

THE EXPANSION OF THE SETTLEMENT FRONTIER ON HEBRON'S WESTERN AND SOUTHERN FRINGES

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Settlement expansion in the margin of the Hebron Mountains is associated with an adjustment to modern conditions and increasing population pressure. It is rooted in traditional modes of life, involving communities of seminomadic herders and farmers who practiced, in some areas, modified transhumance, and who spent a major part of the year in caves and ruins. The alternative explanation that such expansion is the result of mobility into areas formerly threatened by Beduin or other uncontrollable groups is less adequate. Documentation is available from an extensive analysis of nineteenth century literature and sixteenth century tax registers. Field research included personal observations and interviews with village headmen and elders.

The spatial distribution of rural settlements has undergone revolutionary changes during the past century. The modifications which started in Western European countries spread, eventually, into the developing nations and are now discernable in most parts of the world.

The complexity of political, cultural, and economic factors involved in the modernization process makes it difficult to isolate the specific causes of the modifications in spatial distribution. The problem is magnified by the paucity of historical records, particularly with respect to remote and inaccessible rural areas. Interpretation, very often, has to be inferred from "circumstantial evidence" which may lead to erroneous conclusions. Apparent correlation between phenomena or spatial proximity of human and natural elements does not necessarily indicate causal relationships. In most cases more than a single alternative explanation remains open.

Eastern Nigeria can provide one of many such examples. Several researchers (Buchanan and Pugh, 1958; Udo, 1963; Grossman, 1975) pointed to the impact of the slave trade as the most plausible factor explaining the regional imbalance between population and resources there. Karmon (1966), however, suggested the possibility that the ease of cultivation in the sandy hills was responsible for the unique population distribution in the area. Even if this view is not accepted, it is clear that regional imbalance may, in some cases, be apparent more than real. A careful study of a small territory and the way of life of its inhabitants can assist in the interpretation of the real balance which exists between man and resources.

The Land of Israel can provide a number of useful illustrations in this matter. The

* The author is grateful to the Research Authority of Bar-Ilan University for its generous grants which helped to finance this research. He also wishes to thank Dr. Ruth Kark who made helpful comments on an early draft of this article, Mr. Samir Shemesh, Mr. Abdul-Rahim Muhammad Rian, and the people of southern and western Hebron.

“regional imbalance” most commonly stressed has been associated with the “reversal” of the expected density of population and settlement between mountains and plains. This has been primarily attributed to the prevalence of the Beduin in the plains, though corruption of the Ottoman administration, over-taxation, and other forms of exploitation have also been referred to as contributing factors (e.g. Volney, 1787, II; Robinson and Smith, 1841, II). A careful analysis of the recently published study of Hütteroth and Abdulfattah (1977) suggests, however, that the better endowed plains, such as the heart of Philistia, the Lod (Lydda) Plain, and the Acco (Acre) Plain were areas of fairly stable settlements. Instability or low population density was associated with desert fringes or areas such as the Sharon where soils were either poorly or excessively drained (Karmon, 1958).

Furthermore, the most unstable settlement areas appear to have been the Carmel Ridge and the adjacent Menasheh Hills where almost no village was registered in the late sixteenth century. Settlement in the Carmel is known, indeed, to have been renewed only in the eighteenth century, but most of the Druze villages were destroyed around 1840 (Tristram, 1866; von Mülinen, 1908, II; Falah, 1975). This reveals that some of the most destructive violence occurred in the heart of the mountains.

Ironically, the only area where a few villages were registered in the late sixteenth century along the Umm el-Fahm—Menasheh—Carmel Ridge was the Iron (Ara) region. This is precisely the area considered by Golani to have experienced settlement expansion into the valleys after security improved (Golani, 1968). An interpretation of its settlement pattern, however, must take into consideration the fact that it shared a number of characteristics with the rocky hills to its south which were almost totally unsettled. Like them, its narrow valleys tended to develop “bunches” of settlements as their colonization expanded since the later part of the nineteenth century (Grossman, forthcoming).

The examples mentioned here illustrate the difficulty of interpreting man/land relationships. No attempt will be made in this paper to study these areas in detail, nor is it intended to provide an exhaustive study of other areas which raise similar or even more difficult problems. Some of the questions on the causes of settlement distribution—or redistribution—may never be adequately answered. It is clear, however, that there is no easy way to generalize about the likely impact of human-generated forces (such as the Beduin or other unruly elements) on the basis of landscape analysis.

Inter-village warfare which was carried on primarily in the hill country (Finn, 1878, I; Macalister and Masterman, 1906; Hoexter, 1973) could have been, indeed, more destructive than any Beduin raids in the plains. The Beduin took part in these wars and usually allied themselves with one of the combatting factions because of traditional ties or practical convenience. Their destructiveness was associated with this role more than with their raids or thievery (Hoexter, 1973). A proper evaluation of the damage caused by them must take into account their superior ability to resist the “enemy” common to them and to the fallahin — the government. A clear distinction must be made between the trouble caused by the Beduin to the government or government interests and their effect on the surrounding communities of fallahin. Only the latter will be considered in this article. Generalizations or indirect evidence about their destructiveness on the basis of their unruliness are, therefore, insufficient proof of their impact.

