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Khirbet Beit Ta'mar: An Archaeological, Historical and Architectural Study

خربة بيت تعمر: دراسة أثرية وتاريخية ومعمارية

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الملخص: يتناول هذا البحث خربة بيت تعمر الأثرية التي تقع إلى الشرق من مدينة بيت لحم (فلسطين)، والتي تعرف بهذا الاسم تيمنا بالخليفة عمر بن الخطاب (رض). استنادا إلى المسوحات الأثرية التي أجريت في الموقع، وكتب الرحالة والمؤرخين، إن تاريخ الموقع يعود إلى الفترة الرومانية والبيزنطية والإسلامية. ويشمل الموقع العديد من المعالم الأثرية التي تم التعرف عليها من خلال المسح الأثري الذي أجراه الباحث، فقد تمّ العثور على العديد من القبور البيزنطية، ومعاصر للعنب بعدة نماذج، ومعصرة للزيتون، وصهاريج لتخزين المياه، وكهوف طبيعية، إضافة إلى مسجد عمر بن الخطاب (رض)، والذي يعود بناؤه لعام 636م. وقد تعرّض الموقع الأثري في إجزاء منه إلى التخريب، إما عن طريق فتح شوارع حديثة، أو بحجة التطوير، وجزء كبير من الخربة الأثرية اليوم يستخدم كمقبرة إسلامية، يعود أقدم القبور فيها إلى أواخر الفترة العثمانية.

الكلمات المفتاحية: بيت تعمر؛ المقابر؛ تدمير التراث الثقافي؛ المباني التقليدية؛ الآثار في العصور الوسطى؛ جامع عمر.

Abstract: Khirbet Beit Ta'mar is located approximately 4 km southeast of Bethlehem, and about 1.5 km to the north of the Herodion archaeological site. Based on the literature written by travelers and historians, as well as on the archaeological survey carried out by the author in 2014, the settlement history of the site dates back to the Roman period and continued without interruption until recent times. The surveyed archaeological features include ground graves, several olive- and wine-presses, cisterns, and subterranean tombs, all cut into the natural limestone bedrock. Also, the site includes a mosque which is still in use; this mosque was built in the year 636 AD and is known as the Omari Mosque after the Caliph Omar Ibn al-Khattab. Furthermore, several traditional buildings from the Mamluk and Ottoman periods, in use until the middle of the last century, were documented. In addition, the khirbet includes some natural caves that were used by people who lived on the site until the late 20th century

for sheltering their animals and the storage of agricultural products. Over the past few decades, a large part of the khirbet, in several different areas, has been subjected to serious damage and destruction by various means: antiquities looting; urban development construction, including residential structures and roads; and by the burying of the recently deceased of the village in the cemetery located within this archaeological site.

Keywords: Beit Ta'mar; cemeteries; cultural heritage destruction; traditional buildings; medieval archeology; The Omari Mosque.

Introduction: Khirbet Beit Ta'mar is one of many ruins surrounding the city of Bethlehem. Located about four kilometers southeast of the city center, and one and a half kilometers north of Herodian (Fig. 1), the Khirbet stands in a fertile area that is abundant with olive trees. According to the village Local Municipal Council, the area of the Khirbet is approximately three acres, and the total population is 1,229[1].

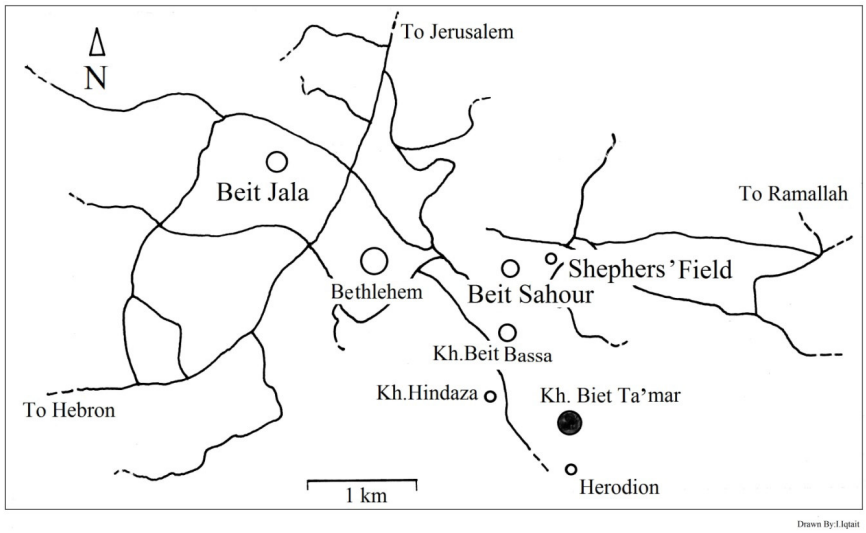

Fig. 1: Map showing Khirbet Beit Ta'mar and other villages and cities.

Unfortunately, the Khirbet is a victim of destruction by its own inhabitants who are constantly expanding the perimeters of the cemetery and erecting new buildings, according to archaeological and architectural evidence, the history of the Khirbet dates back to the Roman, Byzantine and Islamic periods, but only little historical information has been recorded about the site and its mosque through surveys conducted during the 19th century. The first mention of Beit Ta'mar was recorded by

1- Applied Research Institute (2010): Jerusalem, p. 6.

theologians and missionaries Edward Robinson and Eli Smith during their journey to the Holy Land in 1838 A.D., after locating the village south of Jerusalem in an area known as Wadi Al Rahib[1]. In 1863, the French intellectual and explorer, Victor Guérin, wrote about the old village and mosque of Beit Ta'mar and described the ancient site as one inhabited by the Ta'amra tribe[2]. In 1870, the village was a small area with a few residential buildings and a mosque with a minaret[3]. Charles Wilson surveyed the site in the late 19th century and mentioned the Khirbet and the mosques[4]. The Khirbet was also surveyed by Conder and Kitchener and described as "a small village on a hill with wells and a few olives," and its name is "derived from an Arab tribe that originally settled in the area," and that "it contains a small mosque named after the Khalif Omar"[5]. In 1896, a population list noted that Beit Ta'mir was "half Bedouin"[6]. Palestinian historian, Al Dabbagh mentions that Khirbet Beit Ta'mar "is located adjacent to Khirbet Badd Fallouh, and includes a squared depression and subterranean rock-cut tombs." Al Dabbagh also states that "the Khirbet was well known during the Crusader era as Bethamar"[7].

Khirbet Beit Ta'mar was inhabited until the 1950s, when its people gradually abandoned it to either construct new buildings on its eastern and western boundaries, seek new homes in the Bethlehem governorate, or migrate abroad. Some locations in the area are still used as storage spaces for agricultural tools and produce, and people still head to the mosque on a daily basis and continue to use the cemetery to bury their dead.

