

HAR KARKOM: THE IMPORTANCE OF THE SITE

Emmanuel ANATI

Director, Centro Camuno di Studi Preistorici
Professor of Palaeo-Ethnology, University of LecceAbstract

The publication of "The Mountain of God: Har Karkom" (Rizzoli, New York, 1988) and of "I siti a plaza di Har Karkom" (Edizioni del Centro, Capo di Ponte (BS), 1989), have provoked world wide debate. Field work has since progressed and new discoveries provide new evidence. The analysis of data and re-thinking of archaeological evidence, topography and exegesis, suggest new approaches to the understanding of this holy mountain in the middle of the Negev Desert and to the reading of pertinent biblical texts. An immense concentration of rock art, over 40.000 depictions, is found along with many other elements of cult and of social activities. Har Karkom emerges as a paramount site of cult connected to the biblical story of Mount Sinai.

The Mountain

In 1984, my proposal of identifying Har Karkom, a mountain in the Negev desert, with the Biblical Mount Sinai, had opened a wide debate. Subsequent expeditions have further stimulated the scientific interest in this mountain which has been broadly recognized as a very important Chalcolithic and Bronze Age high-place. Several eminent Biblical Scholars and Near-Eastern Archaeologists have taken sides, either in favour of or against the hypothesis of identification, creating a true "archaeological case" which is not yet solved. The evidence available up to 1986 is published in my book "The Mountain of God" (New York, Rizzoli, 1986) and in "I siti a plaza di Har Karkom" (Edizioni del Centro, Capo di Ponte (BS), 1989). Since then the debate has been followed in the pages of the periodical BCSP (vols. 22-26) and in other publications.

Since 1980 this plateau-shaped mountain and the surrounding valleys have been under study. Eighteen archeological expeditions in ten years have allowed a thorough archaeological survey of ca. 200 sq.km. The research, led by myself, is realized by the CCSP (Centro Camuno di Studi Preistorici, Italy) in cooperation with the Antiquities Authority and the Archaeological Survey of Israel, and supported by the Italian Ministry of Foreign Affairs. From 1983 to 1985 the research was also sponsored by the Fondazione CAB of Brescia, Italy.

Every new expedition has provided fresh evidence and now over 890 archaeological sites are known in the surveyed area. Many of them belong to the Late Chalcolithic, the Early Bronze Age and the beginning of the Middle Bronze Age, a period, dating back to the fourth and the third millennium B.C., which we refer to as BAC, or

Bronze Age Complex. Remains of numerous villages of this period have been found in the valleys surrounding the mountain, while the high-plateau is covered by sites of cult and worship: standing pillars, tumuli, stone circles, altar-like structures and a unique concentration of rock art counting over 40.000 figures. (Cf. BCSP 22, 1985, pp. 129-131).

Har Karkom is only 487 m above sea level. Despite the elusiveness of access to the mountain, Har Karkom dominates the land around it, known as the Paran Desert, and is, in fact, visible from great distances. It can be seen from over 50 miles away, from the mountains of Edom in Jordan and from Jebel Arif el-Naqa, likely to be the biblical Mount Seir, thirty miles away. Har Karkom has a rectangular outline that imposes itself on the horizon and makes it an obvious point of reference for travelers crossing the desert even today, as it must have done for travelers in the past.

It is perhaps significant that this mountain must have been an extremely important source of prime-quality flint in Palaeolithic times. From the archaeological evidence it appeared at once to have become a holy place at the end of the Stone Age, when the use of flint as the material of primary daily use was drawing to a close. However, flint continued to be used in the Early Bronze Age, and the quantity of very large and refined tools, too heavy to be easily handled, may well hint at its ritual use. (Two of the largest BAC scrapers weigh more than five kilos each).

In the last expedition it became clear that some sort of "sanctuary" was in use on the plateau of Har Karkom already in the Upper Palaeolithic. An important group of standing stones, large flint boulders having natural anthropomorphic shapes are found in an area of about 300 sq.m in a small valley on the edge of the mountain, with a rich Aurignacian flint industry and several small flint figurines. Har Karkom is likely to have been a sacred mountain ever since the first visits there of Homo Sapiens Sapiens.

