

Caves at the Crossroads: the Role of Caves in the Epipaleolithic of the southern Levant

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Throughout history, caves have played different roles in the lives of human communities, depending on the spatial characteristics of the environment and the social circumstances of certain periods. They provided protection in times of insecurity caused by climatic conditions or other dangers. As a point of entry into the “earth”, they also had a prominent place in the religious concepts of early societies. Their role in people’s lives is especially important during the Ice Ages when they provided protection. However, their “protective” role extended beyond the end of the last ice age. In this paper I will talk about the role of caves in the lives of communities that lived in the time of transition to a new way of life conditioned by the end of the last Ice Age. That was the time when significant changes in human activities were observed within the Natufian culture named after the wadi Natuf where those changes were first identified in the Shuqba cave. I will focus on the core area of that culture, the southern Levant (Mount Carmel, Galilee and Upper Jordan Valley in Israel). In this area, we can follow the continuity of life from the Middle Paleolithic to the so-called Levantine Aurignacian. Changes in cultures were noticed in that area even before the end of the last Ice Age, so the Epipaleolithic period dated 23,000 to 9,500 BC was singled out. Since the Natufian culture developed from the Epipaleolithic traditions of the aforementioned area, I will first present basic information about the key local Epipaleolithic cultures and the Ohallo II site. After that, I will present the current knowledge about the emergence and development of the two main phases of Natufian culture, the Early and Late Natufian. I will then focus on the most important cave sites of this area (Hayonim, el Wad, Kebara, Hilazon Tachtit and Raqefet). Finally, I will compare the findings from the aforementioned sites and present my observations about the role of caves in the core Natufian area, and I will propose a possible interpretation of the observed phenomenon.

Key words: southern Levant, Early and Late Natufian culture, cave sites, dwellings and burial grounds

► Climatic fluctuations during the Levantine Epipaleolithic

The Levant is an area full of diversity. It is settled between the Taurus mountains to the north, the Mediterranean sea to the west, the Sinai peninsula to the south, and the Syro-Arabian desert to the east. Its topography is characterized by a series of elevated and low regions. The central hill range is reaching up to 2,000 m asl¹,

¹ Although most of it is much lower.

the Dead Sea Rift reaching 400 m below sea level, and the Transjordanian plateau, which rises to elevations between 800 and 2000 m asl. It is followed by a descent to the east (Goring-Morris *et al.* 2009: 185,186).

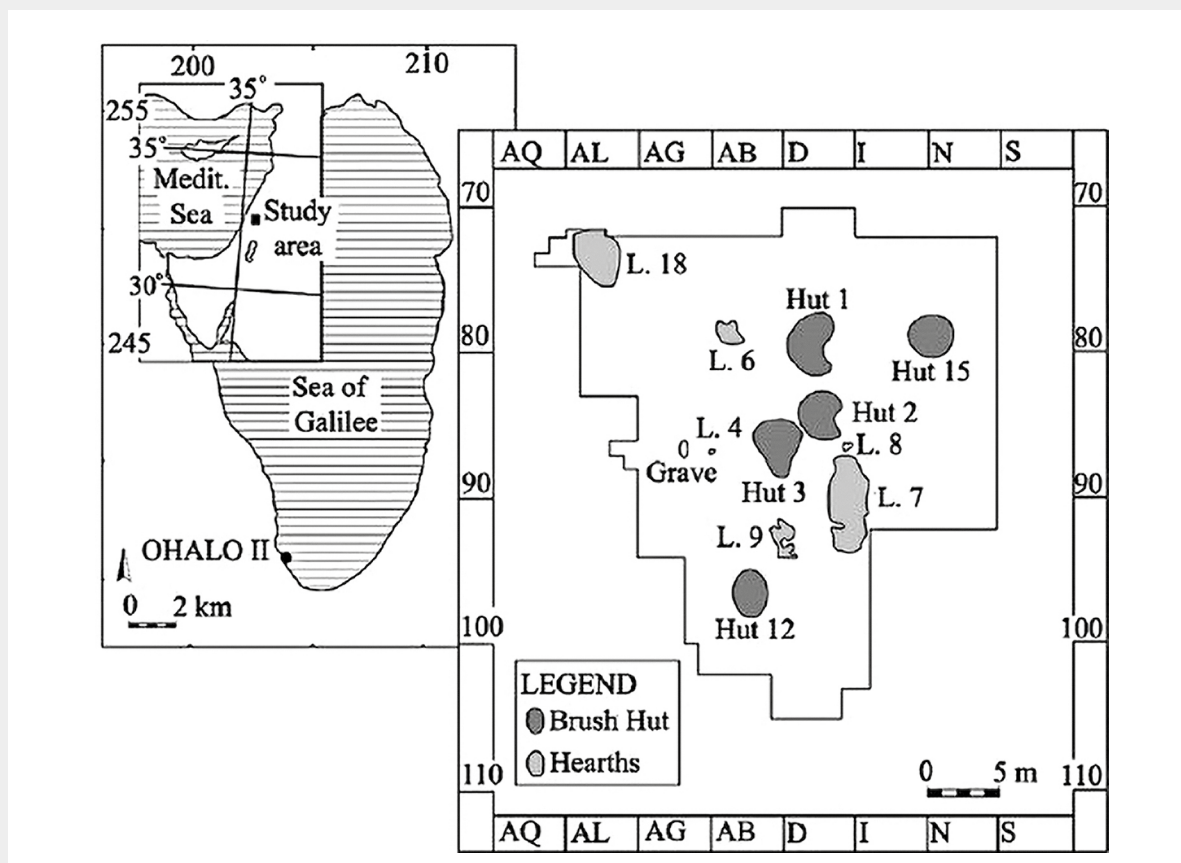
The Epipaleolithic (~22.0 to 11.9 ka cal. BP) was a time of distinct climatic fluctuations that greatly influenced the living conditions of people. It began with the Late Glacial Maximum, dated to ca. 22-19 ka cal. BP. The entire region was cold and the annual precipitation was little lower than today's (Langgut *et al.* 2021:1). However, there was winter precipitation in the hilly coastal areas which were covered by forests. This meant that this area attracted mobile Paleolithic communities. The warmest and wettest period was from about 14.9 to 13.0 ka cal. BP (Langgut *et al.* 2021; 1-2). Precipitation again declined during the Younger Dryas period (ca. 11,000 to 10,000 B.P.). Wetter climate returns again around 10,300 B.P., with which begins a very wet early Holocene in the northern Levant and Anatolia, but in the central and southern Levant it did not reach the previous peak. The gradual rise of the sea level after the peak of the last glaciation until the mid-Holocene reduced the coastal belt of the Levant by 5 to 20 km in width and 500 km in length which mainly affected the size of foraging territories (see Bar-Yosef 1998: 161). The appearance of early Natufian camps in a core area was probably a reaction to environmental change that necessitated a shift of resource scheduling. The previous semi-sedentism pattern of life among Late Pleistocene foragers gave way to the acquisition of a firmer hold over territories (Bar-Yosef 1998: 168).

► Epipaleolithic of the Levant

The Epipaleolithic of the southern Levant is divided into Early (23000 – 16000 BC), Middle (16000 – 13000 BC) and Late, which is characterized by the Natufian culture (13000 – 9500 BC, Tab. 1). The Early Epipaleolithic was marked by the peak of glaciation when the entire region was cold and dry, but the hilly coastal areas were covered by forests (Goring-Morris *et al.* 2009: 198). It is logical that the earliest changes in the way of life of hunter-gatherer communities are observed here because this area is one of the richest in plant species. The existence of more than a hundred edible fruits, seeds, grasses and tubers has been confirmed here (see in Zohary 1973). Changes that took tens and hundreds of thousands of years to occur in the Paleolithic are now accelerating. Especially in an area where the richness of flora attracts numerous animals, so food is available almost all year round. This allows groups of hunter-gatherers to stay in one place for a longer time. Groupings of seasonal camps were found that indicate the organized way of life of larger communities. It was established that these communities in their camps systematically collected and processed various types of wild grains (Goring-Morris *et al.* 2009: 199). Ground stone mortars, bowls, and cupholes are found for the first time in the Upper Paleolithic. This is an indication of a new way of processing plant food and is certainly a key prerequisite for the collection, storage and processing of various wild types of grain, which was confirmed in the Levantine Epipaleolithic, in which the foundations for later Neolithic agriculture were laid (Bar Yosef 1998: 161)

This is best seen at the site Ohalo II (Fig. 1). The site has been dated to around 21,000 BC, i.e. at the very beginning of the Epipaleolithic (Mithen 2006: 517). Judging by the size of the camp, the shape of the huts and the remains found in them, it was determined that it was a base camp that was visited regularly throughout the year (Nadel, Werker 1999). The camp was probably in use for several generations and was burned down. It was preserved by chance (probably) because it was buried by the sediments of the Sea of Galilee. The analysis of the sediments from the huts showed that they systematically collected and processed a large number of small-grained grasses, wild grains, nuts and fruits. More than 140 separate species have been identified, including wild barley and oats (Kislev *et al.* 1992; Piperno *et al.* 2004). Also, a large stone with traces of grinding was found in one hut with cereal starch grains on it, and charred cereal grains around it (Nadel *et al.* 2001; Spivak, Nadel 2016).