Research methodology: The survey was conducted in the summer of 2014 by the author, three of his students and a draftsman, and extended

1- Edward Robinson and Eli Smith(1841): 'Biblical Researches in Palestine, Mount Sinai and Arabia Petraea', A Journal of Travels in the year 1838, vol. 2, p. 159.
2- Victor Guérin (1869): 'Description Géographique Historique et Archéologique de la Palestine', (in French). 1: Judee, pt. 3. Paris: L'Imprimerie Nationalep. p. 121.
3- A Socin (1879): ,'Alphabetisches Verzeichniss von Ortschaften des Paschalik Jerusalem', *Zeitschrift des Deutschen Palästina-Vereins*. 2, p. 147.
4- Charles Wilson et al (1881) ,'The Survey of Western Palestine. Special papers on Topography, Archaeology, Manners and Customs, etc(1883): The Committee of the Palestine Exploration Fund, London.
5- Conder and Kitchener, 'the Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology: Committee of the Palestine Exploration Fund., vol. III, London, pp. 29-30.
6- Conrad Schick (1896):Zur Einwohnerzahl des Bezirks Jerusalem, *Zeitschrift des Deutschen Palästina-Vereins*. 19, p.125.
7- Morad AL-DABAGH (2002-2003): Belladona filisteen, Vol. 8. Part 2, Dar el-Tali'a Beirut, p. 516.

over a period of five days. At the beginning of the survey, the work team divided the top surface of the Khirbet into ten-meter wide zones and collected 10% of material culture visible on the surface. The second phase of the survey involved photographing and drawing all visible architectural remains, while the third and final phase involved selecting and drawing some of the collected artifacts.

The archaeological survey revealed several corroded coins, some of which carried the letter "K"; an indication of the Byzantine fils (Fig.2: a). Some Islamic coins were also found with barely visible Arabic words such as "Muhammed", "Rasul", and "Allah", and their exact date could not be determined. An Umayyad fils was found, dating back to the 8th century A.D., engraved with the phrase "not God, but Allah alone" on one side, and "Mohammed, Messenger of God" on the other (Fig. 2: b). This type of coins appeared during the Umayyad period, and was used in Palestine[1].

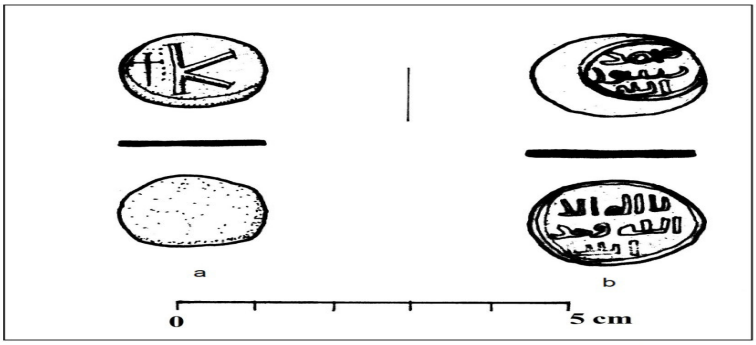

Fig. 2: a. Example of Byzantium *fils*, b. Example of Umayyad *fils*.

Some of the pottery discovered assisted the work team in determining the occupational history of the Khirbet from the Roman, Byzantine and Islamic eras, including the essential periods of the Umayyad, the Abbasid, the Ayyubid, the Mamluks, and the Ottomans. During the excavation of modern graves, Islamic era relics of everyday objects were found, including a hand mill, an eyeliner pestle (with traces of kohol), a ring, and remains of bracelets.

The importance of this study lies in the following points:

1- Lack of sufficient scientific study on this Khirbet.

2- The study reveals the sequential development of the archaeological site, which flourished in the Roman and Byzantine eras and continued

1- Sa'ed AL-MUBAIED (1994): The Palestinian Arabic coins. Al-haia Al-msria, Gaza, p. 153.

during the Islamic era until the end of the Ottoman period, and was finally abandoned after the Israeli-Arab War of 1967.

3- The study reveals the importance of personal interviews in obtaining detailed information about the archaeological site, for example.

4- The efforts conducted fully document, for the first time, the remains of the architectural features of the Khirbet.

2. The archaeological features discovered among the ruins: Several archaeological features spread throughout the area of the ruins were discovered, including three wine presses, an olive-press, five graves from the Roman and Byzantine periods, 30 cisterns for collecting rainwater, two caves, and more than 10 traditional buildings, of which some have been completely destroyed and some partially destroyed, while the rest remain in good condition, such as the Mosque of Omar. Various features are described in detail in (Fig. 3).

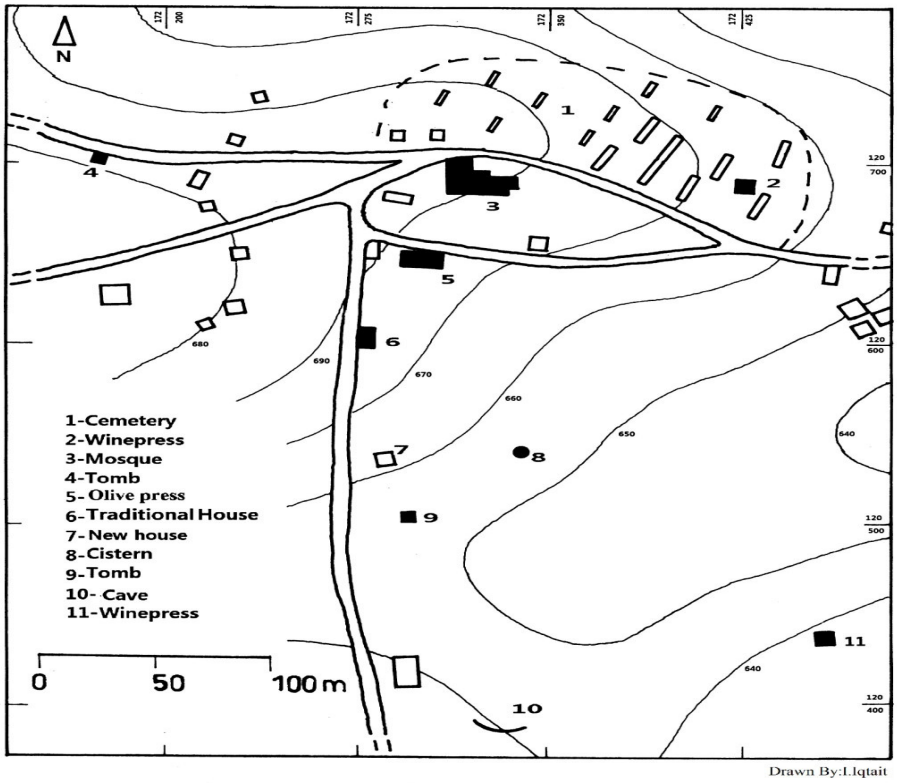

Fig. 3: Site plan of Khirbet Beit Ta'mar.

2.1. Presses: The construction and layout of unearthed installations for

wine and oil production in the Mediterranean region can be very similar, and therefore, it is often difficult to distinguish between them. Four different sources yield an illustration of these types of installations: archaeological fieldwork (excavations and surveys); various artistic depictions (wall paintings, ceramics, and mosaics); written sources from the various periods; and installations that are still in use today or in recent times[1].

The earliest industrial installation for wine or oil production was documented in Megiddo, dating back to the Chalcolithic period or even earlier[2]. Evidence of grape pips have been discovered within EB1 strata at several archaeological sites[3]. In Egypt, written documents were also discovered indicating vine growing and wine production[4]. Thus, it appears that the production of wine in the Levant continued without interruption from at least the late Chalcolithic-Early Bronze Age until the Early Islamic period[5].