Har Karkom was intensely occupied during the Palaeolithic Age by hunting clans that collected and worked fine-quality flint. The area was virtually abandoned in the Neolithic period. Then, in the Chalcolithic, and in the Early Bronze Age, there was a period of intense occupation, reflected in the numerous religious and burial sites on the mountain and the dwelling encampments at its base. During this time, the mountain was a place of worship, and of funerary activities and numerous rock engravings were produced there. After the Middle Bronze I the site was again abandoned - for the entire second millennium. Out of 890 sites, over 250 belong to the BAC period, none to the Late Bronze Age and only five to the Iron Age. A new period of intense human presence starts in Hellenistic times with the Nabataeans, in the last three centuries B.C. and continues in Roman and Byzantine times, with over 160 sites for this range of periods. This mountain appears to have been a holy place for different populations at different ages.

The first four years of archaeological investigation in this area produced an immense documentation on the way of life, the

social structure, the economy, the habits and the beliefs of ancient desert people. It was clear from the beginning of our survey that Har Karkom was a very important cult center in the third millennium B.C., a kind of prehistoric Mecca where large groups of people came and built their camps at the foothills and then a few of them climbed to the plateau to perform worship activities. Pillars, stone circles, tumuli, altar-like structures, peculiar round platforms with "altars" on top of them, were all clear indications of religious activities. We may add to this the enormous amount of religious rock art, several alignments of pillars, the remains on the plateau of a small temple (a structure with a rectangular altar-like platform facing east) and at least five more at the foot of the mountain. There can be no doubt that Har Karkom presents a unique aggregation of evidence of religious activity during the "Bronze Age Complex". To the best of our knowledge, there is no other site like it in the entire Sinai peninsula.

The religious character and its implications

Although Har Karkom's religious character was quite evident, no connection was made at first between that mountain and Mt. Sinai. As an archaeologist, not a biblical scholar, I had never questioned that the Exodus had occurred in about the 13th century B.C. and had assumed this to be an established "fact". There is no evidence of any human occupation at Har Karkom in the 13th century B.C. or for centuries before or after. Indeed, the usual date for the Exodus occurred right in the middle of a long archaeological gap at Har Karkom, a gap that concerns most of the Sinai peninsula if we leave aside military and trading stations. In fact the description of daily life of Midianites, Amalekites and other tribes appearing in the Bible, if not pure mythology, must refer to either before or after the 2nd millennium B.C.

Another factor that at first excluded any consideration of a relationship between Har Karkom and the Exodus was the location of the site, on the edge of the "Promised Land", along the desert route from Egypt to Palestine, facing the Paran desert but far from any previously proposed itinerary of Exodus. Some scholars viewed the wanderings of the children of Israel in the desert as random movements from one well to another. Others saw it as consisting of a route from Egypt south to the Byzantine Mt. Sinai near St. Catherine which is located in the southern part of the peninsula, and from there to Ain Kudeirat which is believed to be Kadesh-Barnea in the north of the peninsula, not far from Har Karkom. Still others suggested the possibility that the Exodus itinerary described sites along the Mediterranean coast of northern Sinai. There were several other hypotheses, but none had considered the Har Karkom area. And, of course, there are a number of authors who claim that the account of Exodus is just a mythical story with no historical basis. The list of the site-names of Exodus is considered by them a meaningless liturgical litany. Whatever the case, the itinerary described must have been topographically convincing to people from the first millennium B.C. who were acquainted with the region. In 1989 and again this year (1992) I explored, in the field, various hypotheses

of the itinerary of Exodus and could verify that several names and descriptions of the Exodus stations can be identified, but this is perhaps the theme for another paper.

The idea that Har Karkom might be identified with the biblical Mount Sinai came after four years of surveying, and 30 years after our discovery of rock art there.

The numerous findings of ritual structures had shown the intense use of the mountain as a paramount cult-site in the Chalcolithic and the Early Bronze Age. On the basis of topographic and archaeological evidence, I then proposed that Har Karkom may be identified with the holy mountain referred to by biblical narrations as Mount Sinai and where Moses (whether he existed or not as an individual) is said to have received the Tables of the Law.