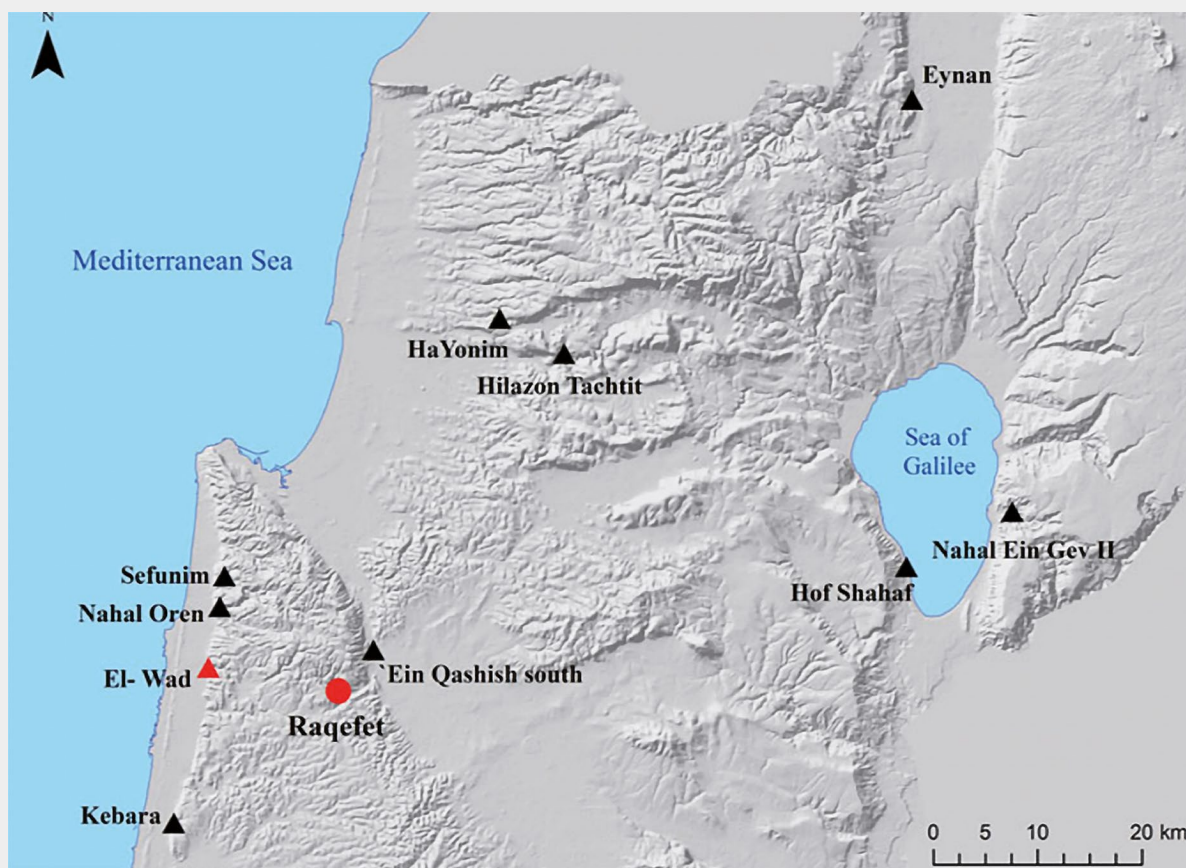
The Middle Epipaleolithic period is marked by a gradual transition to a warmer and wetter climate, when besides the semi-arid steppes of the Negev, Sinai and east of the Rift Valley the higher grounds in Lebanon were occupied as well (Goring Morris *et al.* 2009: 202). This was the introduction to the main changes observed in the late Epipaleolithic.



▲ Figure 1. Location map of Ohalo II and central area of excavation at the site. (Weiss *et al.* 2008: Fig. 1).

► Natufian culture

Around 13,000 BC the Bølling-Allerød period begins and the climate becomes much warmer and wetter. Then the way of life of the communities changed even more and the Natufian culture began. In the Early Natufian core area (Fig. 2) we witness the culmination of processes initiated in the beginning of the Epipaleolithic. Judging by the continuity of archaeological layers in numerous sites as well as by the gradual development of other cultural elements, the Natufian culture developed directly from the last phase of the Kebaran culture (Geometric Kebaran) although some authors point to the difference in the technology of making lithics and different raw materials (Belfer-Cohen, Goring-Morris 2013: 544, 546). A gradual rise in sea level after the Late Glacial Maximum until the mid-Holocene reduced the coastal plain of the Levant and it affected the size of foraging territories (Bar Yosef 1998: 161). All this led to more intense contacts between communities, so some smaller groups merged into larger ones (estimated to be up to around 100 people; Henry 1989). Still, judging by the archaeological remains, some smaller groups still existed. Because of the favorable climate, camps were organized for habitation during most of the year, so more complex dwellings were built. There are differentiations of base camps as large as 100–150 m², as for example at Wadi Hammeh, and smaller, special-purpose camps, 2–4 m² in size. Characteristic Natufian dwellings are semi-buried oval houses with a hearth in the middle (Bar Yosef 1998: 162, 163). We see a culmination of acquired knowledge about the collection and processing of wild grains. It is obvious that a selection has already been made, so mostly various types of wild barley, oats and wheat are collected and processed. A dog for which there is older evidence that it followed groups of people now became a “pet”, at least judging by the burials of people and dogs. Among the Natufian stone tools, lunate-shaped microliths and bifacial Helwan retouche dominate. The microburin technique is also common. Some new types of tools appear, such as sickle blades, picks, and axes. They continue to be used in the later Pre-Pottery Neolithic. The groundstone tools that appear in earlier cultures in the Natufian are more numerous and diverse. Mortars and pestles dominate in the core area, but there are also mullers, plates, shaft straighteners, and whetstones (Belfer-Cohen 1991: 169).



▲ Figure 2. Map of sites in the study area (Barzilai *et al.* 2017: Figure 1.)

Around 11,000 BC. The Younger Dryas began when the climate became colder and drier and Natufian culture spread into neighboring areas. Also, the size of base camps in the core area decreased, and in the Late Natufian they were rarely larger than 10 m². Most Natufian base camps were abandoned, and there was a return to less specialized economic strategies that entailed short-term occupations by mobile hunter-gatherer groups. This settlement pattern implies a scheduled use of a variety of seasonal resources. In the Negev area, lunates with Helwan retouch are mostly missing (Grosman, Munro 2017: 702).

Burials were found in all base camps in the core zone as well as in most of the smaller settlements. Based on the stratigraphic data from the sites where this could be determined (el-Wad², Hayonim, Ain Mallaha), the graves were buried in abandoned dwellings or outside those that were still in use. There are cases of burials in isolated parts of the site, especially in the Late Natufian when cemeteries and special ceremonial sites appear, such as at Nahal Oren, Hilazon Tachtit, Raqefet (Goring-Morris, Belfer-Cohen 2003; Grosman 2003; Noy 1991). The situation is different with the cave sites, as will be discussed in the following chapters. The graves were mostly in pits (deep or shallow). They were rarely paved with stones or clay coating. A few examples were paved with limestone slabs. The fill of the graves contained sediment from the very layer in which they were buried (Bar-Yosef 1998: 164). Graves were sometimes marked as at Nahal Oren with deep mortar holes. The location of the grave could also be marked by small cupholes or large boulder-mortars as at Hayonim and some graves at Nahal Oren (Belfer-Cohen 1988; Stekelis, Yizraeli 1963). Both individual and group burials are found. Group burials are somewhat more common in the Early Natufian, when also decorated burials are occasionally found. In the Late Natufian, the custom of removing the skull and long bones appears. The removal and special treatment of the skull continues in later periods. Secondary burials can be isolated, but there are frequent examples when they are mixed with primary burials. Although secondary burials are also found in the Early Natufian, they are more common in the late phase, which is attributed to the increased mobility of communities (Bar-Yosef 1998: 164).

² See Weinstein-Evron *et al.* 2013.

► Natufian caves

One of the main characteristics of Natufian culture is the emergence of more frequent open-air base camps, which are believed to have been visited throughout the year. However, caves continued to play an important role in the lives of the communities. Caves in the core area were used both in the Early and Late Natufian. Taking into account the changes in climate that have also influenced changes in the organization of people's lives, my intention is to determine whether, among other things, the role of caves in the lives of communities has changed. I will briefly present the data obtained from archaeological research and subsequent analysis of the finds. First, I will present the data for the caves in which both the Early and Late Natufian layers were found (Hayonim and el Wad caves) and after that, for the other caves in which the existence of only an Early (Kebara) or only a Late Natufian layer (Hilazon Tachit and Raqefet) was determined.