During the preparation of the archaeological survey for Khirbet Beit Ta'mar, two types of presses have been found; wine presses and olive presses, reflecting the past and present fertile nature of the Khirbet. Among the olive trees and widespread vineyards that still stand until today, one ancient oil press and three grape presses were discovered; a reflection of the traditional and age-ancient practice of extracting juice by either foot treading or by pressing the grapes using a heavy wooden beam.

During ancient times, the following four methods for pressing grapes were practiced:

1- The linen sling: grapes are placed in a linen bag and each end of the bag is fastened to a wooden pole. The two poles are then placed in opposite directions, where the bags are squeezed and the grape juice is

1- Rafael Frankel (1994): Shmuael Avitsur and Etan Ayalon (eds.), 'History and Technology of Olive Oil in the Holy Land', (Oléarius Editions and Eretz Israel Museum, Arlington, Va., and Tek Aviv, p. 26.

2- Ehud Galili; Daniel Jean Stanley; Jacob Sharvit; Mina Weinstein-Evron (1997): "Evidence for Earliest Olive-Oil Production in Submerged Settlements off the Carmel Coast, Israel". *Journal of Archaeological Science* , 24, p. 1141–1150.

3- Zohary, Daniel. and Pinhas Spiegel-Roy(1975): Beginning of fruit growing in the old world. Science. 31, p. 319-327.

4- STAGER, L. E. (1985): The First Fruits of Civilization. Palestine in the Bronze and Iron Ages. Ed. TUBB, J.N. London, p. 174.

5- Nizar Turshan and Matthew Cox (2015): "Ya'amun main wine press from Roman to the end of Umayyad and early Abbasid periods in northern Jordan", *Mediterranean Archaeology and Archaeometry*, vol, 15, n 3, Greece, pp. 131-139.

extracted through the mesh of the fabric[1].

2- The spiral carved wooden column (screw): installed in a wooden cross-beam in the center of a crushing basic or vat[2].

3- Foot treading: the most common method of extraction of all times, including the Roman and Byzantine periods[3].

4- The wooden press beam: creating a hole or niche in one of the walls of the wine press space, where one end of a long and heavy wooden beam was inserted, creating a continuous downward force (which can be augmented using weights or other mechanical method) to press the grapes into a container[4].

2.1.1. Winepresses of Khirbet Beit Ta'mar: The third and fourth aforementioned methods, foot treading and the use of wooden press beams, were practiced at B`eit Ta'mar.

Two presses that adopted the foot treading method in pressing grapes were discovered in the Islamic cemetery, dating back to the Byzantine period. One of the presses, located near the tombs of Al Masa'ada clan in the northeastern part of the Khirbet, remained intact. This press is rectangular in shape, and consists of two parts: a flat treading floor measuring 2.9m x 2.7m, which was dug into the bedrock surface, containing low mashing vat walls that rise between 0.4m and 0.6m above ground level; and a 0.6m x 1.4m rectangular collection vat for containing the extracted grape juice, cut deeper into the bedrock to a depth of 1.20m, and connected to the treading floor by a channel that is also dug in the natural rock. A shallow circular "cup-hole" (0.3m in diameter) was discovered outside the treading floor in the northern perimeter of the wine press. This "cup-hole" was probably used to stabilize pottery jars that were filled with grape juice after the completion of the pressing process (Fig. 4).

1- FORBES Robert James (1965): Studies in Ancient Technology, Vol. 3. 2nd ed. Leiden, p. 75-76.

2- Salah Al-Houdalieh (2004): "Roman and Byzantine winepresses in Saffa village" in Archaeological articles on the 10th Anniversary of the Institute of Islamic Archaeology (eds.) Marwan Abu Khalaf and Salah Al-Houdalieh, Jerusalem, p. 6-30; Salah Al-Houdalieh (2005), The discovered winepress at Khirbet Shuwayka. An-najah University Journal for Research 19 (4), pp. 1253-1276; Ismael MELHEM (1991-1992): The wine press at Al-Yasela. Comparative study. Unpublished MA. Thesis, Al-Yarmouk University. Jordan, p. 184. (in Arabic).

3- Ismael MELHEM (1995): "Techniques of wine presses in Jordan and Palestine in the Roman and Byzantine period". *Dirasat fi attar Alurdun* , Vol. 5, pp. 30-45.

4- Ismael Melhem(1991-1992): "The wine press at Al-Yasela. Comparative study". Unpublished MA. Thesis, Al-Yarmouk University. Jordan, p. 154. (in Arabic); Rafael Frankle (1997: "Presses for Oil and Wine in the Southern Levant in the Byzantine Period', Dumbarton Oaks Papers, Vol. 51, pp. 73-84; Rafael Frankel, Shmuael Avitsur and Etan Ayalon (eds.) (1994): *History and Technology of Olive Oil in the Holy Land,* (Oléarius Editions and Eretz Israel Museum, Arlington, Va., and Tek Aviv.

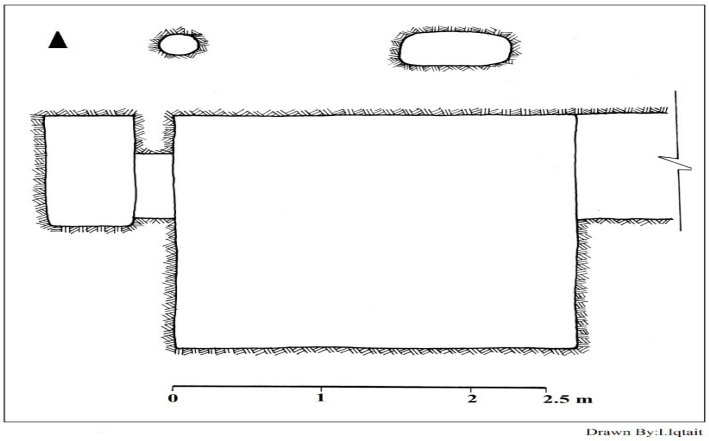

Fig. 4: Top-plan of the wine-press used for treading grapes by foot.

The second wine press was partially destroyed following the construction of new ground graves, and the surviving portion of its treading floor measures 2.6m x 1.5m. During our last visit to the site in March 2019, we noticed that this press was completely demolished by heavy machinery to make space for new graves.

Another press employed the wooden press beam and dates back to the Hellenic and Roman periods and continue to be used throughout the Byzantine period[1]. This second method was practiced in the southern part of the Khirbet. It was cut into the natural bedrock, and consists of two parts: (a) the pressing floor, measuring 2.6m × 2.8m x 0.45m deep; and (b) the collection vat, measuring 1.1m x 1.15m x 1m deep. The two vats are connected via a narrow channel that is 0.10m wide. An elongated niche (0.2m x 0.3m x 0.3m deep) is located in the middle of the southern wall of the pressing vat, usually used to fix a wooden beam that served, together with a weight, to press the baskets full of grapes. Along the eastern edge of the collecting vat, three round depressions (0.25m to 0.35m in diameter and 0.15m deep) were found, and might have been used to stabilizing jars during the filling process (Fig. 5: a, b).

1- Lutfi Khalil L and Fatimi al-Nammari (2000): "Two Large Wine Presses at Khirbet Yajuz, Jordan". Bulletin of the American Schools of Oriental Research, No. 318, pp. 41-57; Ismael Melhem(1995): "Techniques of wine presses in Jordan and Palestine in the Roman and Byzantine period Dirasat fi attar Alurdun, Vol. 5, pp. 30-45.