This article seeks to concentrate on finding more direct evidence on the impact of human beings or land on settlement distribution. Interactions between land and most human-generated activities are complex and indirect. This is the reason for the difficulty in proving their effects and for the “deterministic flavour” of such attempts. When dealing with economic systems in pre-industrial, near-subsistence societies, however, the effect of

local resources is bound to be direct and, often, of vital significance. A close study of such cultures, when combined with the knowledge of their ways of life, can bring about a fairly adequate understanding of the balance between settlements and resources. It is argued, therefore, that where no direct evidence is available to point to any alternative explanation, an analysis of the man/land economic interactions will produce the best avenue to an acceptable interpretation. Such an approach is adopted in this article. It will endeavour to illustrate its usefulness in the case of the western and southern Hebron Mountains.

THE STUDY AREA GENERAL CHARACTERISTICS

The western and southern margins of the Hebron Mountains are among the most active rural (Arab) colonization areas in Judea and Samaria. This was observed as early as the 1940s (Amiran, 1948). It is, however, only one among a number of other areas where peasants from the Judean and Samarian Mountains have settled in offshoot villages since the late nineteenth century. These settlement areas consist of a discontinuous belt which flanks the mountains, mainly on the western side (Fig. 1-2). The eastern side, largely associated with the fixation of Beduin settlements is not shown on the map. These areas are characterized by rocky hills and patchy plots of land in isolated areas or in winding valley bottoms (Grossman, 1980; 1981; forthcoming).

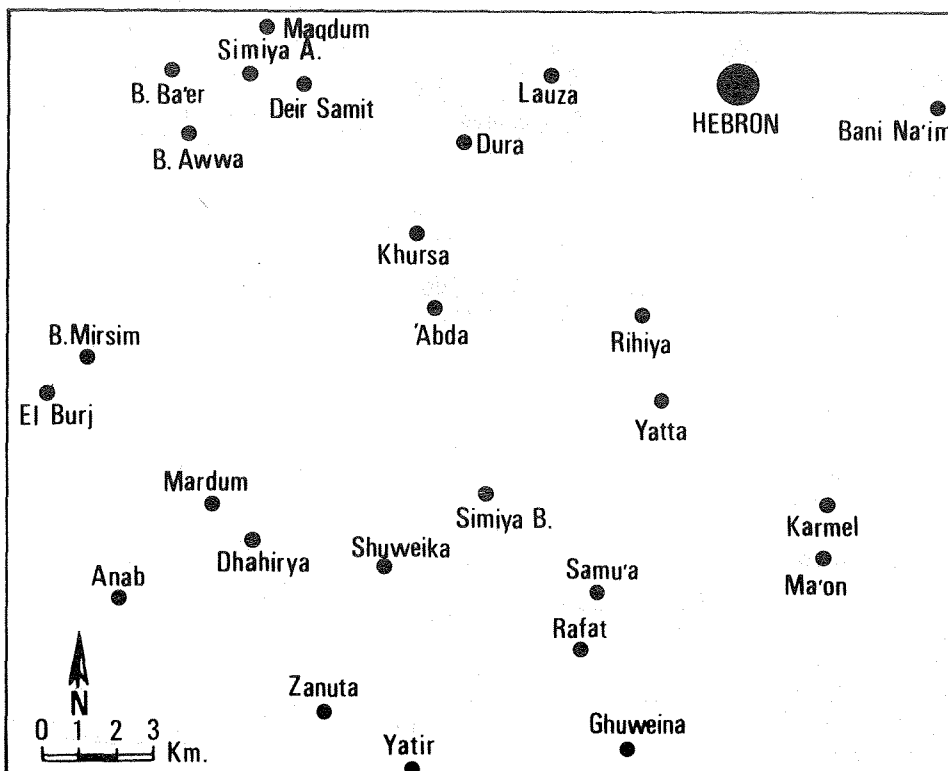


Fig. 1: Hebron Region Place Names.

Hebron's settlement areas, like the other active colonization zones, are fairly unattractive. Their major drawback is a dry climate, though they share with the other