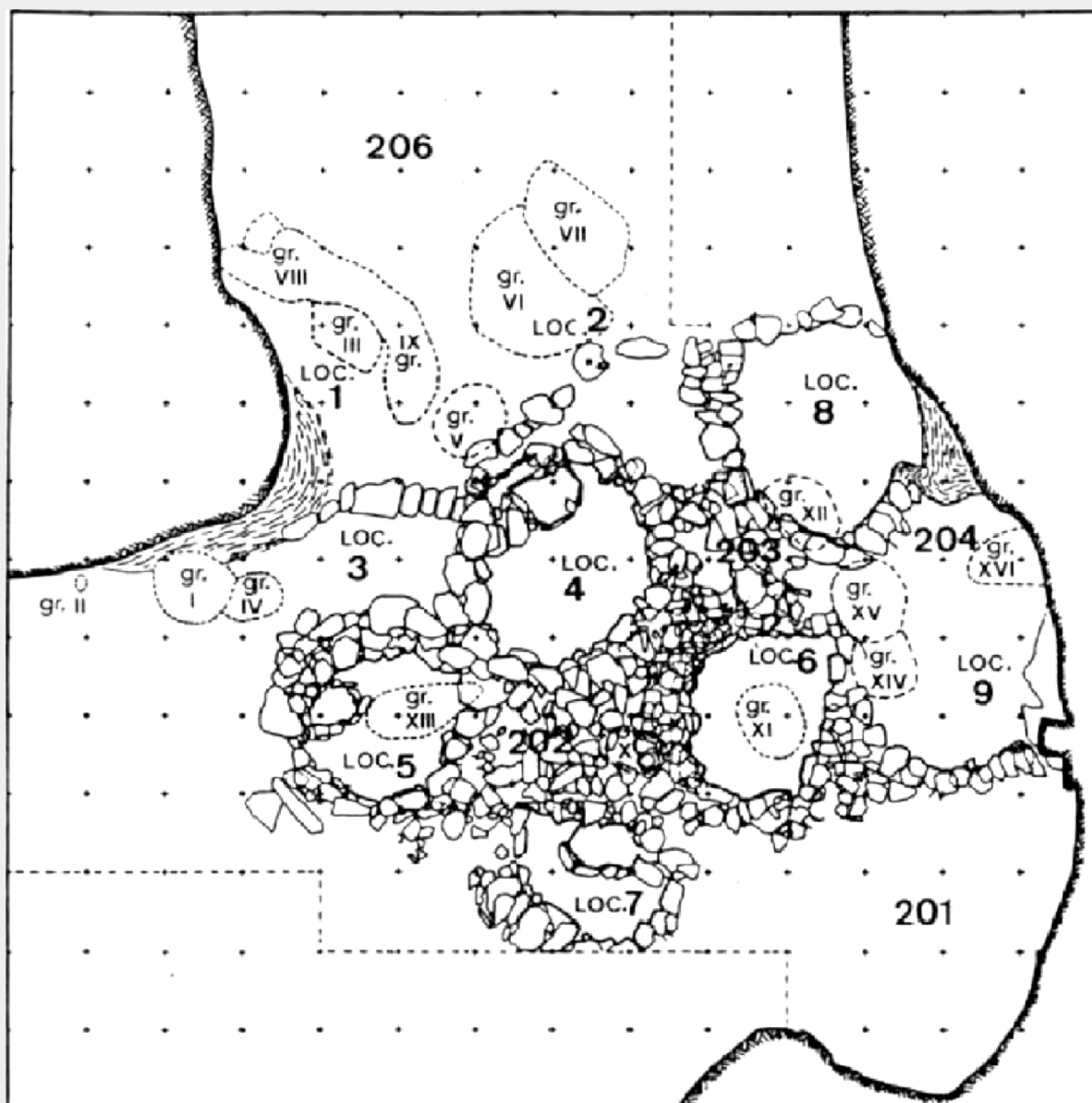
Hayonim Cave

Hayonim Cave is located in Wadi Meged, Western Galilee (Israel). It was first explored from 1965 to 1979 and then from 1992 to 2000 (Fig. 3). The cave was visited from the end of the Upper Paleolithic to the Neolithic period. The Acheulo-Yabrudian, Mousterian, Levantine Aurignacian, Kebaran and Natufian layers are all confirmed here (Bar Yosef *et al.* 2017: 231, 232). For this paper, it is important that both Early and Late Natufian layers have been identified. Finds from both phases of the Natufian are typical of a base camp including intensive game processing (Bar-Yosef 2002; Munro 2004). The inventory of stone tools is typical Natufian with numerous mortars, pestles, mullers, whetstones, and shaft straighteners. Most of the bone tools were used for leather processing and basketry. A lot of bone pendants were also found, mostly in the Early Natufian graves (graves VI, XIII, XVII). *Dentalium* shell beads are also common among the decorations (Bar-Yosef *et al.* 2017: 234).

Much greater activity is noticeable in the Early Natufian layer. The architectural remains consist of a series of round and oval rooms built from stones brought from the surrounding area. In most of them (4, 5, 6, 7 and 8) the floor was paved and a hearth was found. The function of these structures is not clear because although material of domestic character was found in them, their size does not indicate a residential function (Bar-Yosef *et al.* 2017: 233). It was noticed that special activities took place in these structures, such as a kiln for burning limestone, a bone-tool workshop, a floor made of incised slabs, etc. (Grosman, Befer-Cohen 2022: 2). A total of 55 natufian burials were found in 17 graves (71% adult – 42% male, 13% female, 16% undetermined; 29% children) but judging by the large number of isolated human remains in the layer, there were many more. Burials are in an extended (only Early Natufian), semiflexed or flexed position, in some primary ones the head is placed on stones and there is only one single burial. Some of the Early Natufian burials had decorations on them (Grosman *et al.* 2022: 4).

Among the burials, grave XVII stands out. It is a pit lined with slabs around which there is a stone structure with oval walls that follow the shape of the pit. In that grave three phases were detected. In the first phase there are three burials of an old woman (c. 55 years), a male adolescent (17-18 years) and a child (5-8 years). Since the child was laid between the adolescent's later spread legs and the older woman next to them with her hand placed on the child, the adolescent is most likely the primary burial while the woman and child were buried together later. This phase was dug into breccia. Burial of an old woman is the oldest skeleton of the Natufian culture found so far and all burials of this phase are decorated. In the second phase there was only one undecorated male and the pit was extended to the east with carefully placed stones. In the third phase there is again multiple burial of male (35-40 years), adolescent and juvenile (10-13 years) but this is considerably disturbed grave and only for an adult man was concluded that it was decorated (Grosman *et al.* 2022: 6-7).

Burials were also found in the Late Natufian layer, but there are no more decorations on the skeletons, headrests or extended burials. Of the multiple burials, all are either secondary or mixed. Most of the skulls had been removed. There are no traces of domestic architecture, only specific ritual activity areas along the eastern wall of the cave (Ben-Yosef *et al.* 2017: 233; Grosman *et al.* 2022: 2).