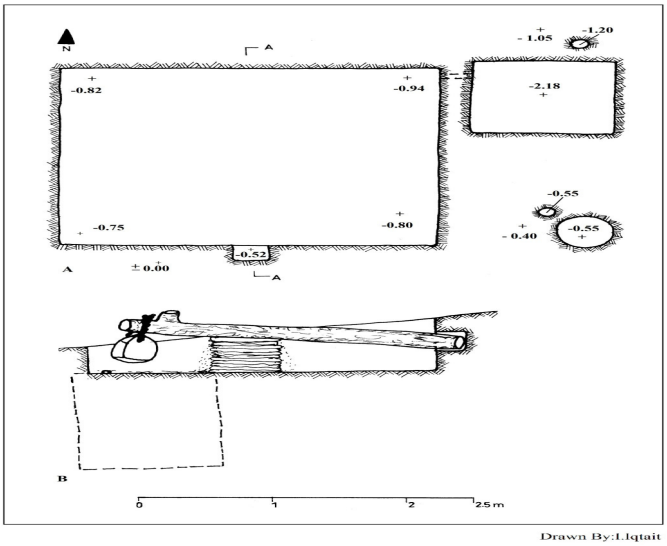

Fig. 5: a. Top-plan of a wine-press for use with a wooden beam, b. The pressing technique with a wooden beam.

2.1.2. The olive press: One part of an olive press installation, or the crushing room, was discovered about 40m south of the Mosque. The crushing mill apparatus was situated inside an irregularly shaped cave measuring 5.6m (east-west) by 5m (north-south), with a height of 3m. This cave was most probably a Roman tomb, as some niches in the walls resemble burial spaces (Fig. 6: a).

The crushing room was a victim of destruction and robbery, and the only part remaining is a round, concave crushing basin (1.7m diameter and 0.6m high), which is shallow, and fashioned from a single piece of local limestone. One of the missing elements beside the basin is the olive crushing mill, whose task was to roll within the confines of the basin and crush the olives placed on the bed in order to reduce the olives to a dark pulp or mash and prepare them for the next stage of oil extraction. It is important to note that the crushing stone depended on a horizontal beam, which served as the axle, with one end rotating around (or fixed to) a central pivot and the other usually tethered to a draft animal - a mule, ox or donkey, which powered the rolling of the stone by walking in a circular motion around the basin. The crushing stone's central pivot would have consisted of a vertical wooden post; the bottom end fitted into a hole in the center of the basin and the top end fixed into the ceiling overhead. Both stones would have had their contact surfaces working smoothly, to maximize the crushing process (fig. 6: b). Apparently, the

crushing stone or wheel were stolen, and the broken concave basin is the only piece that remains from the crushing mill.

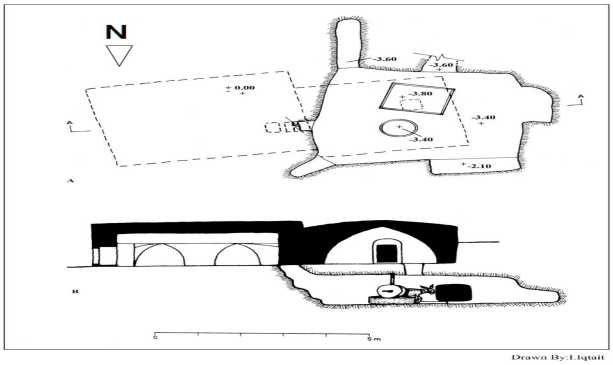

Fig. 6: a Top-plan of the underground olive crushing mill room. The dotted line represents the outline of the floor of the room above. b. Sectional view (looking south) of the olive crushing room (cave) and the overlying traditional building.

The team was unable to determine the exact point of the pressing process took place due to the accumulation of earthen deposits on the floor surface of the press. In order to identify additional parts of the installation, an archaeological excavation would be necessary.

The team was able to determine that the olive processing installation was in use during the latest Islamic era (the Ottoman-Turkish period), as there are two built rooms overlying the cave which were clearly used to store olives and shelter animals. The floor of the smaller room contains a rock-hewn shaft that leads down to the cave; probably used to bring down the loads of olive fruits into the crushing room. This form of traditional olive presses is similar to many other examples that date back to the Byzantine era, such as the ones found at Khirbet Al Tira[1]. and Badd Giacaman in Bethlehem[2]. As mentioned above, the installation was used repeatedly during successive periods, and finally the traditional house was built over it, until both became a functional unit with one single purpose.

2.2. Traditional houses in the Khirbet: The term "traditional architecture," when it comes to the utilization of building materials, refers to houses that were erected without the use of cement in their construction. It also means that traditional building methods were employed in creating the main architectural elements such as walls,

1- Salah Al-Houdalieh (2015): "The oil press complex of Khirbet al-Tireh" Jerusalem Quarterly 62, pp. 84-96.

2- Nabeel HUSSAIN (2014): "The traditional oil press in Bethlehem province" Unpublished MA thesis, Al-Quds University, Palestine, (in Arabic).

ceilings and floors[1]. The basic materials used in the construction of such traditional houses in the region include stone, either fieldstone or quarried stone, set with a lime-based mortar, to which straw was occasionally added. Most likely, quarried stones were cut in a nearby location, since ancient stone quarries were discovered in the area surrounding Beit Ta'mar.

A good number of old houses remained intact in the Khirbet until recently, when a new road south of the Mosque was constructed to expand the area of the cemetery, whereby more than 10 houses, consisting mostly of one or two rooms, were destroyed. The majority of the surviving houses consist of one floor, and one of the buildings consists of two floors.

During the personal interviews conducted by the author with Talal Mahmoud O'dallah Al Danoun / Al-Maharba (68-year-old resident of Beit Ta'mar) and Mukhtar (Mayor) Mahmoud Mousa Mohsen Al Massa'da (69-year-old, who lived in in Beit Ta'mar and currently resides in nearby Za'tara), they declared that the Khirbet was once inhabited by many families from Al Ta'amra clans, such as Asharay'ah, Al Massa'da, Al Hajahjeh, Al Shawawrah, Al Zawahra, and Al Maharba. They also stated that they know the owners of these traditional buildings, some of which include the families of Lafi, Al Wahsh, and Mohsen.

The inhabitants of Palestine during the late Ottoman period can be classified into three main categories- city dwellers, villagers, and Bedouins/semi-Bedouins- and economic resources, lifestyles, social structures, and living environments differed from one class to another. The houses of the wealthy were usually large, and built from sizeable, well-dressed stones, mortar and lime, and decorated with columns, inscriptions, and other ornamental elements. The houses of middle-class families were built of roughly-cut, medium-sized stone and mortar, and were mostly of medium size. The houses of the less privileged, on the other hand, were simple single rooms constructed from rubble and mud and lacked ornamentation. The dwellings of Bedouins consisted of different sized tents tailored to the specific environment[2].

Traditional buildings were constructed according to a courtyard system (the hosh), which is designed to form blocks. Close relatives

1- Salah Al-Houdalieh (2005): "The discovered winepress at Khirbet Shuwayka" An-Najah University Journal for Research-b 19 (4), pp. 1252-1275.