Several scholars had previously considered that, on the basis of biblical accounts, Mount Sinai should be located in the north rather than in the south of the Sinai Peninsula. But the identification of a specific site, relying on pertinent archaeological findings, was a new fact which scandalized some, was accepted by others, and stimulated wide debates.

The new proposal immediately found itself under fire from two directions. On one side were those who simply accepted a well established catechism on the location of Mt. Sinai. Comments were non factual, like: "Everybody knows that Jebel Musa is Mount Sinai, there is no reason for discussing the matter". Or "Since the site of the Burning Bush is at St. Catherine, the mountain cannot be far away". On the other side were those who could not agree with my chronology "Since the Exodus took place in the 13th century B.C., Mt. Sinai should have at its foot remains of 13th century camping sites". Should the date be as certain as some believe, this rule should apply to any site candidate for Mt. Sinai, not just to Har Karkom. In such a case, it is probable that not a single mountain in the Sinai Peninsula would fit because the 13th century B.C. is part of a hiatus in settlement (see chart). But I found other kinds of hostile reaction. An eminent biblist told me "I have been teaching for thirty years that Mt. Sinai is Jebel Musa, how do you expect me to change my position at my age". To the best of my knowledge, besides the Greek Orthodox Church, no other denomination so far has taken an official position about the location of Mt. Sinai: the debate with theologians remains open.

The main texts to identify the area where Mt. Sinai should have been located are the lists of the stations of Exodus, both in the book of Exodus and in the book of Numbers. Mount Sinai appears to be located between Kadesh-Barnea and Ezion-Geber. In the story of Moses in Midian, Mount Sinai is described as being on the edge of the land of Midian. So far Har Karkom is the only locality, among those proposed for Mt. Sinai, that fits such location.

We may consider as well other biblical descriptions and compare them to topographic realities to trace back ancient itineraries that led to Mt. Sinai (also named Horeb). To give an example, at the

beginning of Deuteronomy it is written that "It takes eleven days from Horeb, by the way of Mount Seir, to Kadesh-Barnea". For many scholars, even among those who do not agree with the identification of Har Karkom, Kadesh-Barnea is identified with Ain Kudeirat and Mount Seir with Jebel Arif el-Naqa. In fact there is a good trail between Har Karkom and Ain Kudeirat, by the way of Jebel Arif el-Naqa; and along it there are ten groups of wells at an average distance of 10 to 14 miles from each other.

The Bible describes deserts and tribal areas around Mt. Sinai. One of the main emerging points is that Mt. Sinai, according to the narration, must be located on or near the border between the land of Midian and the land of Amalek. The Bible indicates that the Amalekites occupied the highlands of the Central Negev and the Midianites were on both sides of the Araba Valley; Mt. Sinai, according to the biblical narration, should be located between these two regions, that means in the Har Karkom area. A thorough examination of the topographic details described in the Bible, could have led to the identification of the area where Mount Sinai was located in the Har Karkom region even without the findings at Har Karkom.

The first time that the idea emerged of a possible relation between Har Karkom and Mount Sinai, was, however, dictated by different considerations, that may now be considered as secondary, when compared to the evidence provided by topographic elements.

At the edge of a living site, at the foot of the mountain (Site HK/52) we found a group of 12 pillars or standing stones with a platform nearby. It reminded me of a passage in Exodus (24:4): "And Moses ... built an altar under the hill (or mountain) and 12 pillars, according to the 12 tribes of Israel". Obviously, we are not in the position to prove that this monument was built by Moses, but the monument is there and is likely to have been seen and interpreted by travellers.

The cleft on one of the two top hills at Har Karkom forms a small rock-shelter. It is not a common feature in the Sinai peninsula, such a shelter right on the summit of a mountain. In Exodus 33:21-22, Mt. Sinai is described as having such a characteristic: "And the Lord said, Behold, there is a place by me, and thou should stand upon a rock; and it shall come to pass, while my glory passeth by, that I will put thee in the cleft of the rock, and will cover thee with my hand while I pass by ...". Again this is a topographic feature which the Bible attributes to Mt. Sinai. The story behind it is beyond our concern.