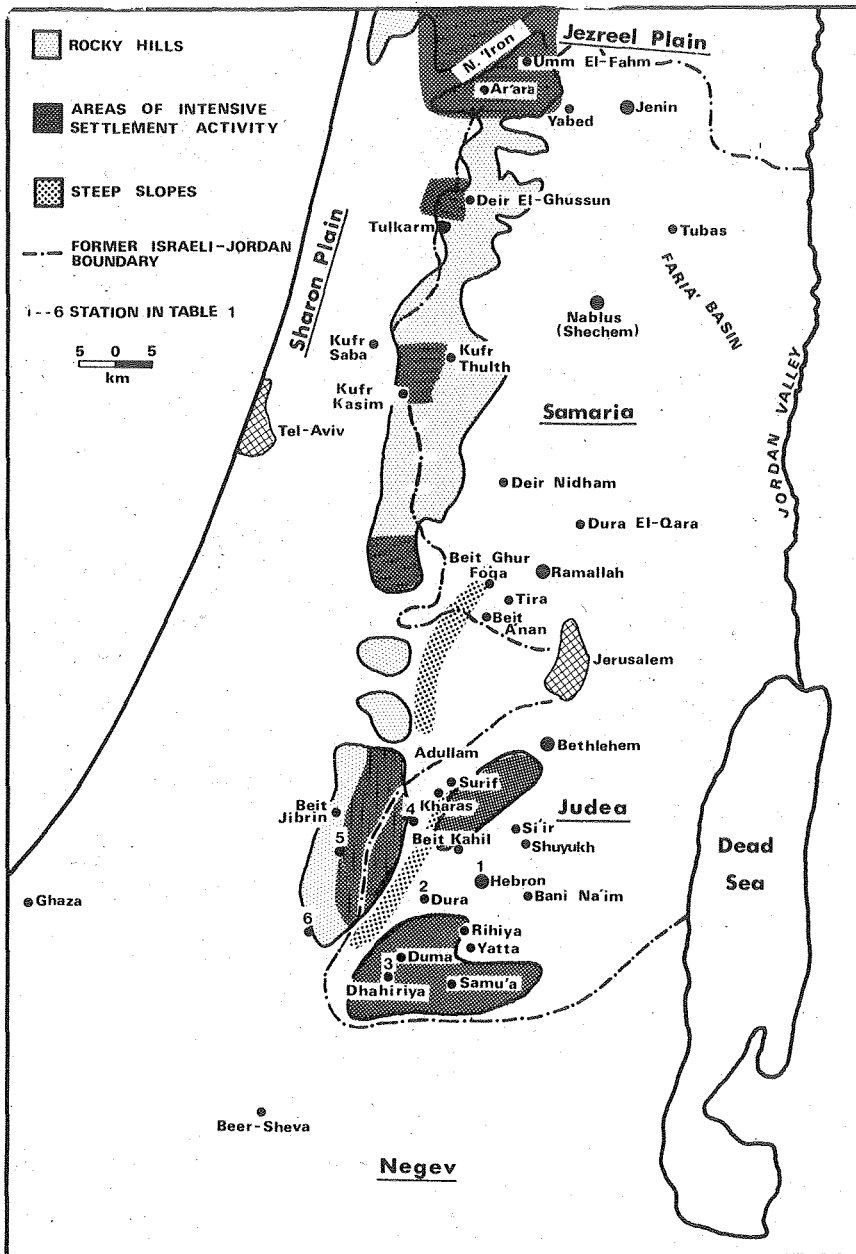


Fig. 2: Location of Main Settlement Zones on the Western Margins of Judea and Samaria.

settlement zones some of the problems of rockiness, which are particularly severe in the escarpment zone (between the western valleys and the uplands). The major villages are located on the relatively flat uplands above this escarpment where precipitation is more abundant.

There appears to be thus a positive relationship between land quality and settlement distribution. A closer look at the historical background and the area's occupancy pattern is needed, however.

HISTORICAL BACKGROUND

Sixteenth century tax registers (no similar registers are available for the rest of the Ottoman period) provide information for plotting the distribution of settlements in that century. The pattern obtained from these registers which were recently analyzed by Toledano (1979) on the basis of five available registers for the sixteenth century and by Hütteroth and Abdulfattah (1977) for the last tax register — 1596/7 — is strikingly similar to that of the nineteenth century cave dwellings of the Hebron area (Fig. 3). Toledano's material is of special significance because it shows that there was a difference between southern and western Hebron in terms of settlement size and stability. In southern Hebron the settlements were stable throughout the sixteenth century, and were, furthermore, larger than usual. In western Hebron, on the other hand, there were frequent shifts in the definition of the registered places (which were usually small in size). As many as sixteen places which were classified as *Qariya* (village) in the first registers were redefined as *Mazra'a* (uninhabited taxable farm) in the later ones. Eight additional places shifted their definition more than once (in either direction) during the same century (Fig. 3). The existence of a large number, 210, of *Mazari'* (plural of *Mazra'a*) in relation to *Qara* (plural of *Qariya*) was pointed out by Hütteroth also (1979). He did not provide, however, sufficient information on their exact distribution, though most of them were clearly in the margins. In other parts of Palestine the *Mazra'a-Qariya* ratio was about 3:1 rather than 7:1.

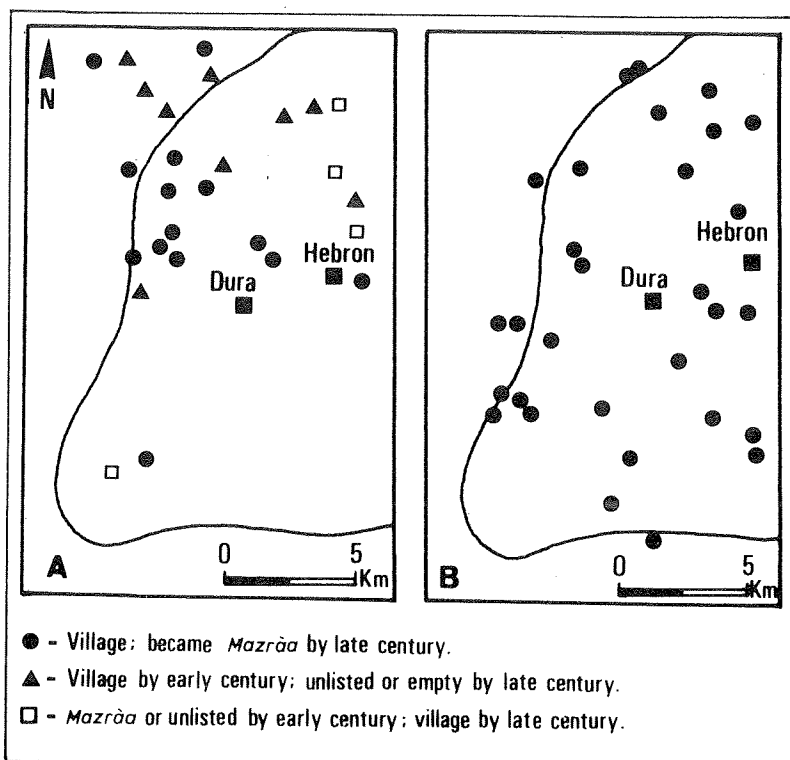


Fig. 3: Intermittent Sixteenth Century Settlements (A); Ruin and Cave Settlements in the Nineteenth Century (B).