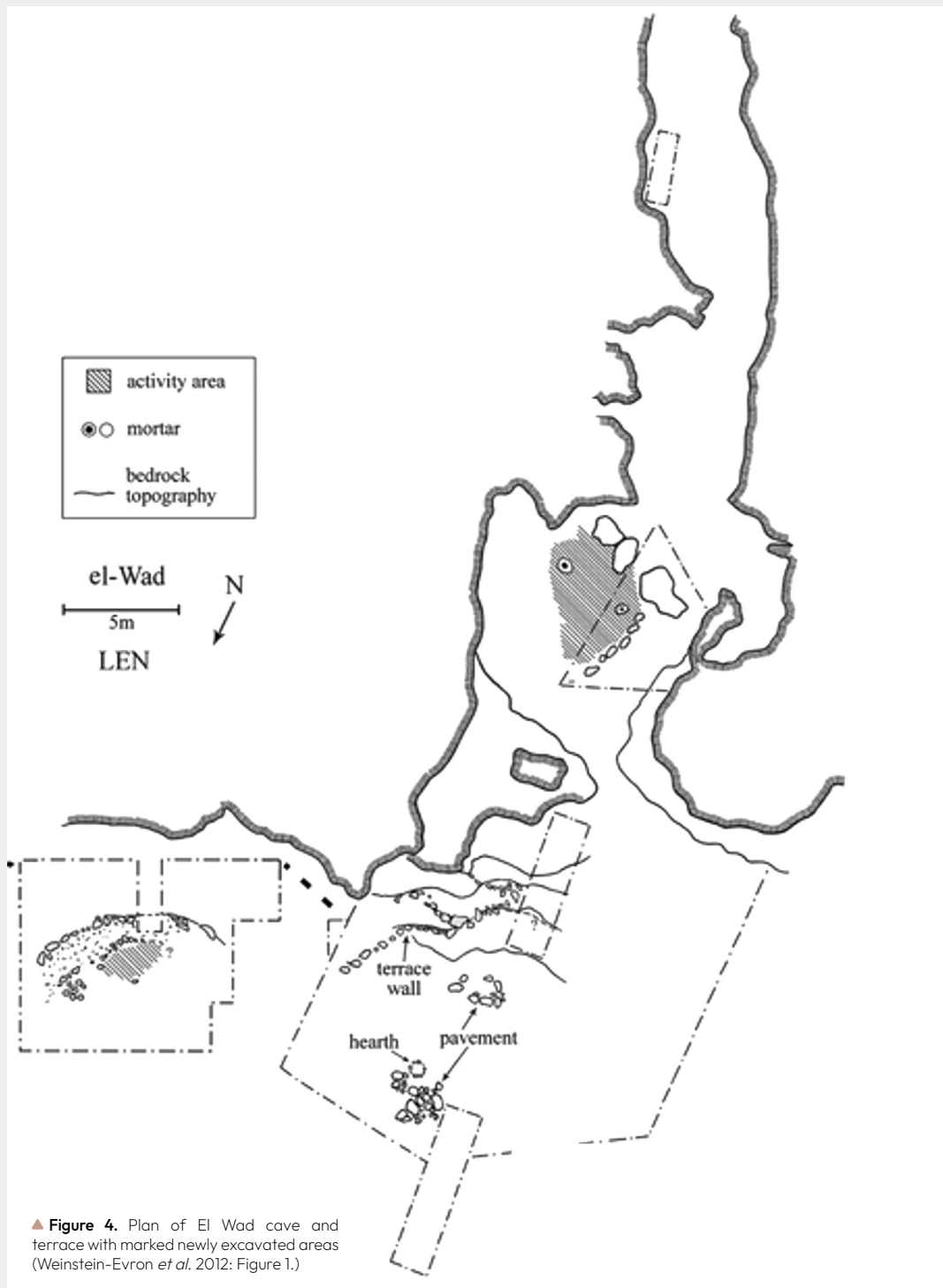
▲ **Figure 3.** Hayonim Cave: general map of the graves and living areas. (Belfer-Cohen 1988; Fig. 1)

In addition to the cave itself, the Natufian finds were also found on the terrace located immediately beneath the cave. Only the Late Natufian layer was confirmed there, in which complex episodes of building and rebuilding were recorded. Burials were also found in which, like in the cave, in one case the skull was removed, while in several cases the cranial was missing. Among the burials on the terrace, the most interesting is the collective burial of three humans with two dogs, two tortoises and a gazelle (Valla *et al.* 1991).

Regarding the use of Hayonim cave in the Natufian culture, it can be concluded that it was used much more intensively in the Early phase, which includes burials and structures in which various activities took place. In the Late Natufian structures and the activities taking place in them were moved to the terrace, while the interior of the cave was used exclusively for burial. Some differences in the funeral ritual are also visible, which follow the trend visible in other localities as well. Extended as well as decorated burials are present only in the Early Natufian, while in the late it is often secondary removal of skulls and long bones.

El Wad cave and terrace

El Wad Cave is located on Mount Carmel, 20 km south of Haifa. It was one of the larger Natufian base camps and has been explored by several expeditions (Fig. 4). It is a Natufian site where Charles Lambert first established the existence of a then-undefined culture through a trial excavation in 1928, and then the first systematic excavations were carried out the following years (1929–1934) under the direction of Dorothy Garrod. It also provides the oldest known dates for a Natufian settlement (Weinstein-Evron *et al.* 2013: 88).



Garrod explored the interior of the cave and part of the terrace in front of the cave entrance. Natufian layers were found in the cave and on the terrace below. In Chambers I and II inside the cave only Early Natufian remains were found, including a large collective burial of extended bodies. On the terrace, she established the existence of a thick and rich layer of the Early Natufian, but above it there was also a layer with findings from the Late Natufian. Most of the stone structures (pavements, terrace walls, five basins cut in the bedrock) on the terrace were attributed by Garrod to the Early Natufian. She attributed flexed burials in individual burials, as well as decorated burials and group burials to Early Natufian. She also determined that bone implements and art objects were more numerous in the Early Natufian (Weinstein-Evron *et al.* 2013: 89-90). However, there is a serious problem with Garrod's reports and the data presented in them. This especially applies to burials. The revision of her reports revealed that the data on the number of found burials differed in the various preliminary and the final report she wrote in 1937. The problem is also the frequent differences in her descriptions of the content and form of the same burials (Boyd 2001: 186). A subsequent revision of the burial data from Garrod's excavation found that 96 individuals had been found (Belfer-Cohen *et al.* 1991). For now, the least problematic is the information about the group burial in the cave, which most likely contained 2 adult, 6 child or infant skeletons and 2 whose age could not be determined, although Garrod states that they also belong to adults (Boyd 2001: 195). As far as the lithics are concerned, it was established that relatively large lunates and Helwan retouch are characteristic of the Early Natufian phase. There are also numerous sickle blades, while micro-burins are extremely rare. In the Late Natufian, smaller lunates and micro-burins dominate, and sickle blades are relatively rare (Weinstein-Evron *et al.* 2013: 90).

Limited excavations were conducted in 1980-1981 by Valla and Bar-Yosef, who opened a probe next to Garrod's excavation on the terrace with the intention of verifying the Natufian stratigraphy established by the first excavations. At that time, one Garrod's layer (B1) was further divided into two phases primarily on the basis of lithics (Valla *et al.* 1986). Soon, during 1988-1989, a smaller segment inside the cave was explored, where an Early Natufian layer was explored, in which numerous lithic and faunal remains were found, together with bone tools and decorative and art objects. A small round structure was also found at the very bottom of the Natufian layer (Weinstein-Evron *et al.* 2013: 91). During these investigations, the existence of a long trade network of contacts with other Natufian communities was established (Weinstein-Evron *et al.* 1999, 2001).

Since 1994, new excavations have been conducted, focusing on the northeastern area of the terrace in front of the cave. All phases of the Natufian culture have been found in this part of the terrace. The existence of Early Natufian architecture (walls, various structures and floors) has been confirmed, which was already established by Garrod in her research. Late Natufian layers have also been confirmed, in which only burials were found. The Early Natufian layer is the thickest and extends over the largest part of the site. Based on the collected and analyzed data, this layer could be further divided into three phases. The oldest is Early Early Natufian phase. It was detected only in the central part of the terrace and in the interior of the cave. The findings indicate either an occasional and short stay at the site or a part of this phase was destroyed by a much more intense later activity. The finds include fenced hearths and circular stone structures in the cave and rock-cut basins on the terrace. The middle phase of the Early Natufian represents the main period of burial inside the cave and on the terrace. All group burials, flexed on the terrace and those extended in the cave, as well as all those with pronounced head decorations, belong to this phase. No construction activities other than burials can be attributed to this phase, although perhaps rock-cut basins were still in use. The Late Early Natufian was the main construction phase. At least three architectural complexes can be attributed to this period. The first is located in a cave. There, in Chamber I, Garrod has already investigated a hearth and associated boulder mortars, which are surrounded on the west by a wall discovered by Lambert. It was built over group burials H 1 - 10. On the terrace in front of the cave entrance, a series of walls, paving and a leveled area surrounded by a large wall were found. This enclosed area contains at least one well-preserved structure as well as a series of floors (Weinstein-Evron *et al.* 2013: 91 - 94).

In the late/final Natufian layer, only a small number of burials without any significant architectural features were found on the terrace. No activity has been confirmed with certainty in the cave itself, but this may be due to the unprofessional excavation of the early researchers, as well as the fact that this is one of the first Natufian sites explored, so the typology of Natufian material had not yet been established. No significant construction