2- Salah Al-Houdalieh (2010): "Survey of the Historic core of Saffa Village an Ethno-archaeology Study" Ethnoarchaeology Vol. 2. (2), pp. 173-212; Yazharn Hirschfeld (1995): "The Palestinian Dwelling in the Roman-Byzantine period', Jerusalem: Franciscan printing press, pp. 109-143.

shared the same courtyard and customarily refrained from admitting other members, even from their own clan, to live with them, in order to preserve their social privacy. Indeed, this practice led to the distribution of the courtyards according to the degree of blood relations[1]. Due to the large number of buildings available at Beit Ta'mar, the work team limited their discussion to two structures located south of the mosque and next to the recently opened street.

The first traditional building is located about 40 meters south of the mosque and near the edge of the modern street. It is built over a cave, which was used in multiple periods as part of an olive press installation (the crushing room), as described above. This traditional building is rectilinear, yet irregular in shape, with the longer dimensions running in an east-west direction. It is divided into two offset parts, which are essentially separate yet adjoined constructions, with no common wall, axis or passage between them. The western part is a squared room that is accessed through a doorway located in its southern wall. Today, this room was found mostly destroyed, with the exception of its northern and western parts. It was once used to store olives prior to their processing in the crushing room located directly below. As previously mentioned, this room has a square opening in the floor that was used for transferring olives down to the cave. The second part of the traditional building, the eastern-most of the two adjoining structures, was once used as a stable for large animals. From the inside, the northern and southern walls are constructed with corbels, which create four individual arched stall spaces, where animals could be tethered by means of holes in the stonework. The length of the four stalls varies according to the irregular shape of the construction. One entered this structure through its only doorway, on the eastern end. Immediately inside on the left, a niche in the wall (0.3m x 0.3m x 0.4m) was used to place an oil lamp, and a similar niche in the opposite wall was used for the same purpose. This eastern section of the traditional building was added to the first section at some later point in time; evident in the existence of a straight joint or seam in the exterior masonry of the two adjacent sections. Through this addition, there was also access into the olive processing area below; a passage dug down through the bedrock inside the northwestern corner of the structure allowed the access of draft animals that were used in turning the crushing mill, both sections of this traditional building were constructed during the

1- Salah Al-Houdalieh (2006): "The courtyard (hosh) system in Saffa during the late Ottoman period', An-Najah University Journal for Research-b 20 (3), pp. 666-695.

Ottoman period using rectangular and squared worked stones, and covered with vaults (Fig. 7).

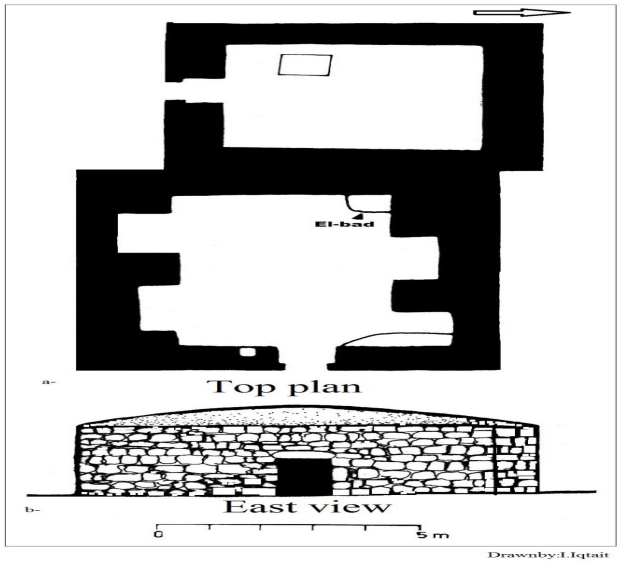

Fig. 7: a. Ground-plan of the first traditional building; b. elevation of its eastern façade.

The second traditional building is located about 15 meters southwest of the first building (described above). Its construction is rectangular in shape, having exterior dimensions of 13.2m (north-south) × 8m (east-west) and a height of 3.7m. It consists of two main rooms defined by a common east-west running wall, with no doorway connecting them. However, each of the northern and southern rooms has an entrance from the outside via two separate doorways about 0.9m wide. Both doorways are set in the structure's eastern wall only about two meters apart (but on opposite sides of the internal wall). The southern room was found to have internal dimensions of 4.6m × 5.6m, while the northern one of 6.2m x 3.85m. Inside, the ceilings of the two main rooms are vaulted; outside, the roof takes the shape of a low, elongated dome. In addition, the southern room has a small storage space attached externally to its western wall and accessed via a small hatch-like opening, about one meter above the room's floor level; this space has an area of 1.8m × 3.5m; the opening measures 90cm tall. Overall, the stonework of the traditional building is known in Arabic as alka'kuly, which represents irregular pieces of unworked fieldstone bound together by a mortar of lime mixed with straw (Fig. 8).

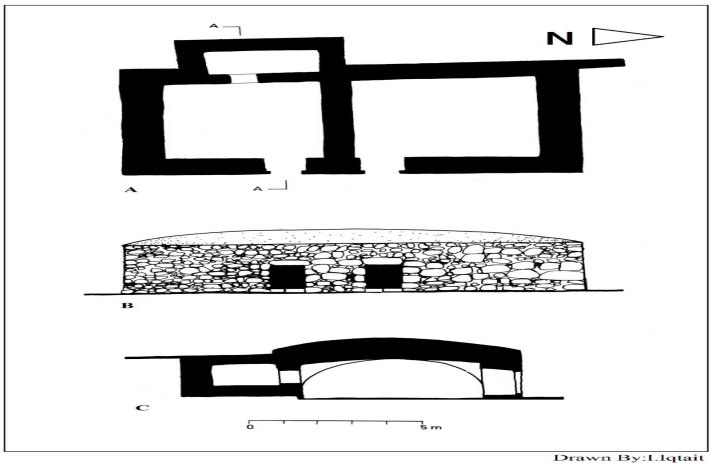

Fig. 8: The second traditional building: a. Top-plan, b. eastern elevation, c. and sectional view (looking south).

2. 3. Roman and Byzantine rock-hewn tombs: Six Roman and Byzantine style tombs were documented throughout the village and remain visible to this day. The first two tombs are located north of the mosque, and are almost complete. However, it is difficult to access them due to the accumulation of debris. The third tomb is located about 30 meters northwest of the Mosque. Some of its walls are still visible above ground, and it consists of a more or less square chamber with a northern entrance. The fourth tomb is located about 60 meters southwest of the mosque, and it is accessed from the eastern part. A front space leads in turn to a small rectangular room measuring 2.5m x 3m. The floor surface of this tomb includes two ground graves, which have also been victims of looters who left nothing behind other than stones and debris (fig. 9). The fifth and the sixth tombs are located south of the Mosque and were later re-used as a cemetery for children. The aforementioned descriptions reflect the general state of the Khirbet, has been exposed to widespread looting and destruction under various pretexts, especially the establishment of cemeteries and the erection of new buildings.