A closer look at the sixteenth century data and their comparison with the available records of the nineteenth and twentieth centuries presents a picture of extreme instability of settlement over all of the Hebron Mountains and not only in their margins. Of the twenty-seven settlements (excluding three settlements located west of the "green line") recorded in Hütteroth's list (Hütteroth and Abdulfattah, 1977) at the eve of the seventeenth century, only ten (or possibly nine, since Shuyukh's existence is uncertain) were recorded as existing in the first census of the twentieth century when nineteen villages were recorded (Palestine, 1923). Of these nineteen, six settlements were most probably founded after the sixteenth century (Surif, Beit Kahil, Kharas, Rihya, Jaba' and Dhahiriya, according to oral tradition). Three others (Taffuh, Beit Aula and Beit Ummar) were not settled in the second half of the sixteenth century. They were listed, however, in the early part of the sixteenth century (Toledano, 1979), and were settled again later (Toledano, unpubl. ms.).

There is reason to believe that this instability can be explained by the turmoil which prevailed during the seventeenth and eighteenth centuries. William Albright obtained information in Dura from which he concluded that in the seventeenth century the place was overrun by Beduin and its population was replaced by new elements — its present dominant families (Albright, 1939). These findings fit well into the general picture of violence which prevailed during the seventeenth and eighteenth centuries and which resulted in large-scale migrations and in the replacing of the leadership in many areas (Assaf, 1941; Peake, 1958; al Nimr, 1975; Abir, 1975). There is hardly any doubt also that prior to Muhammad Ali's occupation of Palestine and Syria (1831-1840) and for about two decades afterwards, the country suffered from chronic insecurity (Hofman, 1963; Ma'oz, 1968; Tibawi, 1969). From records of travellers who visited the Hebron area between the late seventeenth century and the early nineteenth century it can be concluded that violence was much more severe in Hebron than elsewhere, but the most troubled part was its northern fringe rather than its southern border (Morison, 1704; Pococke, 1745, II; Ali Bey Abassi, 1816, II; Robinson and Smith, 1841, II). The war between the Bethlehem and Hebron districts resulted in the destruction of many villages in the frontier zone between the two (Hasselquist, 1766; Granquist, 1931). The information on other parts of Hebron, particularly on its southern area is scantier. The literature contains, however, data on the type of settlements and on the way of life. From these descriptions it can be learned that the habit of spending part of the year in the caves and underground caverns (which were found in the ruins of southern Hebron) was widespread.

Seetzen, who travelled through southern Hebron in 1807, described cave dwellings which can be still seen in that area today. His main account relates to Zanutah, which he considered to be the last inhabited place south of Hebron (Seetzen, 1854-9, III). It was termed "a village" (*Dorf*), but it contained, according to him, only one building, and most of its inhabitants — several families of peasants — lived in caves. The place functioned at that time as a commercial station between Hebron and Egypt. This was the result of the immediate aftermath of the Napoleonic campaign which shifted the Beduin commercial activities from the coastal routes. The place lost its commercial importance later on but the dwellings described by Seetzen were not necessarily abandoned. In 1968 Zanutah was found to have one modern building which served as a stable, and several caves and enclosures for the flocks (Kochavi, 1972).

Another locality, Shweika, which was an important village (having seventy taxpayers in the sixteenth century) was also referred to by Seetzen as a *dorf* (Seetzen, 1854-9, III). It was, apparently, occupied in a similar manner in the early twentieth century as well. A number of new dwellings have recently been built near the extensive ruins of Shweika, but many of its underground caves were still partly inhabited in 1980.

Cave dwellings were described even in the large villages, such as Dhahiriya. Nineteenth century travellers, notably Bartlett and the P.E.F. surveyors, referred to inhabited caves found there (Bartlett, 1879). Remnants of cave dwellings are to be seen even today in the center of Samu'a and Yatta. South of Yatta the P.E.F. survey team encountered many caves which seemed to be inhabited. They remarked that the peasants in this part of Palestine are often found living in caves or stables (Conder and Kitchener, 1883, III). Lindsay in 1838 wrote that when inquiring about the existence of ruins in the area, the Sheikh of Samu'a gave him the name of Dhahiriya in answer. This indicates that its status was still very low at that time (Lindsay, 1838, II). The elders of Dhahiriya confirmed, indeed, that their village consisted of cave dwellings solely until about two centuries ago.

Guérin (1868) and Robinson and Smith (1841) are the best sources on this subject. They reported the existence of cave or ruin dwellings in many areas of Hebron. Robinson encountered cave dwellings near Karmel and Ma'on (Ma'in) (Robinson and Smith, 1841, I, II). Bani Naim, to the east of the town of Hebron, was found by him to be totally deserted in 1838. Its inhabitants were in the surrounding areas living in caves and tents (Robinson and Smith, 1841, II). Guérin recorded at least six inhabited ruins in western Hebron and four additional ones in its southern part in 1865. A number of scattered inhabited ruins were found by him even in the central part of the mountains (Guérin, 1868, II).