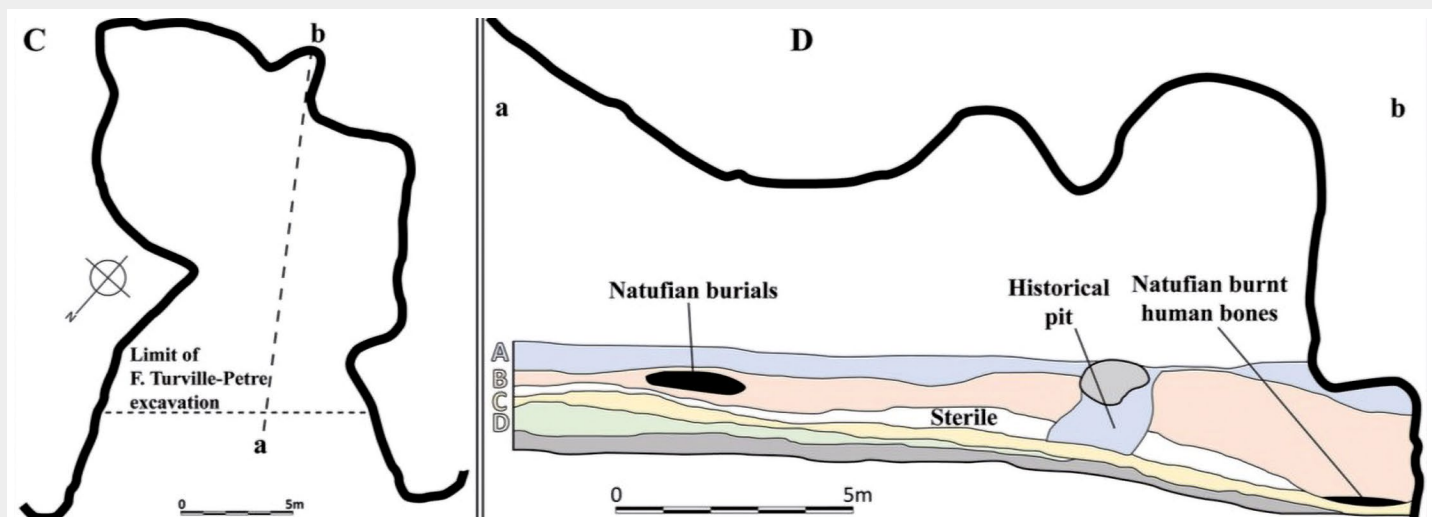
activities can be attributed to this phase on the terrace. The graves were dug into the upper part of the Early Natufian layer at the northeastern part of the terrace (Weinstein-Evron *et al.* 2013: 100). Analysis of the human remains (15 from the most recent terrace excavations in addition to 5 remains from Garrod's excavations) indicated similar funerary customs to those found for Late Natufian burials at Hayonim. Of the 20 studied remains, all of them, whose position in the grave could be determined, are flexed. Also, a single skull was found which may belong to the Early Natufian phase but in the Late Natufian burials even in those well-preserved there were no traces of any skull. None of the burials had grave goods or were decorated. The specificity of Late Natufian burials on the El Wada terrace is the large number of children's burials (9 children, mostly 4–6 years old, one infant and one 9–11 years old). Adult burials are dominated by men (6 men and 4 women, the gender of one could not be determined; Bachrach, Herskowitz, Kaufman, Weinstein-Evron 2013).

The latest research on the site has confirmed that there was a large Natufian settlement in el Wad, which was very frequently visited in the Early Natufian phase to which 18 stratified habitation levels are attributed (Yeshurun *et al.* 2025: 13). The remains testify to intensive residence for both funerary and other purposes. It has also been established that in the beginning of the Natufian period residence here was occasional and mainly for funerary purposes. Visits for funerary purposes intensified in the Middle Early Natufian (see Weinstein-Evron *et al.* 2018: 55). The most recent study in which the zooarchaeological remains were analyzed determined that before the main construction phase a smaller group of people visited the el Wad site and that the settlement itself can be characterized as a hamlet (Yeshurun *et al.* 2025: 14). At the end of the Early Natufian phase (Late Early Natufian), the site turned into a large complex settlement, where, judging by the material found, intensive residence was observed, and not exclusively for funerary purposes (see Weinstein-Evron *et al.* 2018: 55). Archaeological remains and their analysis indicate that the larger community invested more effort in the construction, extension and renovation of the place for more permanent residence. It was established that some dwellings were renovated at least ten times in the same spot. (Yeshurun *et al.* 2025: 14). In the Late Natufian, the site was visited less frequently again, and again exclusively for funerary purposes. It is difficult to say what was the reason for the change in the purpose of the site in the Early Natufian, because no major changes are visible in the material. The situation is similar with the comparison of Early and Late Natufian material, where the only noticeable trend is the one observed at other Late Natufian sites (see Weinstein-Evron *et al.* 2018: 55). It is possible that one or more groups separated from the larger community credited with building the main architectural phase at el Wad. They may have settled in new Late Natufian settlements like Nahal Oren situated only 5 km from El Wad (Yeshurun *et al.* 2025: 14, 15).

Kebara cave

Kebara Cave is located in the western part of Mt. Carmel. It is another site whose Natufian layer was investigated in the first half of the 20th century, so only revisions from the end of the 20th and beginning of the 21st century resolved some doubts. The first sounding was carried out by Stekelis in 1927, but the real research began in 1930, when Garrod discovered a specific lithic material unknown until then, which she named Kebaran. She invited Turville-Petre, who conducted short research with Baynes in 1931. A later evaluation of the findings determined that layer B discovered in the cave contains Natufian material. Stekelis returned to Kebara and conducted several seasons of excavation there from 1951 to 1965. The excavations were continued by a team led by Bar-Yosef in the 1980s and lasted for 9 seasons (Bar-Yosef *et al.* 1992: 500–502). However, all subsequent excavations have concentrated on the Middle and Upper Paleolithic layers, in large part because Turville-Petre had explored the entire surface of the cave and nothing remained of the Natufian layer.

The Mousterian layer, the Levantine Aurignacian, the Kebaran culture and the Natufian layer have been confirmed and investigated in the cave (Fig. 5). The Natufian layer belongs to the early phase of the culture and according to the latest study, 48 burials were found in it (30 adults aged 13 to 35 years and 18 children aged 0 to 12 years; Bocquentin 2003: 151). Here, as in el Wad, the majority of adults are men (Belfer-Cohen, Schepartz 1991). The burials were found in two locations. At the entrance there was a mass burial for which Turville-Petre wrote in his report that “the bodies seem to have been thrown in without any attempt at orientation, and packed in with stones. Together with adult skeletons were those of several infants; there were no ornaments associated



▲ Figure 5. Plan of Kebara Cave and cross section of the deposits in Kebara Cave identified by F. Turville-Petre (Davin, Bellot-Gurlet, Navas, 2023: Fig. 1 C, D).

with the burials and all were in a very damaged condition” (Turville-Petre 1932: 271). It was later determined that 17 individuals (6 adults and 11 children) were buried there. Deeper inside the cave, a group of burnt human bones was found, which Turville-Petre attributed to layer C, which contains remains of the Kebaran culture. In this group, 31 skeletons (24 adults and 7 children) were also subsequently identified (Bocquentin 2003: 151). By subsequent C^{14} analysis it was established that the group of burnt human skeletons found deeper in the cave belongs to the very beginning of Natufian culture. It was determined that there were no signs of cannibalism and that they burned like whole skeletons. Additionally, it was determined that it was probably an intentional burning. However, it is questionable whether burning was part of the funeral rite (cremation) because that type of funerary ritual has not yet been recorded as part of Natufian culture. Analyzes have established that in the group of burnt burials, seafood did not play a major role in the general diet (Bar-Yosef, Sillen 1993). An analysis of the skeletal remains of adult men found near the entrance revealed that there was a healed trauma on two skulls, while a part of the lunate was embedded among the vertebrae of the third individual (Fig. 6). The lunate was most likely attached to some projectile which, judging by the preserved ribs, did not damage any other bones. However, through the reconstruction of the projectile’s possible trajectories, it was determined that it must have damaged either the lungs or the heart. That the injury was fatal is also confirmed by the fact that there are no signs of bone healing around the lunate (Bocquentin *et al.* 2004).

It is questionable whether there were any stone structures because Turville-Petre only mentions the stones in the burial pit at the entrance to the cave and no additional drawing or photograph has been preserved (Bar-Yosef, Sillen 1993). Stone constructions would be expected if we take into account the situation in the Early Natufian layers in Hajonim and el Wad as well as the numerous lithic material (the most numerous are sickle blades and lunates) found in the Natufian layer of Kebara. In addition to the lithic material, there are particularly numerous bone tools here, some of which are decorated and zoomorphically shaped (see Turville-Petre 1932). Although Turville-Petre wrote about the burials that they were undecorated, a large number of bone pendants (more than 400) were found in the Natufian layer, of which 150 were found in a “cache” near the burials (Fig. 7.). Pierced animal teeth and shells were also found. Among them there are pendants made of shells from the Red Sea (*Dentalium bisexangulum*) and those made of shells originating from Miocene-Pliocene fossil deposits about 400 km further to the north, in the northern Levant (*Dentalium sexangulum*). In addition to the fact that some of the shells were obtained from more distant regions, which is not the case with shells from other Natufian sites, some of the oval bone pendants were “colored” by controlled heating. A unique find from the Kebara cave is the dye coloring of the pendants. The analysis was carried out on 16 pendants (13 made of shells, 2 from animal teeth and one made of bone) on which traces of dye were found. On 10 of the shell pendants, residues of an organic red dye was obtained from plants of the *Rubiaceae* family. Dyeing with this organic dye, which would have been common from the 3rd millennium BC, is 9000 years older than the oldest confirmed use of this dye so far (Davin *et al.* 2023).



◀ **Figure 6.** Detail of H4/ Keb3 vertebrae with a lunule embedded in the 7th or 8th thoracic vertebra (Bocquentin, Bar-Yosef, 2004: Fig 2.).