At the center of the plateau, at Har Karkom, there are remains of a BAC temple, with an elevated platform oriented toward the east. Surrounding this shrine there are funerary tumuli and rock engravings, including depictions of footprints carved in the direction of the mountain top. In the book of Exodus there are several references to a temple that is said to have been seen by Moses and to have thereafter inspired the building of the temple in Jerusalem (Exodus 25:40; 26:7; 26:30; 27:8). Some biblical scholars

believe that Moses may have had a vision of a "celestial" temple while on the mountain, but the Bible says that there was a temple and this again is a topographic feature.

Other such parallels, between the biblical accounts and the archaeological findings were at first seen as intriguing coincidences but, as the survey went on, such coincidences became too many. No doubt they demand a re-thinking of the biblical accounts.

The archaeological discoveries at, and surrounding, Har Karkom provide a sound image of the way of life, the beliefs and practices, the social organization and the economic resources of desert tribes. They display many similarities to the biblical accounts and even should it not be Mount Sinai, its archaeological finds reflect a story very similar to that described in the Bible and reveal a site which mirrors the biblical narrations on Mount Sinai. The compilers of the book of Exodus, when describing Mount Sinai provided a wealth of topographic details which coincide with those of Har Karkom. Whatever the case, the worship of this mountain lasted for centuries and on more than one occasion large groups of people stopped at its foot.

When my book "The Mountain of God" came out in 1984, about 500 archaeological sites were on record. Since then, the expeditions conducted there every year have added new sites, bringing their number to over 890.

Several recent discoveries have contributed to the acquisition of new information on the area. The valleys to the west and to the north of the mountain appear to have been intensely frequented by human groups from the 4th millennium to the end of the 3rd millennium B.C. The mountain is likely to have remained a paramount site of worship and pilgrimage for well over one millennium.

Living sites and other structures

In past years we had recorded three different types of living sites in the valleys surrounding the mountain; they are likely to represent three different kinds of social structure and economic activity. A fourth type has emerged in the latest expeditions.

One of the three previous types appears to represent a more permanent kind of settlement than the others. It has small clustered villages with threshing courtyards and other elements of agricultural character. A second type displays large enclosures for livestock. The presence of one or two such pens in connection with villages of several living structures, seems to indicate a system of communal ownership of the livestock. The living quarters of this type are small oval huts with stone built basements that could hardly shelter more than one nuclear family each.

The third type is what we have called "courtyard structures"; a large courtyard with rooms built around it and may have several

smaller structures of the same kind surrounding it. This sort of construction is likely to represent seasonal or semi-permanent habitation sites of tribal populations with strong patriarchal patterns, where several families cluster around the main house, which may have belonged to the "father" or to a leading figure (the Bible refers to such a figure as Ab-ram, Great father, or Abraham). The economy appears to be based on animal rearing but some sort of garden agriculture may have existed as well. Remains of primitive agricultural terracing near at least two of these sites are likely to belong to the same age and to indicate the presence of agricultural plotting.

The material culture of the different groups does not vary much. The three types appear to be roughly contemporary to each other and all of them seem to span a rather long period of time, which extends practically from the Chalcolithic to the beginning of the Middle Bronze Age. They all appear to be settlements used repeatedly during the BAC period. Secondary variation in structural characters may reflect different phases within the BAC.

One of the recent discoveries concerns a new type of BAC site where stone built structures are organized in large circles round a vast central plaza. This fourth type of site had already been seen in previous years, but we have now surveyed over 25 of them and an attempt to obtain an overall view has been ventured in a monographic study: I Siti a Plaza di Har Karkom (Capo di Ponte, Edizioni del Centro, 1987).

These "Plaza Sites" may consist of up to 26 structures and reach a diameter of over 80 meters. There are different types of stone built structures. Some of them are round or oval in shape and measure up to 7-8 m in diameter; they seem to be living quarters. Occasionally they have a sort of courtyard on one side. Others are platforms near which are dug silos surrounded by circles of stones, and small stone-built storing structures. Others again simply appear today as heaps of stones.

These "Plaza sites" which date back to an early phase of BAC (ca. 3.400-2.900 B.C.), are usually located at 2-3 km from the foot of Har Karkom. They are found all the way round, along the main trails leading to the mountain, and they maintain a rather constant distance (averaging 2-3 km) from each other, forming a sort of ring around Har Karkom. In four out of twenty-five cases, there are double plazas, that is two circles of structures close to each other. All Plaza sites are situated in locations of easy access, on slopes where they can be seen from far away and from where one can see the next "Plaza site" in both directions.