Additional references to cave dwellings can be found in various other accounts, e.g. Tristram's (1866) account of Yatir—Attir, and Conder's (1878, II) description of the Adullam area. The actual number was undoubtedly greater than that reported by the travellers. The overall picture is thus of a clear pattern of seasonal or temporary cave and ruin dwelling, encircling all the mountain area. (Fig.3).

Seasonal cave dwellings still persist in many parts of Hebron's margins. Jamrura, an intermittent sixteenth century village, was listed as a settled place in the 1830s (Robinson and Smith, 1841, III). It is used by Beit Kahil farmers, and was found to be occupied by farmers and herders when visited on several occasions since November, 1979.

The most extensive remnants of ruin and cave dwellings are found today on the southern fringe of Hebron. Some, like Rafat, are now partly converted into villages, but others still retain their traditional characteristics. A long list of cave settlements, a few of which were abandoned because of the 1948 War, was obtained from informants in Samu'a. The list included practically all of the sites which are mentioned in the sixteenth century tax registers as large villages (see also Israel, Ministry of Agriculture, 1977). It is possible, as indicated earlier, that even at that time habitation was more under the ground than above it.

Two main questions arise, however: 1) What is the cause for the stability and the large size of the settlement on the southern frontier in the sixteenth century, and why was the stability of settlement so low on the western frontier during that century? 2) Why did the less stable western frontier develop earlier than the southern frontier during the twentieth century? The two questions may have a common explanation. It may assist in answering the questions posed above as to the basic causes for this form of settlement growth.

INTERPRETATIONS

The dry climate which prevails in southern Hebron is probably one of the factors that makes cave dwelling feasible (in wet areas caves tend to be too damp and unhealthy). Another important factor is the general poverty which prevails in the area. The low standard of living is, at least partly, a reflection of the environmental problems, and particularly, of the unreliable precipitation. This forces the local peasants to adopt seminomadic practices which bring their way of life, in many respects, closer to that of the Beduin.

In the past, the villagers in the entire study area held large herds of sheep and goats (Robinson and Smith, 1841, II; Fisk, 1843; Conder and Kitchener, 1883, III). Shmueli's research on Si'ir gave details on the way of life in the eastern margins where the desert provided winter pasture in areas where farming was practically excluded (Shmueli, 1969). In the southern and the western margins which are wetter than the east, pasturage usually followed the spring harvests. The winter season was mostly devoted to farming. Repeated crop failures (according to a Samu'a informant they counted on only two good harvests and three total failures in every seven years — compare with data in Table I) made it impossible, however, to rely solely on farming. In poor years emphasis was placed on the herds and migration to remote localities took place. Samu'a migrants were encountered by this writer in the Faria' Basin of eastern Samaria and in the Kufr Qasim area of western Samaria. Yatta informants reported that they too had flocks in northern Samaria. Western Hebron villagers were also active in such migrations, and this may account for the fairly large number of villages which claim to have their origin in Dura and adjacent areas. Tira, Beit A'nan, Beit Ghur Foqa as well as Dura el Qara (all in the Ramallah subdistrict) are such examples (Dror, 1979). In Dura el Qara the headman said that the settlers had lived in the Faria' Basin prior to their settlement in the present site.

Table 1: Precipitation Records for Six Stations, Southern Hebron and Adjacent Areas

	No. of observations 1968-1978	Mean	S.D.	Am. ppt. above 300 mm	
				No. observs.	%
<i>Mountain</i>					
1 Hebron	9	568.0	128.6	9	100
2 Dura	9	470.4	107.8	9	100
3 Dhahiriya	10	341.1	104.6	6	60
<i>Western Valleys</i>					
4 Beit Aula	10	423.2	123.7	9	90
5 Amatzia	7	394.4	100.5	6	86
6 Lahav	10	292.3	87.2	3	30

Source: Data Obtained from the Israeli Meteorological Service.

The Hebron area functioned also as a "stop over" station for many groups of farmers or herders who were displaced from their original areas by severe drought or by other causes. They came mostly from the deserts of Arabia and Transjordan. Smilanskaya (1966) recorded evidence of such movements involving peasants from Transjordan into Hebron in the nineteenth century. The migrations resulted from prolonged droughts in the source areas, and provided labor for commercial grain cultivation in the Beit Jibrin area not far from western Hebron.

Many of the families in Samaria who arrived there from Hebron have their initial source south or east of it. A western Hebron origin (including the adjacent Beit Jibrin zone) is especially widespread in northern Samaria and beyond it in the Iron (Ara) Valley (e.g., in Yabed and Umm el-Fahm and their offshoots) and in the Jezreel Plain (Fig. 2). The origin of the settlers in the Arab village, Kufr Saba, is attributed to a group of Hebronites who migrated there as a result of crop failure (Artzi, unpubl.). In all of these cases the migration took place relatively late (within the past three centuries), and points to the existence of

shaky economic conditions which forced southern Hebron peasants to adopt seminomadic practices.