The Natufian layer in the Kebara cave, judging by the abundance of stone and bone artifacts, testifies to the intensive occupation of one or more groups of hunter-gatherers. The question of the existence of stone structures, as I have already stated, remains open, although they should be expected. At the time of the excavation of the Natufian layer in Kebara, knowledge of the Natufian culture was in its infancy, so it is quite possible that stone structures that are not so obvious were overlooked. The two groups of burials may indicate two different groups that inhabited the cave. Judging by the Turville-Petre drawing of the stratigraphy of the cave, the burnt burials at the bottom of the cave are located at the very bottom of the Natufian layer, while those at the entrance are located in the middle. If we take into account the analyses of burnt bones, which indicated a lack of seafood in the diet of these individuals, and the fact that many harpoons and hooks were found in the layer, perhaps the two groups of burials belong to two different communities. Conflicts between the communities certainly existed, as indicated by the traumas on the remains of three men from the burial at the entrance. Analyses of the type of diet on these remains have not been made, so we can only speculate. Likewise, we can only suggest possible reasons why the burials at the bottom of the cave would have been burned: accidental arson, a special burial practice of only one Natufian community, or the total destruction of the conquered and the takeover of the territory. Much more data and analysis are needed for more precise hypotheses.



▲ **Figure 7.** Selected bone zoomorphic figurations and oval bone pendants from the Early Natufian of Kebara Cave (Davin, Bellot-Gurlet, Navas, 2023: Fig. 13.)

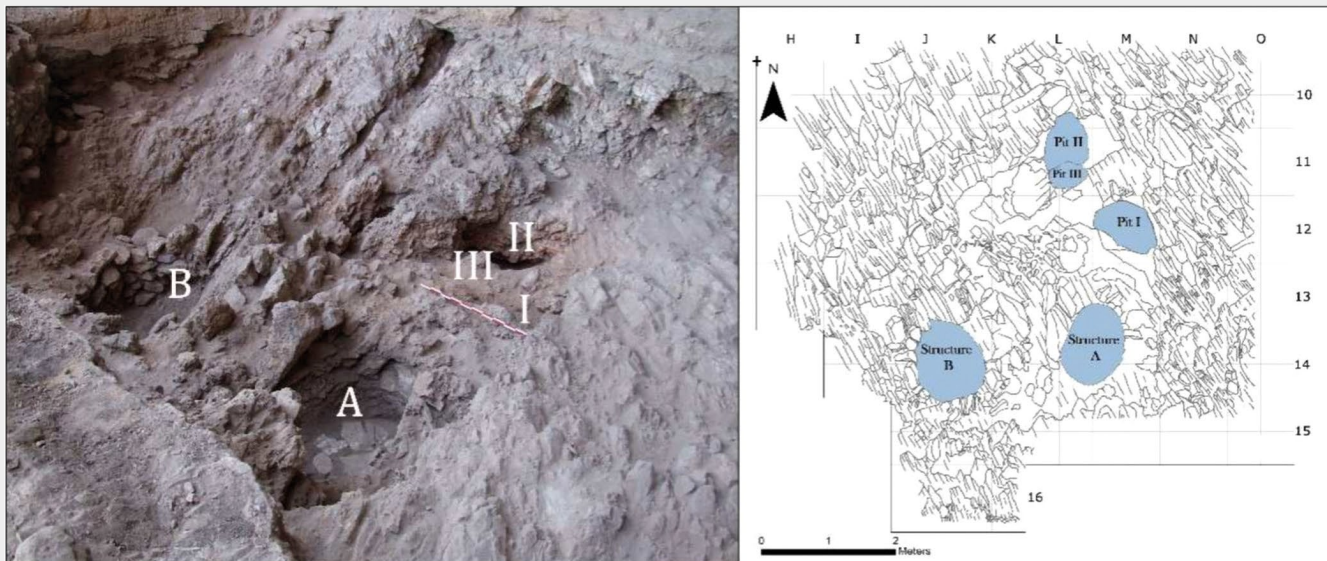
Hilazon Tachtit

One of the most famous Natufian caves is Hilazon Tachtit. It is located on the left side of Nahal (Wadi) Hilazon in western Galilee. Its interior is about 100 m² and has a small terrace in front of the entrance where no traces of Natufian habitation were found. Excavations were carried out over 8 seasons from 1995 to 2008 (Goldgeier *et al.* 2019).

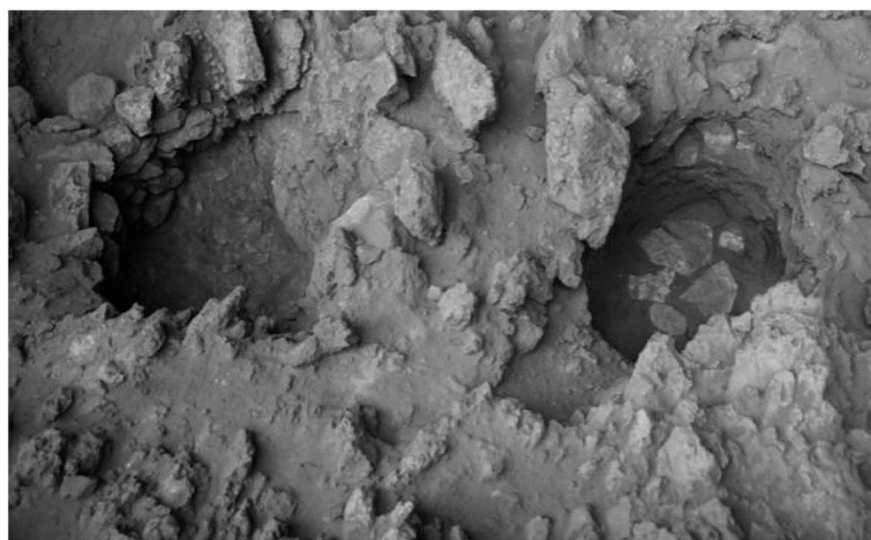
The cave was utilized exclusively during the Late Natufian phase (ca. 12,400 - 12,000 cal years BP). Skeletal remains of at least 28 people were found in the cave. Beside burials there is evidence for food preparation and consumption, and lithic and bone tool manufacture that took place at the site but the cave was used only for burying the dead (Grosman *et al.* 2022: 67). All the remains were found inside or near 3 architectural features: Structures A and B and three burial pits (Fig. 8).

Structures A and B are located near the entrance and are both cut into the bedrock to a depth of over 1 meter (Fig. 9). They were constructed at the same time and before the burial pits. Structure A has a symmetrical oval shape and it was plastered with clay. Limestone slabs were later pressed into the clay layer. This structure contained the so-called shaman burial. It is a burial of a woman of 45-50 years and it represents the foundation of the site. Examination showed that she suffered from congenital deformities and osteoarthritis (Grosman *et al.* 2008; Grosman, Munro 2017: 303 - 305). Only with this burial were numerous grave goods found which, with careful preparation of the burial site, further indicate the status she had in the community. Large stones were placed on the head, pelvis and hands. Next to her and on her there were the tail of an aurochs, the pelvis of a leopard, one and a half pine marten skulls, the wing tip of a golden eagle, the remains of at least 90 tortoises, several unique ground stone fragments, several complete *Cerastoderma* shells and an articulated human foot (Goldgeier *et al.* 2019). All were covered with the remains of a funeral feast and closed with a very large stone.

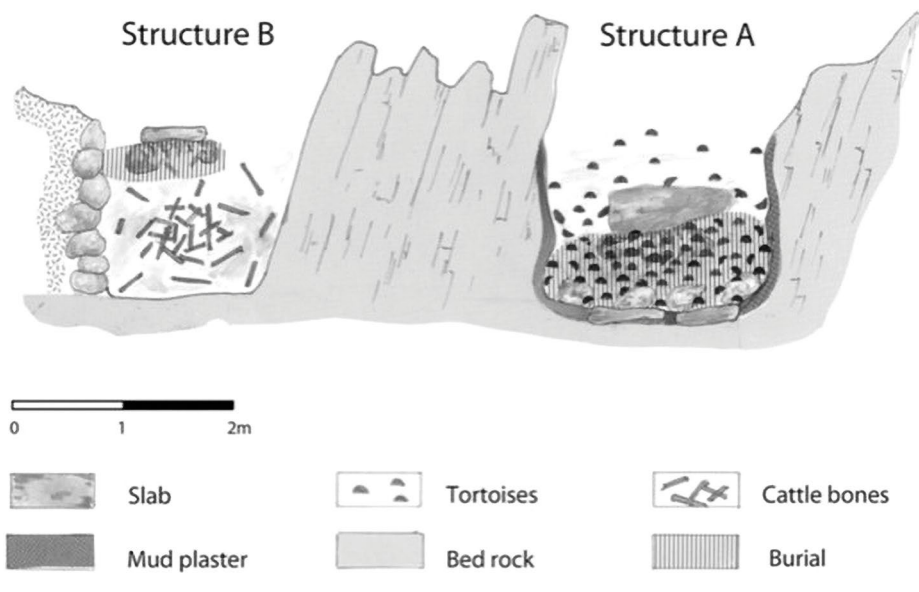
Structure B was probably constructed for a ritual feast for the shaman burial. Animal remains in the oldest layer of the structure indicate that two grown and at least one juvenile aurochs were consumed, which provided for more than 300 kg of meat. Other animals such as turtle bones were also found alongside them. Remains in the lower part of Structure B indicate a rich funeral feast held for the burial in Structure A (Munro, Grosman 2010).



