriculture.[105]

103 The severe settlement crisis which characterized the hill country during the fifteenth century continued during the fourteenth-thirteenth centuries BCE; see Zertal (above, n. 6—1988), pp. 204-207. In my opinion, the settlement recovery in the northern part of the hill country in Late Bronze III should be ascribed to the very end of the period and be related to processes discussed below; see also Finkelstein (above, n. 6—1988), p. 90. It may be argued that in Late Bronze I-II a portion of the hill country shepherds/nomads 'disappeared' from the archaeological record because they shifted to the less sedentary end of the settlement continuum, without abandoning the hill country. This can explain the power of the hill country kingdoms, despite the paucity of permanent settlements within their territories (e.g., Naʾaman, above, n. 8, pp. 216, 219). However, it seems that these kingdoms suffered from a severe shortage of manpower (which was probably one of the incentives for their expansion attempts); see Marfoe (above, n. 2), pp. 14-18; Bunimovitz (above, n. 15), pp. 157-160.

104 D.G. Bates and S.H. Lees, 'The Role of Exchange in Productive Specialization', *American Anthropologist,* 79 (1977), p. 827.

105 Ibid., pp. 827-829, 832. There is an objective difficulty in locating encampments of shepherds/nomads in the lowlands, resulting from a combination of geomorphologic and human factors different from those characteristic of the hill country. Finkelstein (above, n. 6—1988, pp. 343-344) proposed regarding the isolated temple of Tell Mevorakh and the Fosse Temple at Lachish, which is located outside the city, as indicators of the presence of a pastoral population.

Accordingly, during the fifteenth-fourteenth centuries BCE the frontier spilled over from the central hill country to the lowlands, a phenomenon which is reminiscent, in general lines, of what happened in these regions in the post-Byzantine periods. The Egyptian government was indifferent (or powerlessness) in this matter.[106]

The historical insight gained so far by a 'longue durée' perspective can be refined with the help of a short-term 'history of events'. In this context we can make use of the episode of disturbances and revolts in southern Palestine, in which the 'Apiru took an active part, and which apparently came to an end in the wake of preparations for an Egyptian military campaign.[107] This episode indicates that even though the frontier of the Late Bronze Age expanded into all the regions of Palestine, there were periods of ebb and flow, in accordance with the constant changes in the power of Egyptian government.[108]

The withdrawal of the shepherds/nomads (and other non-sedentary elements) from the lowlands in the beginning of Iron Age I, and their sedentarization in the highlands can also be explained in line with the shifting frontier model. It has recently become clear that during the time of the Nineteenth-Twentieth Dynasties the Egyptians had revolutionized both the nature and extent of their involvement in Palestine. Gradually strengthening their hold on the lowlands, they finally instituted their *de facto* annexation of Canaan to Egypt. The deepening Egyptian involvement and increased administrative and military presence in these regions presented the non-sedentary population with a new situation: the broad frontier that characterized Palestine in the fifteenth-thirteenth centuries BCE quickly shrank and receded to the hill country and the steppe.

The steps taken in the second half of the nineteenth century by the Ottoman government in order to push back the frontier that had expanded over extensive portions of Syria seem as if they had been borrowed from the Egyptian policy of the thirteenth-twelfth centuries BCE: direct rule and a lessening of the power of local notables by concentrating state affairs and entrusting their implementation to government officials; the establishment of a network of military and police

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106 The relatively dense population of the hill country in the post-Byzantine periods could not prevent incursions and raids by shepherds/nomads to the very heart of the region; see Y. Drori and E. Reiner, 'Eretz-Israel in the Mamluk State (1260 1516)', A. Cohen (ed.), *The History of Eretz-Israel*, Vol. VII: *The History of Eretz-Israel Under the Mamluk and Ottoman Rule (1260-1804)*, Jerusalem 1981, pp. 25, 28 (Hebrew); A. Cohen, S. Avitzur and M. Rosen, 'Eretz-Israel in the Ottoman Empire until the Beginning of Modern Times (1516-1804)', ibid., pp. 109, 117 (Hebrew); Shmueli (above, n. 96), pp. 32, 71, 129-130. It transpires, therefore, that in both the Late Bronze and the post-Byzantine periods the frontier included both the hill country and the lowlands.
107 Na'aman (above, n. 56— 1975), pp. 119-140; idem, 'The Origin and Historical Background of Several Amarna Letters', *UF*, 11 (1979), pp. 676-684; idem, 'The Southern Shefelah during the Late Bronze Age according to the Cuneiform Documents', E. Stern and D. Urman (eds.), *Man and Environment in the Southern Shephelah: Studies in Regional Geography and History*, Givatayim 1988, pp. 94-95 (Hebrew).
108 For the Egyptian rule in its Asiatic provinces during the Amarna period, see Weinstein (above, n. 12), pp. 15-17.