Such a way of life characterized not only the herders but also the farmers of southern and western Hebron. Land which was needed in large units because of low yields, as well as the wish to spread the risk over a number of different ecological areas, resulted in a scattering of farm plots over a wide territory. The fact that villages bordering the desert have larger areas than regular mountain-top villages has long been observed (Amiran, 1948). Because of the greater distances between the plots, farmers had to shift their dwellings frequently. Only one of the many potential settlement sites functioned as their main home, and this tended to be the place where the conditions were favourable for the development of larger communities. In the other sites they utilized caves and ruins in the fall and winter. Sowing was postponed, usually, to late November when the ground had some chance of absorbing moisture. In the summer they returned to their houses in the major villages, but even in the "mother" villages tents were often the form of habitation for many of the poorer farmers.

In western Hebron the background for the settlement pattern is broadly similar to that of southern Hebron. There were, however, a number of differences between the two areas. Unlike most of southern Hebron where environmental conditions change imperceptibly and gradually, the western territory is characterized by a pronounced contrast between its core and the periphery. South of Dura conditions are similar in many respects to those of southern Hebron, but Dura's surroundings are distinctly wetter and cooler. The contrast between the periphery and the core is heightened by the existence of the wall of steep rocky terrain west of Dura. Herding is the only land use which is possible in this rocky zone. Its repulsive nature is multiplied by its function as an effective block to communication between the parts of the Dura area (Fig.4).

The differing characteristics of the upland and lowlands gave rise to an economic system which utilized their resources in a complementary manner, in a modified form of transhumance. Summers were spent in Dura where the herds could be grazed on harvested fields, and the shepherds could enjoy the cooler weather. They could work, in addition, in the vineyards where demand for labor was at its peak in the summer season. Winters, on the other hand, were spent in the drier and warmer lowland where caves were used for shelters and where abundant fresh grass was available on the adjacent rocky terrain.

Farming was also practiced in the valleys of western Hebron. The high risk of crop failure discouraged the peasants, however, from relying on it too heavily, and demand for farmland was low. The powerful families of Dura seem to have taken advantages of this, and took possession of large parts of the land, particularly in the south, where the interconnected basins provide continuous farmland. Sharecropping prevails in this area even today.

This modified transhumant practice of Dura is probably the main cause for the observed intermittent nature of settlement in its western valley in the sixteenth century. In many respects Dura is similar to the other areas where active colonization has been observed, but the problems are found there on a large scale partly because of the size of its territory and partly because of the dry climate. The barrier effect of the steeply dipping rocky escarpment is also more pronounced there than elsewhere.

As in other temporary settlement areas, the process of fixation in the present century resulted mainly from the declining role of grazing and the parallel rise in the importance of intensive farming. Population growth and modernization were the main contributing forces which brought about the gradual fixation of the settlements. Since land was more abundant in the remote margin than in the core (even if available only on a sharecropping basis and