▲ Figure 8. Photo (left) and plan (right) of the structures and pits excavated in the bedrock at Hilazon Tachtit (Goldgeier; Munro, Grosman 2019: Figure 1.).



◀ Figure 9. Overview of structures A and B from Hilazon Tachtit cave and artist's reconstruction of their stratigraphic cross-section (Munro, Grosman 2010: Fig. 2.)



An older woman was subsequently buried in these deposits.

At least 24 individuals were buried in the pits. All three pits were located in an area of 5 m². All are irregular in shape, of various dimensions and were buried to a maximum depth of 80 cm. Pit I has the most clearly marked boundaries and its lower part is cut into bedrock. Two of the pit's walls were built with small stones and the bottom was paved with several large limestone slabs (Grosman *et al.* 2022: 67). It contained two layers of inhumation and a sterile layer between them. All burials were missing skulls and long bones. In the first phase an adult and child were buried, and in the second phase there are at least five burials: an infant, two children, an adolescent, and an adult. Stages of the burial in Pit I were: primary burial, re-opening of the grave after flesh decomposition (ca. one year), removal of skeletal parts (long bones and skulls), reburial, and probably secondary deposition of removed parts elsewhere. After that came secondary burials (Grosman, Munro 2017: 304). Pit II had no defined boundaries and was only partially cut into the bedrock. A small number of human and animal bones were found in it near the bottom. Pit III was completely buried in the Natufian layer, so it is probably the latest. Only an upper half of a single individual packed in a vertical position was found in it (Grosman *et al.* 2022: 72).

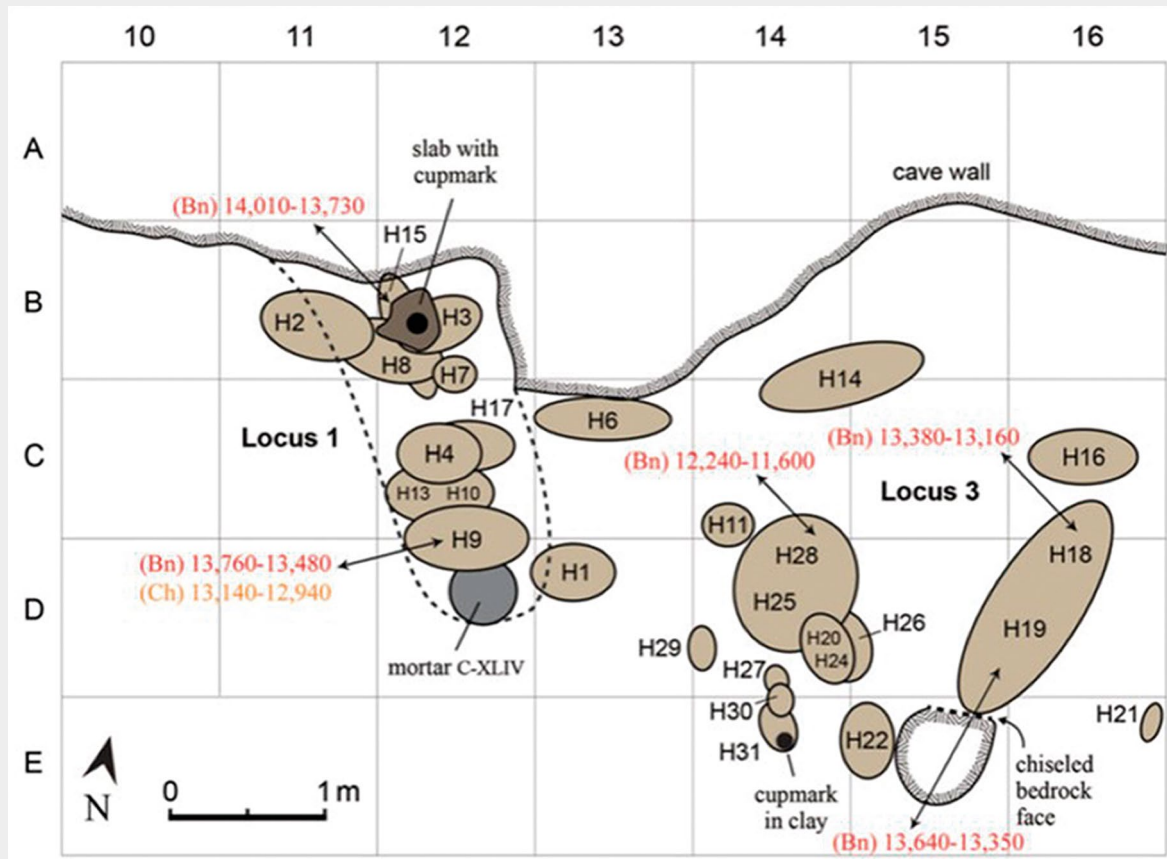
The last burial event on site occurred between the two structures, after the pit burials. This is another burial of a woman, this time younger, with a fetus buried next to her (Goldgeier *et al.* 2019: 6). The location between the two structures where burials began in Hilazon Tačtit and the fact that two elderly women were buried in these structures, whose graves were not subsequently opened, indicates that the structures were marked in some way. Also, the burial of a younger woman between those two structures indicates that she belonged to the same "category" as the shaman and other older women. The burial of the shaman marked the beginning of the "necropolis", while this last burial of the younger woman "closed" it.

Hilazon Tačtit is a cave that was used exclusively as a burial site for several hundred years in the Late Natufian. It was probably used by a small community (Grosman *et al.* 2022: 66). The beginning of the necropolis is certainly a single burial in structure A, which has become known as the shaman burial. The effort that went into the construction of structures A and B, the finds in the shaman burial and the remains of the feast in structure B indicate the importance of the funeral for the community. It is possible that this burial marked the cave itself as "sacred", which then caused later burials in it. The pit burials represent the main and longest phase of Hilazon Tačtit cave (Grosman *et al.* 2022: 72). Whether these later burials are connected with the shamanic element cannot be said with certainty, but it is clear that only part of the community was buried in the cave.

Raqefet cave

Raqefet cave is located in the south-eastern part of Mt. Carmel in Wadi Raqefet. The interior of the cave is divided into five chambers and there is a narrow terrace in front of the entrance. The cave was discovered in 1956. but was explored in 3 campaigns only in 1970. –1972. when the first and second rooms were explored. Levantine Aurignacian, Kebaran, Geometric Kebaran, Late Natufian, Neolithic and Bronze Age material was found. Numerous Natufian remains were found but only one thin layer and the burials were undisturbed so most of the Natufian material was found together with material from other cultures. A short excavation was carried out in 2004. but even then mostly mixed material from several cultures was found (Lengyel, Bocquentin 2005: 272, 273). The excavations continued in 2006. and 2008., when the only undisturbed Natufian material was found in the burials. The last two seasons were conducted in 2010. and 2011. (Nadel *et al.* 2008, 2009, 2012; Lengyel *et al.* 2013: 478, 482).

The belonging of the Natufian remains to the late phase was determined with the analysis of lithic material, but also with C¹⁴ dates (13,500 and 12,200 years cal BP) obtained from the analysis of skeletal remains and charcoal (Barzilai *et al.* 2017). On the basis of the revision of the first research (Lengyel, Bocquentin 2005) and in later excavations it was concluded that a total of 29 burials of adults, adolescents, children and infants was found in Natufian layers. They were mostly grouped in Locus 1 and 3 in Chamber 1. Only one burial was found near the entrance (Fig. 10.). Four graves were covered with a thick layer of plant material, among which were



▲ **Figure 10.** Plan of burials in the first chamber, Raqefet Cave. Bn = dated bone; Ch = dated charcoal (Barzilai *et al* 2017: Figure 2.).

also sage flowers (Nadel *et al* 2013). All are single burials except for four that are double. Along with the burials, tiny bedrock holes, cupmarks, bowl-like specimens, small mortars, deep narrow mortars and large basins were found (Nadel, Rosenberg 2016). There were no architectural remains other than a burial pit, but over 20,000 stone artifacts were found in the immediate vicinity of the graves or inside them (Barzilai *et al* 2017: 1141). Judging by the bedrock mortars, numerous lithics, butchered faunal remains, plant processing, the place was often visited, but without architectural remains it can only be concluded that the activities that took place there were connected with the funeral ritual.

Raqefet Cave was clearly a community burial site over a longer period of time, since later burial pits disturbed older burials (Power *et al.* 2014: 51–54). What distinguishes the burials from the Raqefet cave from the other Late Natufian burials presented here is that a good part of the burials of adults lay in an extended position which is characteristic of Early Natufian burials and that they do not lack skulls and long bones common in the Late Natufian. Obviously, the community that buried a part of its members there nurtured an older Early Natufian tradition.