Several hypotheses have emerged concerning their function. After making soundings in ten sites it became clear that none of them is connected with burials. The idea that Plaza sites may constitute guard points around the mountain had to be dismissed because they are not fortified like other sites of the same period in the same area. Usually the fortified sites have a defence wall and are found in an easily defendable location, on the top of hills

(one such place has been found near Beer Karkom, site BK/407). None of the Plaza sites has a defence wall nor is anyone of them located on the top of a hill.

Another thesis suggests that the Plaza sites may have been the "... bounds round the mountain ..." (Exod. XIX, 12) which were not to be tranversed. Their early date would simply indicate that such a custom is old. But a doubt is legitimate: these sites, seen in later times, may have been interpreted as "bounds round the mountain" though originally they may have had other functions. Nevertheless, the suggestion seems to face a contradiction since several living sites of the same period were found at the very foot of the mountain, beyond the line of the Plaza sites.

These Plaza sites, however, seem to have fulfilled special functions. Although they include living quarters, most of their structures had different purposes. Their topographical location is different from that of all other BAC living sites. In the Plaza sites HK/241, some 35 beautiful fan-scrapers, were found concentrated in an area of less than 2 square meters. These flint tools were of excellent quality and none of them seems to have ever been used. That place may have been either a workshop or a shop, or both. One of the silos, excavated in another Plaza site (HK/152) was bell-shaped, descending some 80 cm below the surface. At the bottom an ash-grey level indicated that it must have contained organic materials which became carbonized. We recognized a rectangular relic: it is likely to have been a wooden box; it probably contained a small quantity of organic material, apparently of high value.

One gathers the impression that the Plaza sites may have been some sort of commercial places but difficulties arise again. It is not easy to figure out the use of such "markets" surrounding a mountain in the middle of the desert. The riddle remains open to further consideration. The idea of a "Prehistoric Lourdes" with merchants offering ritual tools, incense, holy water, dopes, or some other worship facilities, is still to be explored.

The various types of stone-built clusters of structures found in the valleys surrounding the mountain indicate that several different human groups had the habit of coming to the mountain foot during the BAC period while selected people only had the right of access to the mountain plateau where only worship places are present.

The mountain of fire

Another recent problematic discovery concerns a group of four platforms located on the top of a peak some 3 km south of Har Karkom (HK. 301). They are built with great skill, out of unworked large size stones. One of these monumental structures has a diameter of ca. 10 m, another is slightly smaller while the other two measure about 8 m in diameter. They are well preserved and still stand about 1 m above the ground; each of them is surrounded by a shallow circle of smaller stones. All the material culture found in this

site belongs to the BAC period.

The platforms are flat on top and the stones appear to have been "melted" by the heat of fires. In some places they have formed a concrete-like layer. Dr. Lahat of the Weizman Institute and some other specialists feel that such an intense heat as that needed here cannot have been caused by open fire of wood or animal excrements. It is not unlikely that some other kind of fuel may have been used by the Bronze Age people to make these pyres.

The function of these burning platforms has stimulated speculations. The possibility that they may have been funerary pyres is unlikely. They are located on the top of a peak which requires a hard and long climb. A detailed examination of the cracks and holes has not brought forth a single piece of bone. The only bone fragment found in the site comes from a small heap of stones, probably a fireplace, some 15 m away from the nearest platform, and belongs to a large ruminant, probably an ox. It is in an advanced stage of fossilization.

Some colleagues suggest a referral to the Biblical description "... And Mount Sinai was altogether on a smoke because the Lord descended upon it in fire. And the smoke thereof descended as the smoke of a furnace, and the whole mount quaked greatly .." (Exod. XIX, 18). But this site is not on Har Karkom and I trust that Har Karkom and not this mountain is Mount Sinai. As mentioned already, this peak is about 3 km away. Several large areas with traces of the same intense burning were found on Har Karkom, but without such platforms. Traces of huge fires have been noticed on the mountain. Especially near the concentrations of rock art, fire appears to have played a very important role in the performances there.