posts; punitive campaigns and pacification of lawless regions; and imposition of law and government rule on nomadic tribes.[109]

The change in Egyptian administration in Palestine was accompanied by vigorous economic exploitation, which consisted mainly of the transfer of large quantities of grain to Egyptian hands.[110] These measures had a decisive influence on the groups of uprooted population and the shepherds/nomads, who during the Late Bronze Age had maintained symbiotic relationships with the Canaanite city-states. It cannot be determined whether the Egyptians compelled this population to settle down; however, the possibility exists that a portion of it was incorporated in the Egyptian administrative-military apparatus, as were groups from the Sea Peoples. Others may have settled in the lowlands, where small settlements were reestablished at the beginning of the twelfth century BCE.[111] Additional groups settled in the western fringe of the central hill country, and some of them engaged

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109 N.N. Lewis, 'The Frontier of Settlement in Syria, 1800-1950', *International Affairs*, 31 (1955), p. 53; and compare with Singer (above, n. 89— 1988); see also Cohen et al. (above, n. 106), pp. 112-113. The increased Egyptian involvement in Canaan was therefore intended primarily to overcome the penetration of the frontier into the lowlands, and was not necessarily related to the strengthening and settlement of nomadic groups in the central hill country, the Negev, and Transjordan; see Na'aman (above, n. 8), p. 250; Singer (above, n. 89— 1988), p. 6. Merneptah may have therefore encountered 'Israel' in the Shephelah, on the fringe of the hill country, or even in the coastal plain itself, and not necessarily in the hill country or in Transjordan, as has recently been proposed; see Singer (ibid.), p. 4; idem, essay in this volume; F.J. Yurco, 'Merenptah's Canaanite Campaign', *JARCE*, 23 (1986), pp. 211-212; idem, '3200-Year-Old Picture of Israelites Found in Egypt', *BAR*, 16/5 (1990), pp. 33-37; B. Mazar, 'The Valley of Succoth', E. Schiller (ed.), *Zeev Vilnay's Jubilee Volume*, Jerusalem 1984, p. 217 (Hebrew); G.W. Ahlström and D. Edelman, 'Merneptah's Israel', *JNES*, 44 (1985), pp 59-61; N. Na'aman, 'Yeno'am', *Tel Aviv*, 4 (1977), p. 171. A similar conclusion was reached by L.E. Stager: 'Merenptah, Israel and Sea People: New Light on an Old Relief', *Eretz-Israel*, 18 (1985), p. 61. But see the debate between A.F. Rainey and F.J. Yurco: 'Scholars Disagree', *BAR* 17/6 (1991), pp. 56-61. According to EA 297, 'Sutu' were present in the Gezer area during the fourteenth century BCE; see J.F. Ross, 'Gezer in the El-Amarna Letters', *Museum Haaretz Bulletin*, 8 (1966), p. 51; Na'aman (above, n. 8), p. 236.
110 O. Goldwasser, 'The Lachish Hieratic Bowl Once Again', *Tel Aviv*, 9 (1982), pp. 137-138; idem, 'Hieratic Inscriptions from Tel Sera' in Southern Canaan', *Tel Aviv*, 11 (1984), pp. 77 93. This activity was probably connected with the shortage of grain which struck extensive portions of the Ancient East at the end of the thirteenth century BCE; see Singer (above, n. 89— 1988), p. 6; idem, 'Takuhlinu and Haya: Two Governors in the Ugarit Letter from Tell Aphek', *Tel Aviv*, 10 (1983), pp. 3-6; idem, essay in this volume.
111 See, for instance, Oren (above, n. 100); Z. Gal, 'An Early Iron Age Site Near Tel Menorah in the Beth-Shan Valley', *Tel Aviv*, 6 (1979), pp. 138-145; idem, 'The Settlement of Issachar: Some New Observations', *Tel Aviv*, 9 (1982), pp. 80-81; Bunimovitz (above, n. 15), pp. 86-89. Lewis (above, n. 109) showed that the reestablishment of settlements in regions which had become desolate due to the incursion of the frontier occurred soon after its recession. These processes also have a 'settling' effect on the groups of nomads retreating to the fringe of the new settlement; see also Amiran (above, n. 96), pp. 72-73; Shmueli (ibid.), p. 45. The time of the Nineteenth-Twentieth Dynasties' rule in Canaan should therefore be considered as *the* period of 'Pax Aegyptiaca', rather than the Amarna Age or the days of Thutmose III, as is commonly held; see B. Mazar, 'The Phoenicians on the Eastern Shore of the Mediterranean Sea', *Cities and Districts in Eretz-Israel*, Jerusalem 1975, p. 252 (Hebrew); Weinstein (above, n. 12), p. 15.