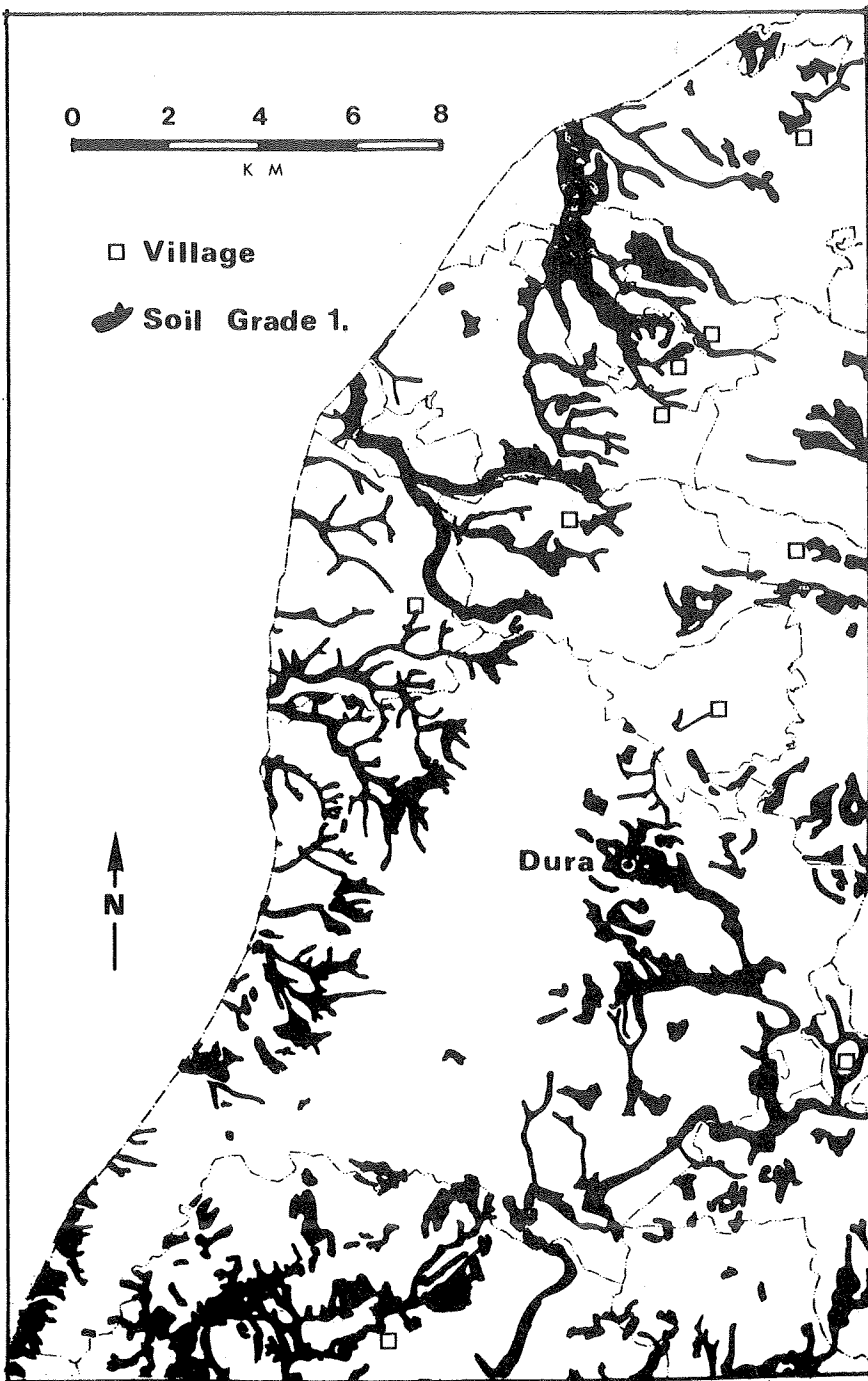


Fig. 4: Distribution of High Grade Soils in Western Hebron.

Source: Grossman, David, (1981), "The Bunched Settlement Pattern: Western Samaria and the Hebron Mountains," *Transactions Institute of British Geographer*, NS, 6 (4), pp. 491-505. (reprinted with permission of the Institute of British Geographers)

under greater risk of crop failure), poorer families preferred to establish their permanent homes there. This process was accompanied by a decline in the significance of the highland-lowland complementary economic system. Improved communication became critical as the former self-sufficient economy was gradually replaced by commercial one, and by dependence on the non-farm sector for livelihood. Communication with the outside could be facilitated by following the chain of interconnected western valleys, and there was no pressing need to climb up to Dura as before.

In southern Hebron the process of settlement fixation was not necessarily identical to that of the western areas. Conditions in the core were only slightly better than elsewhere and even though the latter was worse off, even the core suffered from severe drought hazards. It is the greater climatic drawback of the south, in comparison to Dura's western sector, that provided the main reason for its extremely slow adjustment to modern stimuli and to the belated emergence of permanent dwellings there. The poverty and shaky nature of the economy were recognized by the British Mandatory Government which subsidized the local peasants in dry years.

The cave settlements were scattered in localities which were not necessarily interconnected by natural routes. In addition, communications with the outside had to continue utilizing the older roads (or paths) which passed through the traditional centers. Modern influences were slow to penetrate the area and, as a result, few permanent structures were built in the ruins until recently.

The fact that Dura held a dominant political position in the Hebron area may also account for its unusual development. Its leaders may have encouraged settlement in their remote estates. The available information does not indicate, however, that fixation was the result of landlord initiative.

Even if the villages which were registered as permanent settlement in southern Hebron in the sixteenth century were not substantially different from the cave dwellings of our time, it is obvious that they have experienced a reduction in size and importance. In a few cases they may have been totally abandoned. The reasons for this decline are unknown. Extended droughts, such as the 1783-1788 drought (Yaari, 1951) or warfare are two equally plausible possibilities. According to an old man in Samu'a, the abandonment of Shweika and Attir (Yatir) was caused by droughts which were followed by fire. In Dura, on the other hand, there is an oral tradition which relates the destruction of Khursa to its being attacked by Dura people (probably during the turmoil of the seventeenth century). Its former residents moved, according to this account, to Beit Jibrin. These traditions cannot be substantiated, but it is very likely that violence was an important factor conditioning the area's settlement processes.

The available information about the area's history in the nineteenth century supplies some details about the possible factors affecting the settlements. A conscription drive caused the temporary abandonment of Dhahiriya and other places in the early 1860s (Guérin, 1868, III; Tristram, 1866; Alsberg, 1976, I). Dhahiriya was deserted again in the early 1870s when it was attacked by the Beduin who were allied with Dura (Conder and Kitchener, 1883, III; Bailey, 1981).

These events, however, did not cause its permanent desertion. Nor is it known that any other village was permanently abandoned in the nineteenth century. On the other hand, a number of settlements were built in this century (see above).

The most well recorded reports on violence during and after the retreat of Muhammad Ali's forces (1840) relate to the power struggle between the rival factions in Dura over the

control of the Hebron Mountains. It involved also the adjacent Beduin tribes. Ironically, Robinson's account of this struggle leaves the impression that it stimulated settlement rather than suppressed it. This was the case in el Burj where the supporters of the defeated party (the Arjan) concentrated (Robinson and Smith, 1841, III). Finn, like Robinson, also reported finding in el Burj Dura peasants who were concerned about the effects of rivalries at Dura. His statement that the cave dwellings were an expression of insecurity is understandable in view of his preoccupation with such problems at that time, but el Burj was less likely to suffer from Beduin incursions than other localities since, as Finn himself tells us, it contained a military outpost (Finn, 1877). Finn, in his dispatches to London as well as in his books, said that the Dura rulers were allies of the Tiyaha Beduin. Dura's most famous ruler, Abdul Rahman el Amr, found refuge among the Beduin when he escaped from a Jerusalem prison (PRO, various documents 1850-52) and utilized the latter's "services" in order to enhance his political goals. The Beduin tribes who were at frequent war with each other throughout the nineteenth century caused more damage to each other than they did to any of the fallahin. The fairly detailed traditions of their warfare do not contain any records about village destruction (el 'Aref, 1937; Bailey, 1980).