The peak where the platforms were found is the top of a prominent mountain overlooking the entire Paran Desert, from the Central Arava Valley to Kuntilla. If the present Paran Desert is the same as the one so called in biblical times, this would be, in fact, the only mountain that could be called Mount Paran, because it is the only truly dominating mountain in that Desert. Apparently the Bible indicates the presence of three holy mountains in the same area, where it says: "The Lord came from Sinai, and rose up from Seir unto them; he shined forth from Mount Paran" (Deut. XXXIII,2).

Whatever the use of the pyres may have been, their smoke and fire light were visible all over the Paran Desert up to a considerable distance, probably, over a radius of 50-60 km around. Only on the side of Har Karkom, towards the north, may they have been hidden by the mountain.

Iron Age and later evidence

Another recent noteworthy discovery is the first and only true Iron Age settlement found so far. In fact, in the 890 sites known, the BAC period is copiously represented, there have not been any findings from the Middle Bronze II as yet, nor from the Late Bronze

Age and the Early Iron Age. After this long gap (starting ca. 1950 B.C.), the mentioned site, dating back to the 9th century B.C., is the first record of a renewed human presence in the area (HK.173).

Sporadic pottery sherds of the same type have been found in a few places near Beer Karkom, but this is the first true settlement: a small village with 8 structures built with stone basements, an area with a few heaps of stones which may be a burial ground, and a small temple. Inside this shrine, a standing stone pillar is found in front of a large stone having the shape of a bowl, likely to have served for offerings or sacrifices. The pottery found there is similar to that found in the Negev plateau of the same period, and may be attributed to Elijah's times (cf. 1 Kings, XIX, 8). This hamlet had a short life. The structures appear to have been built all at the same time; showing no traces of repair, they are unlikely to have been in use for more than a few months. Two of the same stone built huts have been repaired later, but much later: according to the findings, they were reused by Nabataeans in Roman times.

Recent surveys have also included the largest settlement found so far in the area (BK/480). This site, which had been seen already from the air a few years ago, consists of 108 habitation structures, with a wealth of Hellenistic pottery dating back to the 4th century B.C., about the age of Alexander the Great: a period of explorations, conquests and military expeditions. The settlement, which is likely to have sheltered several hundred people, was well planned and was built all at the same time. The houses are in rows. On the surrounding hills there are remains of watching posts. It may well have been a military installation and it probably had a rather short duration.

Site BK/480 is by far the largest but five other sites from the Hellenistic period are known in this area; in Roman times there is a true explosion of new settlements, nearly seventy of them in 200 sq.km, and further more in Byzantine times, reflect a new human adventure that lasted almost one millennium, from the 1st Century B.C. to the 8th Century A.D. The area was abandoned at the beginning of the Islamic era and has remained a desert ever since.

Among the latest discoveries is a unique late Neolithic village with ten round living-structures with stone basements, one of which is larger than the others. Two pillars are at the sides of the entrance. Against the wall, opposite to the entrance, there is a rectangular black monolith. It is likely to have been used as some kind of altar, with fire-cracks on the flat top. A group of pillars is clustered in a corner and surrounded by a line of stones: a similar shrine is known in the Uvda Valley, ca. 100 km south, which some consider to be part of the biblical land of Midian.

Another discovery of major interest concerns a Late Hellenistic sanctuary on the top of a peak looking at Har Karkom from less than 1 mile away. A rectangular building has in its vicinity a group of pillars and a stone altar. It is the first time that evidence of cult activities either as early as the Neolithic or as late as

Hellenistic times have been discovered in the area. It seems that the chronological range of cult activities is longer than ever suspected before. Also the area of sacrality appears to be much wider spread than supposed. The recent discoveries include several groups of standing pillars at ca. 6 miles from Har Karkom.

Rock art sites and worshipped stones

Several rock art sites on the mountain appear to have been used for performances including the lighting of large fires. Some areas had been cleared of stones which were then scattered around; burning material must have been piled there, for producing fires that left conspicuous traces, changing the color of rocks and causing fire-cracks on hundreds of flint flakes found in the same area. The size of the burned area is sometimes over 20 m in diameter.