in intensive growing of grain, bearing in mind not only their own needs, but also the Egyptian granaries. It is in this manner that we are to understand the sparsely populated sites which nevertheless are rich in silos, such as 'Izbet Ṣarṭah and its neighboring sites, and Tell Beit Mirsim B1-2. If this understanding is correct, then at the end of the thirteenth twelfth centuries BCE these sites belonged to the socio-economic system of the Shephelah and the coastal plain, rather than to that of the hill country.[112]

Further to the east, the heart of the central hill country was once again occupied by a considerable pastoral population (most probably accompanied by other non-sedentary elements). These groups were deprived of their former sources of livelihood in the lowlands; the surplus grain of the permanent settlements there no longer was at their disposal, having fallen under Egyptian control. But a return to a symbiotic way of life of the type known in the hill country in Middle Bronze II-III was inconceivable, or at best was extremely limited, due to the settlement depletion of the hill country. With the vanished frontier behind them, and a hill country almost empty of permanent settlements before them, the options open to those returning to the highlands were limited, and they therefore chose to settle down.[113] Thus, in a gradual process that reached its zenith in Iron Age II, the frontier was pushed back also from the hill country, which became the heart of the Israelite monarchy.

112 I. Finkelstein, *'Izbet Ṣarṭah: An Early Iron Site Near Rosh Ha'ayin, Israel* (*BAR International Series,* 299), Oxford 1986; idem (above, n. 6 — 1988), pp. 264-269; R. Grinberg, 'New Light on the Early Iron Age at Tell Beit Mirsim', *BASOR,* 265 (1987), pp. 55-80. It should be noted in this context that an elaborated complex for grain storage was established during the thirteenth century BCE in Tell Halif: J.D. Seger, 'Investigations at Tel Halif, Israel, 1976-1980', *BASOR,* 252 (1983), pp. 4-9; idem et al., 'The Bronze Age Settlements at Tell Halif: Phase II Excavations, 1983-1987', W.E. Rast (ed.), *Preliminary Reports of ASOR-Sponsored Excavations 1983-87* (*BASOR Supplement,* 26), Baltimore 1990, p. 21. These topics have been the subject of lengthy discussions with my colleague and friend Z. Lederman.

113 For other elements that settled down in the hill country at that period, see Ofer's essay in this volume; B. Mazar, 'The Early Israelite Settlement in the Hill Country', *BASOR,* 241 (1981), pp. 75-85.

Theoretical Speculations on the Transition from Nomadism to Monarchy

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The reality of 'From Nomadism to Monarchy', which emerges from the various discussions in this volume, is that of small, medium-sized and large socio-spatial groups, some originating from the autochthonous population of the country, others immigrating from distant lands. Some of these Iron Age I groups were more sedentary in their character, some more nomadic, and others originated from the previous urban society, which underwent a process of nomadization. These socio-spatial groups coexisted in complex relations of interaction and conflict. This happened parallel to, and within the wider context of, the collapse of the urban cultures in the entire Aegean, Anatolian, Syrian and Palestinian world, and the large-scale nomadization processes of entire populations thereafter.[1]

The processes in Iron Age I, as described above, are similar in many ways to the events that took place in Early Bronze I and in the Intermediate Bronze Age. In all three periods there was a transition from an agricultural to an urban society. The first part of this paper considers the nature of agriculture and urban societies, and suggests that urbanization implies the socio-spatial stabilization of an otherwise unstable agricultural system.

This similarity between Early Bronze I, the Intermediate Bronze and Iron I gives a strong impression of repetitive, cyclical processes in the entire ancient Near East, which may justify considering them as a single, large, socio-spatial system. In cases of large, open and complex systems, very often the 'usual' causal mode of explanation fails and a different mode is required. The theory of self-organization, suggested in the second part of the article, was formulated specifically for such complex systems.

The transition from agriculture to urbanism is just one facet of the transition from nomadism to monarchy. The latter was associated also with transformation in the internal structure of the society. The third part of the paper considers the transition 'From Nomadism to Monarchy' in light of social theory and in conjunction with the notion of self-organization. I would argue that in terms of

1   See Na'aman's article in this volume.