► Caves at the Crossroads

The beginnings of human development go back millions of years and much is still unclear, but some basic features of development have been established for now. A few million years passed from “descending from the tree” to the beginning of tool making. From then until the complete adaptation to bipedal walking and the discovery of fire, several hundred thousand years passed. Each subsequent “evolutionary step” was lower and lower. Along with physiological changes, the organization of life and human consciousness also changed. Climatic changes probably played a decisive role in these processes at first, but over time, evolution began to take its natural

course. The greatest climatic change was certainly the end of the last ice age, after which we witness a gradual adaptation to a sedentary lifestyle, which is the basis of today's life.

The area of the southern Levant is the place where we can follow the most detailed changes in the organization of the life of hunter-gatherer communities that ultimately led to a sedentary lifestyle and the development of food production methods. Natufian culture is the key link that connects the old and new ways of organizing the life of human communities. The beginning of the culture is connected with the end of the last ice age, but the changes started already during the last Glacial maximum. The Ohalo II locality is certainly a witness to this. So the prerequisites for the beginning of agriculture began long before the end of the ice age. Changes in the Natufian culture itself (early and late phase) were also explained by climate changes and the onset of a colder and drier period. However, newer dates for the beginning of the late Natufian from new research in el Wad and new dating of skeletal remains from Raqefel cave show that the beginning of the late Natufian must be placed several centuries before the Younger Dryas event (Weinstein-Evron *et al* 2018: 55). Therefore, the first changes in the organization of the hunter-gatherer communities crucial to the later emergence of the Neolithic were not caused by climate changes, but by the natural evolution of human communities.

The Natufian caves provide insight into the unique development of human consciousness in that area and at that time. The findings from them indicate that in the early phase of the Natufian culture, the caves were used both for burials and for various domestic activities, which is most clearly evidenced in Hayonim cave and el Wad. In a way, this is a continuation of the tradition of earlier Epipaleolithic cultures in that area, such as the systematic collection, storage and processing of wild cereals. The findings from these two caves also indicate a specific burial tradition within which some local specificities are still noticeable. In the Kebara cave, unfortunately, the entire Natufian layer was explored at a time when the modern archaeology was still in its infancy, as was the knowledge of the Natufian culture. Therefore, we cannot say with certainty that it did not contain elements that characterize other Early Natufian caves. However, what is clear in all three caves in which Early Natufian layers were found is that the interiors of the cave was intensively visited. In the case of Hayonim and el Wad it is clear that the interior is used not only for burials but also for the construction of structures in which various other activities were carried out. In the Early Natufian phase, caves were certainly inhabited for at least part of the year.

The situation changes in the Late Natufian phase. Hayonim Cave is used exclusively for funerary purposes while structures for various activities are moved to the terrace in front of the cave. In el Wad, the interior of the cave is completely abandoned and only the terrace is used, but it seems only for funerary purposes. Hilazon Tachtit and Raqefel are only used in the Late Natufian by certain, probably smaller, communities, and only for the burial of some of their members. Who used these caves and which members of the communities buried them cannot be said at the moment. Were spiritual leaders buried there, as the find from Hilazon Tachtit might indicate, or "victims/warriors" as suggested by the find from Kebara, or children who are particularly numerous in el Wad and Raqefel, or perhaps members of certain families? This requires new research and analysis. It is clear that the funerary traditions of the Late Natufian communities differ, but they have one thing in common – the caves moved from the "sphere of the living" to the "sphere of the dead".³ People continued their evolutionary path, they "came out of the cave" and they continued to discover and conquer nature and the world around them. The caves were left to the dead and the gods.

³ There are some exceptions: Baaz rock shelter (Syria) and Irak ed-Dubb (Jordan) that were used in Late Natufian for dwelling (see Edwards, Martin 2007; Stahlschmidt *et al.* 2017.).

Spilje na raskršću: uloga spilja u epipaleolitiku južnog Levanta

Spilje su imale razne uloge u životima ljudi tijekom cijelog razvoja ljudskog društva. Najistaknutije mjesto imale su zasigurno za lovačko-sakupljačke skupine tijekom paleolitika. Promjenom klime nakon zadnje oledbe nastali su uvjeti za drugačiju organizaciju života dotada lutajućih skupina. Promjena se nije dogodila preko noći te se u različitim okolišima odvijala na različite načine.

U ovome radu bavim se prostorom gdje se promjene u načinu života najranije javljaju – južnim Levantom. Tamo su se zbog specifičnih geoklimatskih karakteristika vrlo rano stvorili uvjeti za postupni prelazak na neolitički način života. Prve naznake promjena javljaju se već prije prestanka zadnje oledbe pa se za širi prostor Levanta i Egipta izdvojilo zasebno tranzitno razdoblje, epipaleolitik. U južnom Levantu već se u prvoj polovici tog razdoblja koje pada u vrijeme vrhunca glacijacije (oko 20 000. – 14 500. pr. Kr.) zamjećuju promjene u organizaciji života lovačko-sakupljačkih zajednica. To je najevidentnije potvrđeno na lokalitetu Ohalo II datiranom oko 21 000. pr. Kr. Tamo je pronađen bazni kamp jedne zajednice u kojemu je potvrđeno sistematsko sakupljanje i prerađivanje preko 140 različitih vrsta divljih trava, žitarica, orašastih plodova i voća.

Promjene kulminiraju nakon kraja oledbe kada uz bujniju floru i faunu na prostoru južnog Levanta dolazi i do smanjivanja teritorija po kojemu su razne lovačko-sakupljačke zajednice sakupljale hranu. To je vrijeme kasnoepipaleolitičke natufijenske kulture (oko 13 000. – 9 500. pr. Kr.). Smanjivanjem teritorija dolazi do spajanja raznih skupina pa neki lokaliteti svjedoče o boravku zajednica od oko stotinjak osoba. U ranoj fazi natufijenske kulture, prije zamijećene promjene u životu ljudi, oni kulminiraju pa sada svjedočimo o sistematskom sakupljanju, obrađivanju i pohranjivanju selektiranih vrsta žitarica. Također, arheološki nalazi ukazuju da se na nekim lokalitetima boravilo većim dijelom godine. Kasnu natufijensku fazu obilježilo je kratko zahlađenje te se lokaliteti ove faze nalaze na znatno širem teritoriju.

Spiljski lokaliteti potvrđeni su u objema fazama natufijenske kulture. U radu sam obradila pet spiljskih lokaliteta: Hajonim, el Wad, Kebara, Hilazon Tačtit i Rakefet. Obje natufijenske faze potvrđene su u spiljama Hajonim i el Wad, samo starija faza u Kebari dok nalazi iz Hilazon Tačtit i Rakefet pripadaju mlađoj natufijenskoj kulturi. Iako su u nekim spiljama zamijećene lokalne specifičnosti, kod svih je evidentno da se unutrašnjost spilje u kasnoj fazi natufijenske kulture koristi isključivo u pogrebne svrhe. U ranonatuufijenskim slojevima u unutrašnjosti spilja potvrđeni su objekti u kojima su se odvijale razne kućanske i druge aktivnosti koje se u slučaju spilja Hajonim i el Wad u kasnoj fazi sele na terasu ispred ulaza u spilju, a unutrašnjost se koristi samo za ukope. Utvrdile su se i promjene u pogrebnom ritualu koje su potvrđene i na drugim natufijenskim lokalitetima. U ranoj se fazi uz zgrčeni položaj skeleta često javlja i ispruženi položaj kojeg nema u kasnoj fazi. Također, skeleti s ukrasima prisutni su samo u ranoj fazi. U kasnoj fazi većinom se nailazi na sekundarne ukope, a javlja se i običaj naknadnog uklanjanja lubanja i dugih kostiju.

Dugo se pojava kasne faze natufijenske kulture objašnjavala pojavom hladnijeg i sušeg razdoblja, ali novije datacije skeletnih ostataka iz spilje Rakefet ukazuju da je promjena u načinu života ljudi nastupila prije klimatske promjene, tako da i ova razvojna stepenica ljudskog društva kao i pojava sistematskog sakupljanja žitarica i intenzivnijeg boravka u kampovima na otvorenom u ranom epipaleolitiku nije povezana s promjenom klime. Ljudska svijest u oba je slučaja nadrasla prijašnji paleolitički način života. U kasnoj fazi natufijenske kulture to je za posljedicu imalo napuštanje spilja kao mjesta obitavanja. Iako bi se očekivalo da se s pojavom hladnijeg vremena, spilje intenzivnije nastanjuju dogodilo se upravo obrnuto. Čovjek je izašao u svijet, a spilje je ostavio samo za mrtve.

Ključne riječi: južni Levant, rana i kasna natufijenska kultura, špiljski lokaliteti, nastambe i groblja

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