Rock art sites include circles made of stones many of which have been engraved. Standing stone pillars, also appearing to be frequently connected with rock art, are found in the same sites. It is surprising to find so much evidence of BAC human activity on the plateau of Har Karkom where no traces of BAC habitation sites have been found. The systematic inventory of rock art, will attempt to verify recurrent patterns of association between these various structures and the different styles and subjects of rock art.

The rock art has a variety of styles from Neolithic to Islamic times, covering over 7000 years. While some of the styles and groups of rock engravings were similar to those found in the central Negev and in various areas of Sinai, others were quite different. Some assemblages belong to what is known today as Period III of rock art, in the Chalcolithic period (fourth millennium B.C.). These engravings include beautiful hunting scenes in which the hunters wore skin garments, used the bow and arrow, and were assisted by dogs. Other assemblages were also of a familiar character, showing a style known as Period IV-C, usually connected with the Nabataeans around the beginning of our Era, and still others included inscriptions from Hellenistic, Roman and Byzantine times.

Between these assemblages was another category of rock engravings. It turned out to be a local version of the Period IV/A, likely to belong to the Early Bronze Age. These assemblages depict figures of worshippers standing before strange abstract symbols - for example, a figure of a praying man with upraised hands standing before a simple line. This theme is repeated several times. Other rock engravings have scenes referring to mythological epics, some of which show similarities to biblical narrations. Just to give some examples, one of these depicts a snake and a staff, close together, accompanied by undeciphered ideograms; a staff which became a snake, like in the story related to Moses. Another depicts a twin-table with ten partitions; it is surprisingly similar to later depictions of the Tables of the Law.

From this same period, we also found several menhirs, (standing stone). In the Bible such menhirs, or standing stones, are known as

masseboth (singular, massebah), usually translated as pillars. Other discoveries included a peculiar stone structure with a courtyard and a rectangular platform facing east, a shrine with a stone built altar. Several tumuli (piles of stones that usually cover tombs) were also located on the mountain. One of these tumuli had a flat stone on top; below this stone were the pieces of a so-called "metallic-ware" jar that enabled us to date the tumulus to about 2200-2000 B.C. Often, groups of engraved boulders were connected to these monuments.

Another interesting aspect, which has become clearer in the course of the last research campaigns, concerns what we may call the "collection of peculiar stones". In 16 sites, groupings of particular stones have been noticed. They usually have a natural shape which reminds one of anthropomorphic or zoomorphic heads. The way they are arranged leaves little doubt that these stones were collected and grouped by man. In 14 cases they are located near structures of the BAC period. In one case, one such stone with anthropomorphic features was found standing on top of an altar-like man-made structure.

The plateau appears to be literally covered by traces of human performances, the meaning and function of which still require further analysis. However, the area appears to have been used for a remarkable range of non economic or non-functional activities over a rather long period of time, covering most or all of the BAC period, probably from about 3.600 to 1.950 B.C.

The chronological sequence ranges from Palaeolithic to Islamic times. By far the most intensely represented period is the BAC. Then for 1.500 years the mountain had been a paramount high place of worship and large human groups camped around it.

The proportions of the discoveries are growing but the general view seems to be confirmed. Har Karkom was a holy mountain in the BAC period; nowhere else in the Sinai peninsula do we know of such exuberance of worship evidence. The living sites are located at the foot of the mountain: remains of hundreds of stone-built habitation hamlets.

The presently named "Jebel Musa" at the foot of which the monastery of St. Catherine was built, has not provided any evidence of cult sites previous to Byzantine times. The same, as already said, applies to the second main candidate for Mt. Sinai, that is Jebel Halal. Other mountains which have been proposed by various authors as possible "Mount Sinai" also lack the same sort of archaeological evidence. Some scholars have advocated the possible existence of several mounts Sinai. But, if that is the case, where are they? So far no other mountain in the Sinai peninsula has provided archaeological evidence of being a paramount cult high-place in early times.

After the first shocked refusal in 1984, several scholars now tend to agree that Har Karkom may well be identified with Mount Sinai, however several questions remain open. The most puzzling one

is that of chronology. Our discoveries indicate that Har Karkom was a paramount holy mountain in the third millennium and the beginning of the second millennium B.C.