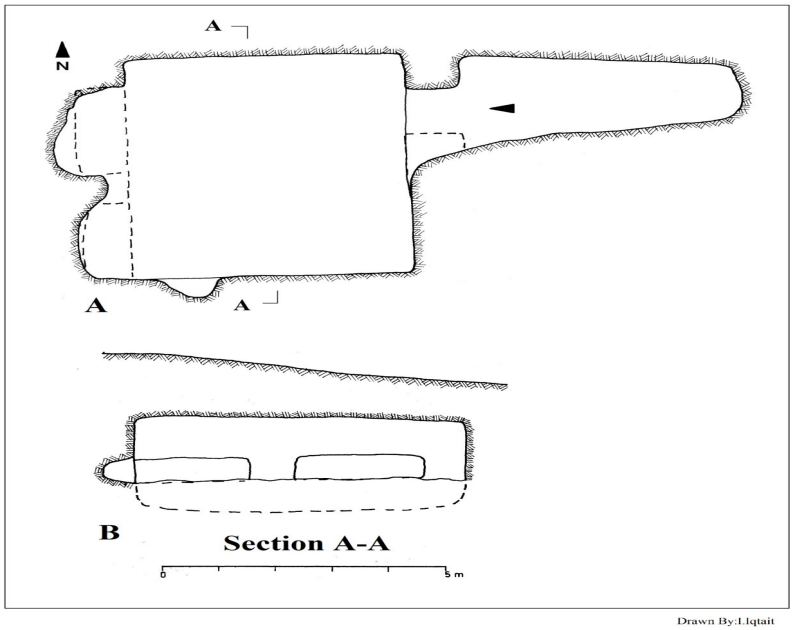

Fig. 9: Roman tomb chamber located southwest of the mosque.

2.4. Omar Ibn Al Khattab Mosque: The Mosque is located near the center of the Khirbet, in the upper part toward the north. It is one of the many mosques established in the Muslim world, bearing the name of the second Caliph, Omar Bin Al Khattab. The Mosque stands on the ruins of buildings that probably date back to the Byzantine period. These ancient elements suggest the form of a church, as it was a structure aligned on an east-west axis, and certain discoveries revealed two coins dating back to the Byzantine period, as well as some clearly Christian artifacts, such as a cross, which was discovered during the burial of one villager in 2013.

The date of construction of the original part of the Mosque (atop the Byzantine structure) can be traced to the early Islamic period, considering the style of the stone plaque with the word mosque "Jami'a" engraved on it. Some indications from early archaeological surveys revealed that “south of Jerusalem is a real Mosque of Omar, Jami'a 'Amar Ibn Khuttab, close to the village of Beit T'amir, dating perhaps from 636 A.D”[1]. Shukri Arraf also mentioned “a mosque in a khirbet believed to be the site that the Caliph Omar Ibn Al Khattab arrived and stayed in when

1- Charles Wilson et al(1881): The Survey of Western Palestine. Special papers on Topography, Archaeology, Manners and Customs, etc’, The Committee of the Palestine Exploration Fund, London, p. 270.

he came to Jerusalem"[1].

The Beit Ta'mar mosque is similar to one found in near Artas village, dating back to the same period. According to a historical research on Artas Village, "there is no specific date for the construction of the Mosque of Omar in the village of Artas, but it is likely that the construction was in the early Islamic period, as it was named after the Caliph Omar like so many other mosques that were built in the same period, or in a later time period, such as the Omar Ibn Al Khattab Mosques in Jerusalem, Bethlehem, Beit Ta'mar, and Beit Sahour"[2].

The complex of Beit Ta'mar Mosque consists of two main parts: a courtyard and a prayer hall. The main entrance is located at the northern end of the eastern façade of the complex in the form of a doorway (1.8m × 0.9m). This entryway leads in turn to a courtyard that is irregular in shape, with a maximum length of 6.6 meters and width of 5.23 meters. A cistern is also found inside the northwestern corner of the courtyard, dating back to the earliest Islamic period, or perhaps even the Byzantine period. A small chamber is found (2.50m × 2m) on the opposite (eastern) side of the courtyard, topped by a small dome, and accessed through a small arched opening at a height of 1m above the ground level of the courtyard. The original Mosque did not include a minaret, and the present one, which is a modern addition, is located outside the southern wall of the Mosque .The rectangular shaped prayer hall (7.5m x 4m internally) is located south of the courtyard and is covered by a barrel vault. The mihrab in the center of the southern wall has a depth of 80cm and a height of 1.5m, and the rectangular window higher up in the south wall, is probably a modern addition. A series of rectangular windows are found in the eastern facade of the hall, most likely designed to provide ventilation. Built-in masonry benches are found at the rear (north end) of the prayer hall, flanking the hall's entry staircase on both sides (fig. 10: a, b).

1- Shukri 'Arrâf (1993): Tabaqat al-anbiyâ' wa-l-awliya' al-ṣalhin fi alard al-Muqaddasa. (Tarshiha: Maktabat Ikhwan Makhul, 1 vols., p. 126.

2- Ibrahim Abu Irmaies (1996): The Islamic Antiquities of Artas. (Unpublished MA diss., Institute of Archaeology, Al-Quds University, Palestine, p. 30.

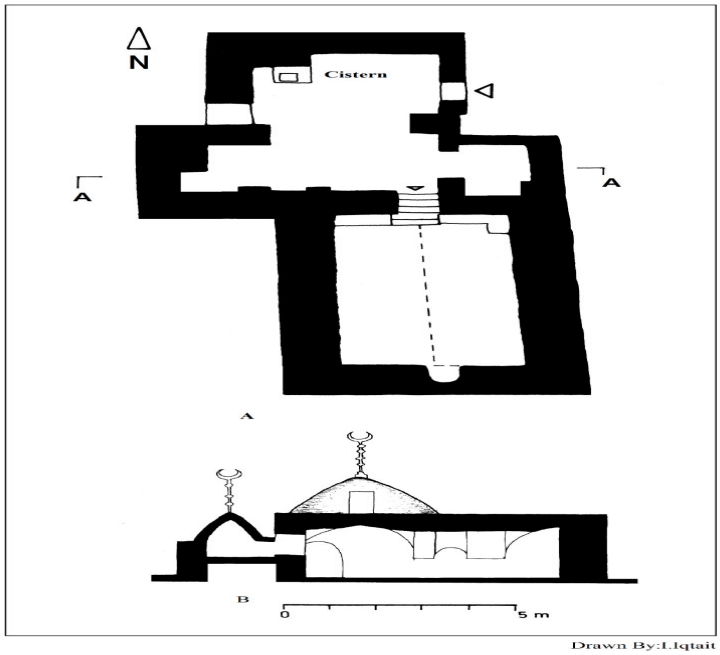

Fig. 10: a. Ground plan of the Omar Ibn Al-Khattab Mosque, b. Sectional view through the courtyard in front of the mosque (east-west).

Many parts of the external façade of the Mosque have been obscured from view. For example, a large part of the western and eastern façades are covered by modern construction, which was built around the old building by the inhabitants of the Khirbet in 2001, thus, moving parts of the historic façade internally. Likewise, the northern façade is not seen because it is located below the current street level. The southern façade, which has a height of 3.5 meters, is the only historic front that remains completely uncovered.