The numerous people who were interviewed in all of the major settlements of southern and southwestern Hebron rejected the possibility that the fear of Beduin attacks was in any way a factor which prevented them from constructing surface buildings over their caves. The reported misunderstandings which erupted into violence occurred mostly as a result of friction over the demarcation of borders. Such problems occurred often between neighbouring villages of fallahin as well, and one of them was associated with a famous bloody feud between Dura and Dhahiriya in 1921. It was settled by the imposition of a heavy fine of twenty thousand Egyptian pounds on Dura's "brigands" (Albright, 1926).

The border feuds with the Beduin were concerned with territories located beyond the southern edge of the Hebron Mountains. These dry areas in the northern Negev and the Judean Desert were cultivated by the fallahin only in exceptionally good years. Their hold over the area was, therefore, extremely loose and the local Beduin showed concern about these intrusions into areas which they considered to be their private domain. Feuds over the land erupted, naturally, in the reverse direction also. In dry years Beduin penetrated into the sown areas causing friction with their neighbours (Reifenberg, 1955).

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The numerous people who were interviewed in all of the major settlements of southern and southwestern Hebron rejected the possibility that the fear of Beduin attacks was in any way a factor which prevented them from constructing surface buildings over their caves. The reported misunderstandings which erupted into violence occurred mostly as a result of friction over the demarcation of borders. Such problems occurred often between neighbouring villages of fallahin as well, and one of them was associated with a famous bloody feud between Dura and Dhahiriya in 1921. It was settled by the imposition of a heavy fine of twenty thousand Egyptian pounds on Dura's "brigands" (Albright, 1926).

The border feuds with the Beduin were concerned with territories located beyond the southern edge of the Hebron Mountains. These dry areas in the northern Negev and the Judean Desert were cultivated by the fallahin only in exceptionally good years. Their hold over the area was, therefore, extremely loose and the local Beduin showed concern about these intrusions into areas which they considered to be their private domain. Feuds over the land erupted, naturally, in the reverse direction also. In dry years Beduin penetrated into the sown areas causing friction with their neighbours (Reifenberg, 1955).

The improved security towards the end of the past century affected all parts of the country and, undoubtedly, enhanced economic activity and settlement growth everywhere. In appraising the spatial impact of the security issue, however, it is necessary to balance the Beduin problem with that of internal warfare. It is also necessary to take into consideration the results of the resented conscription and tax systems and of corrupt and inefficient government activities. The Beduins were not necessarily the worst source of violence. It is difficult to accept the hypothesis that the people of southern and western Hebron, who themselves were seminomads and lived with the adjacent Beduins, would abstain from settling where many of them were, in fact, living for much of the year.

Amiran's contention that the unstable settlement of the desert frontier is an expression of the Beduin-fallahin confrontation is difficult to prove or disprove (Amiran, 1948). But the slowness of the southern frontier in responding to the removal of the Beduin hazard since the late nineteenth century may suggest that the reason for the persistence of the shaky settlements does not lie in that struggle.

CONCLUSIONS

The research on the background of the phenomenon of settlement expansion by the local Arab population is handicapped by the absence of reliable records on the historical background of the area. There is reason to believe that some of the major gaps in our knowledge, particularly on the seventeenth and eighteenth centuries, will be filled in by future research, but the use of nineteenth century records and carefully "screened" local oral traditions, makes it possible to reach some conclusions about the causes and the background of the settlement activity.

These data point to the existence of the widespread phenomenon of herding and farming associated with ruin and cave dwelling all around the margins of the Hebron Mountains. In this paper the main focus was on southern and western Hebron where conditions for fixing the temporary dwellings were better than in the eastern flanks of these mountains, but which were also fairly unattractive for permanent settlement because of climatic problems and their isolation beyond a rocky escarpment.

The differences between the settlement patterns of the western and southern parts of the study area can be viewed as an expression of their respective resources. Modified transhumance practices and poor accessibility in western Hebron are the main factors which explain the rapid settlement expansion in this zone. The harsher climate and greater

isolation of southern Hebron, on the other hand, has resulted in a more uniform settlement pattern, but also in greater poverty and in a delay in adjustment to modern challenges.

Rising population and the consequent intensification of farming accompanied by a decline in herding seems to have presented the main motivation for the fixation of settlement of these areas since the end of the nineteenth century. The modernization process, associated with commercialization and more diversified sources of income reduced former risks of dependence on these marginal areas.

Even though improved security may have played an important role in the process of frontier expansion, it is unlikely that it was the main factor because cultivation is known to have taken place on the Beduin frontier zone long before its settlements were fixed.

The character of the settlement is typical of marginal areas with settlements that are subject to frequent fluctuations because of the nature of the resources. Alternate waves of expansion-fixation and contraction-nomadization follow each other mainly as a result of population growth or shrinkage. In our century the expansion wave was associated with a technological revolution which made the fixation wave stronger and more stable than ever before.

A similar conclusion can be applied to other areas of active colonization in Judea and Samaria, but it is not claimed to have universal application. Each area has to be analyzed on the basis of its own resource structure before any explanation of its settlement evolution is attempted.

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