Recent archaeological investigation established the same dates for Kadesh Barnea, Arad, Jericho, Ai, and other sites mentioned by the biblical accounts of Exodus and of the book of Joshua. According to the archaeological findings all those localities flourished in the third millennium B.C. and suffered devastations and destruction towards the end of that millennium or at the beginning of the second millennium B.C. Despite the numerous efforts made by scholars to make their findings fit the currently held dates for Exodus, if the identification of the excavated archaeological sites is correct, none of those sites existed in the 13th century B.C.

In the last 100 years many efforts have been invested in finding some hints of Exodus in the Egyptian ancient literature. What emerges from the Egyptian texts that date to the New Kingdom - and there are plenty - is that there is no mention whatsoever of the flight from Egypt or the episode of the Red Sea. The biblical episodes in Egypt refer to - the presence of significant groups of Asians in the area of the Delta, and political changes that upset their social standing. If all of this has a minimal basis in historical fact, then it cannot have been totally ignored by the Egyptians. And the fact is that it was not ignored. The relevant texts do not date to the New Kingdom at all, however, but to the Old Kingdom. In other words, it is our opinion that events and situations which may have inspired the biblical narrations do not date to the thirteenth century B.C. but rather to the third millennium B.C.

As already stressed by several authors, the Egyptian literature of the late Old Kingdom (from the 6th dynasty on) and the first Intermediate, shows many points of contact with the biblical narrations. The world that emerges is both conceptually and contextually very close to the one described in the biblical texts. Several parallels have been made with the "Instructions of Meri-ka-Re", the "Admonitions of Ipu-wer", and other texts.

The Sinuhe narrative clearly has much in common with the biblical story of Moses, who escaped to Midian to his father-in-law Jethro. It is difficult to believe that these parallels can be a series of coincidences. It seems, in fact, that there was a common matrix to these two accounts, which cannot be later than the twentieth century B.C.

Several other factors have encouraged us to consider the world described in the Book of Exodus as belonging to the third millennium B.C. This obviously implies the need to review other moments in the sequence of the biblical narratives as well, from the period of the Patriarchs to the epoch of the Judges.

Above all, the archaeological evidence at Har Karkom, Beer Karkom, Ein-Kuderat, and in all of the Sinai peninsula specifically excludes the possibility of the presence in the area from the

twentieth century to the 12th century B.C., of ethnic groups such as the Midianites, Amalekites, Amorites, Horites and of Israel.

This evidence is further supported by finds in Jordan, where the presence of large human communities and vast activity toward the end of the Early Bronze Age and the beginning of the Middle Bronze Age, during the BAC period, bear patterns similar to those recorded at Har Karkom. This archaeological episode, like in the Negev and Sinai, is followed by a hiatus until the Iron Age. If there is any historical ground at all, according to the archaeological finds at Moab and Edom as well, it is unlikely that the people to whom the Bible refers could have lived in the area any later than the twentieth century B.C.

Considering these various factors all together, it seems that the biblical narratives reflect what archaeological research has discovered, both in Jordan and at Kadesh-Barnea, as well as at Jericho, Ai, Arad and elsewhere.

If the epic described in the books of Exodus and Numbers relies on even a minimal historical matrix, and if indeed there was an Exodus with stops at the foot of Mount Sinai and at Kadesh-Barnea, then its chronological context can only refer to the BAC period, during which Har Karkom was a mountain of exceptional importance. The documentation gathered through archaeological research at Jericho and Ai, the comparisons with Egyptian literature, and the actual finds at Har Karkom, all seem to imply that the biblical narratives referring to the era of Joshua beginning at Gilgal, marked the twilight of the Early Bronze Age. This is when the epoch of Moses ends, an epoch which both culturally and historically belongs to the Early Bronze Age. About one millennium before the dates given to such episodes by what had been so far the conventional chronology.

The location of Har Karkom is in the desert and many sites have been preserved almost intact for millennia. Had it been located in a more populated area much of its structures might have been upset by man. Here we find a rather unique example of a major rock art concentration related to structures and being enriched in the content by ancient oral traditions which made the core of the biblical written accounts of Exodus.