The Mosque was built from limestone obtained from the nearby area. The new part of the Mosque, which was built in 2001, includes stones obtained from the ruins of the Khirbet. However, the construction process was unsystematic and failed to integrate the new features with the old ones, until today, this Mosque is associated with many historic stories and myths, including the age-old local tradition of storing personal possessions inside the Mosque. Legend has it that one man entered the Mosque with a piece of bread, and took some of the olive oil that belonged to others, as well as a bottle of oil, property of the Mosque. When he finished eating, he was unable to find his way out of the Mosque because he had lost his eyesight. Eventually, the man in distress vowed to make a sacrifice in the name of Omar in order to be permitted

to leave the Mosque. Once he returned the bottle of oil, the Mosque door opened. This story was passed on among the locals from one generation to another, and it was narrated to us by one 80-year-old Fatima Ibrahim Abu Armayes. According to Canaan (1927) and Al Houdalieh (2010), there are many accounts of such stories that occurred in the 19th century where Palestinian villagers placed their personal possessions in the campus of shrines, under the protection of these holy saints[1].

2.5. The late Islamic cemetery (Ottoman period until today): This cemetery is located on the northern and southern sides of the Mosque, spread over an area of eight dunams (4 dunams= 1 acre). The oldest tombs found in the cemetery date back to the late Ottoman period, but based on a survey conducted, one gravestone was discovered dating back to 1272 A.H. (after the Hegira of the Prophet, equivalent to 1855 A.D.). This cemetery is considered one of the oldest cemeteries for the Ta'amra clan in the Bethlehem governorate, and includes graves of many extended families such as Al Massa'da, Al Dnadna, Al Wahsh, Al Zawahra, Dar Abu Ir'aeih, and Dar Abu Imhemeed. The cemetery area covers a large portion of the ancient ruins of the Khirbet, and some of the ancient features that have been documented in the aforementioned survey were unearthed during the excavation of modern graves.

The cemetery includes the following two types of graves:

1- Individual graves, which usually consist of two major parts: one located underground (typical dimensions of 2.2m x 1m x 1.2m deep), known as Al Lahed, or the space where the body is interred. Following the burial, Al Lahed is covered with stone tiles and a layer of soil is placed on top to prevent the emanation of odors to the surface. The upper part of the individual graves consists of one or more courses of stone, and the widespread practice was placing three courses of stone up to a height of 80 cm. The names, date of death and sex of those interred in the individual graves are engraved in the tombstones. It is important to note that some of the graves were unmarked (anonymous), and some of them reflected the social status of the deceased; the construction method or the height of the upper part of the grave structure (Fig. 11). Such tombs are found in Saffa[2].

1- Tawfik Canaan (1927): Mohammedan Saints and Sanctuaries in Palestine. Jerusalem, pp. 102-103; Salah Al-Houdalieh (2010): "Visitation and making vows at the shrine of Shykh Shihab Al-Din". *Journal of Islamic Studies* 21 (1), pp. 377-390.

2 Salah Al-Houdalieh (2010): "Visitation and making vows at the shrine of Shykh Shihab Al-Din". *Journal of Islamic Studies* 21 (1), pp. 377-390.

Fig. 11: Beit Ta'mar Islamic cemetery.

2- Multi-chamber graves (fuskiya), designed for multiple persons, some of which contained more burials over time. This so-called "fountain" was built from stones or cement, with its lower part below ground level and its upper part above it. These multi-chamber tombs vary in size between 5.4m long x 4.1m wide and 53m long x 4m wide, and in the total number of graves (between 4 and 35). Internally, each tomb is divided into at least two individual burial spaces, each space measuring 1.2m high x 1.5m wide x 2.7m long. Each multi-chamber tomb might contain as many as 20 individuals, used at intervals, and as needed. This type of graves also resembles those found in Saffa[1].

2.6. Cisterns: Water is the source and foundation of life, and man's relationship with water dates back to the origins of humankind on earth. Since ancient times, people settled near fresh water resources, and the ancient civilizations of Egypt and Mesopotamia, for example, were both centered on major river systems. Through the archaeological survey conducted by the author, 30 cisterns for storing rainwater were found in various parts of Khirbet Beit Ta'mar, of which most are no longer functional, and two continue to be in use until today for quenching the thirst of livestock.

The numerous documented cisterns in and around the Khirbet reveal that the area was not only inhabited by a large population, but was also used as farmland, which likewise, required water. Most of these rock-hewn cisterns are very old, dating back to the Roman, Byzantine and

1- Salah Al-Houdalieh (2010): "Visitation and making vows at the shrine of Shykh Shihab Al-Din" *Journal of Islamic Studies* 21 (1), pp. 377-390.

Islamic periods. Often, an interior coating of sheed (Arabic for lime plaster) with grog and ash was used, as evident in one particular cistern located in the southern part of the Khirbet. The cistern's internal space is pear-shaped, narrow at the top and expands in width as it goes downward; a form common in most cisterns found in Palestine. The depth of the hole, from the opening to the base, is six meters, the opening has a diameter of 0.8 meters, and the space widens gradually until the "pear" reaches its maximum diameter of about five meters; approximately two-thirds of the way to the bottom. The cistern's opening is covered by a carved capstone (1.2m in diameter) with a round hole (0.5 m in dimeter) through the center. The capstone prevents the entry of dirt and debris, as well as the entry of children and small animals. If the cistern was still in use, it would include an additional stone plug or cover stone to protect the well water from light and pollution. The top of the cistern includes a circular 0.6-meter high carved stone basin (0.2m deep), which contained drinking water for animals. The supply of water into the system is obtained through channels that are dug into the bedrock of the surrounding terrain for collecting rainwater. Usually, cisterns include two holes located on the sides of the neck near the top. The first hole was used to allow the flow of rainwater into the cistern, and bunches of thistles were inserted in the hole to filter debris and other residues[1]. The second hole, on the other hand, which functions as an ejector or drainage pipe, was used as a channel to direct the flow of extra water towards another catchment.

As mentioned earlier, most cisterns are no longer in use today, with the exception of two cisterns, which are used to water sheep and cattle during the summertime. Normally, these cisterns were divided among the families of Khirbet Beit Ta'mar, whereby each clan had its own cistern. Some cisterns were named after families, such as that of Al Zahlan, which is located in the southeastern part of the Khirbet.

Quoting his late father, Al Haj Talal Mahmoud 'Otallah Al Danoon, stated during an interview that Beit Ta'mar was not blessed with natural water springs during the dry seasons when water was scarce. People were obliged to collect rainwater in the cisterns and oftentimes obtain drinking water from the outflow of the perennial Artas spring, located west of the area. The plaster layers coating the internal faces of the cisterns

1- Salah Al-Houdalieh (2010): "Survey of the Historic core of Saffa Village an Ethno-archaeology Study". Ethnoarchaeology Vol. 2. (2) 183-184.

documented in Khirbet Beit Ta'mar resemble those found in Beit 'Awwa[1], Saffa[2], and Khirbet Et Tireh[3].

2.7. Caves: Since ancient times, people lived in either natural caves or manmade ones. Two caves were documented in the Khirbet: the first located in the southwestern part of the area, next to an olive orchard known as Omar Bin Al Khattab Olive Grove. This cave is partially destroyed, and hence its original dimensions could not be determined. The second cave (7m long, 8m wide, and approximately 2m high) is located next to the building of the village council. It was carved out of the rock and used as a residential unit during the Late Ottoman period; reflecting an age-old local custom. The marks of the picks and chisels used to carve out the rock are visible evidence of the methods of construction at the time. Today, this cave is used for sheltering animals.

2.8. Pottery sherds: During the survey conducted by the author in the summer of 2014, a large number of pottery fragments were collected and classified according to their shape and time period. The collection of pottery includes fragments of jars, jugs, bowls, cups, a glazed dish, cooking pots and pans and clay tobacco pipes, dating back to various periods, including the Byzantine (fig. 12, a), the Abbasid (fig. 12, b) and the Mamluk-Ottoman (Fig. 12. c, d).

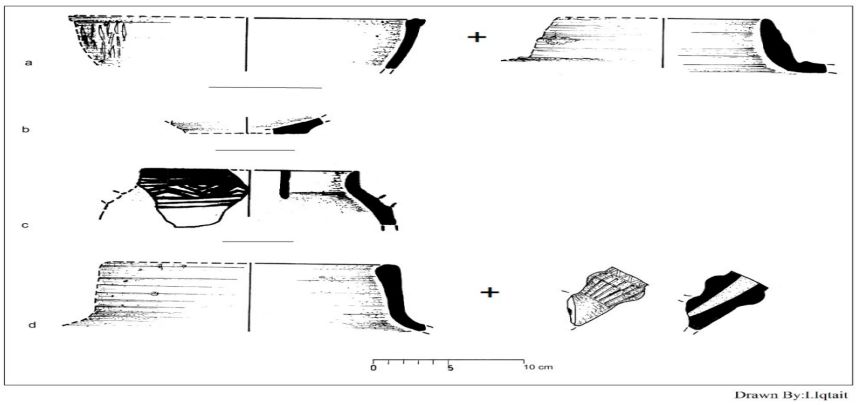

Fig. 12: a. Byzantine period pottery sherds, b. Abbasid period pottery sherds, c. Mamluk period pottery sherds, d. Ottoman period pottery sherds.

1- Al-Hroub Ishaq (2015): "Atlas of Palestinian Rural Heritage". trans. AL-AMAYREH, K. Bethlehem, Diar Publishers, p. 123.
2- Salah Al-Houdalieh (2010): "Survey of the Historic core of Saffa Village an Ethno-archaeology Study" Ethnoarchaeology Vol. 2. (2) 183-184.
3- Salah Al-Houdalieh (2015): "The oil press complex of Khirbet al-Tireh". Jerusalem Quarterly 62, p. 84-96.

Conclusion: People lived in Khirbet Beit Ta'mar since the Roman period, always leaving behind traces of their everyday life. Thus, the remains of ancient features are quite evident, specifically of Roman and Byzantine periods, and there is no doubt that additional artifacts are yet to be discovered. The many existing cemeteries also represent proof of habitation during the said periods.

Since the Khirbet boasted a rich collection of olive trees and grapevines, its inhabitants built special installations, including grape presses and olive mills, for the industrial processing and commercial use of these resources, and dug cisterns for the collection and storage of rainwater. Over 30 cisterns existed in the Khirbet, but most of them were ruined as a result of abandonment or lack of maintenance. Nevertheless, the two remaining cisterns are still functional and sometimes used for watering animals.

During the Islamic period, the Khirbet enjoyed a special connection with the second Caliph Omar Bin Al Khattab, and a mosque was built in his name. Over the centuries, this mosque, which is still in use today, underwent several alterations that changed many of its internal and external features. The Khirbet was inhabited throughout the successive Islamic periods, evident in the remains of traditional houses, some of which were still in use until recently. The two caves found in the Khirbet were used for habitation during certain periods, and one of them is partially destroyed.

Today, violations committed by people, especially on the western side of the ancient site, are leading to the deterioration of this national treasure. This negative impact poses real threats to the integrity of the Khirbet and raises questions about its ultimate survival.

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References:

- Applied Research Institute (2010): Jerusalem
- A Socin (1879): "Alphabetisches Verzeichniss von Ortschaften des Paschalik Jerusalem" *Zeitschrift des Deutschen Palästina-Vereins*. 2, p. 147.

- Al-Hroub Ishaq (2015): "Atlas of Palestinian Rural Heritage". trans. AL-AMAYREH, K. Bethlehem, Diar Publishers, p. 123.
- Charles Wilson et al(1881): The Survey of Western Palestine. Special papers on Topography, Archaeology, Manners and Customs, etc, The Committee of the Palestine Exploration Fund, London, p. 270.
- Conder and Kitchener (1883), 'the Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology: Committee of the Palestine Exploration Fund., vol. III, London, pp. 29-30
- Conrad Schick (1896): Zur Einwohnerzahl des Bezirks Jerusalem, *Zeitschrift des Deutschen Palästina-Vereins*. 19, p.125.
- Edward Robinson and Eli Smith (1841): "Biblical Researches in Palestine, Mount Sinai and Arabia Petraea". A Journal of Travels in the year 1838, vol. 2, p. 159.
- Ehud Galili; Daniel Jean Stanley; Jacob Sharvit; Mina Weinstein-Evron (1997): "Evidence for Earliest Olive-Oil Production in Submerged Settlements off the Carmel Coast, Israel". *Journal of Archaeological Science* , 24, p. 1141–1150.
- FORBES Robert James (1965): Studies in Ancient Technology, Vol. 3. 2nd ed. Leiden, p. 75-76.
- Ismael MELHEM (1991-1992): The wine press at Al-Yasela. Comparative study. Unpublished MA. Thesis, Al-Yarmouk University. Jordan, p. 184. (in Arabic).
- Ismael MELHEM (1995): "Techniques of wine presses in Jordan and Palestine in the Roman and Byzantine period". *Dirasat fi attar Alurdun* , Vol. 5, pp. 30-45.
- Ismael Melhem(1991-1992): "The wine press at Al-Yasela. Comparative study". Unpublished MA. Thesis, Al-Yarmouk University. Jordan, p. 154. (in Arabic).
- Ibrahim Abu Irmaies (1996): The Islamic Antiquities of Artas. Unpublished MA diss., Institute of Archaeology, Al-Quds University, Palestine.
- Lutfi Khalil L and Fatimi al-Nammari (2000): "Two Large Wine Presses at Khirbet Yajuz, Jordan". Bulletin of the American Schools of Oriental Research, No.318, pp.41-57.
- Morad AL-DABAGH (2002-2003): Belladona filisteen. Vol. 8. Part 2, Dar el-Tali'a Beirut, p. 516.
- Nizar Turshan and Matthew Cox (2015): "Ya'amun main wine press from Roman to the end of Umayyad and early Abbasid periods in northern Jordan". *Mediterranean Archaeology and Archaeometry*, vol, 15, n 3, Greece, pp. 131-139.
- Nabeel HUSSAIN (2014): "The traditional oil press in Bethlehem province". Unpublished MA thesis, Al-Quds University, Palestine, (in Arabic).
- Rafael Frankel (1994): Shmuael Avitsur and Etan Ayalon (eds.). "History and Technology of Olive Oil in the Holy Land". (Oléarius Editions and Eretz Israel Museum, Arlington, Va., and Tek Aviv, p. 26.
- Rafael Frankle (1997): "Presses for Oil and Wine in the Southern Levant in the Byzantine Period', Dumbarton Oaks Papers, Vol. 51, pp. 73-8.
- Rafael Frankel, Shmuael Avitsur and Etan Ayalon (eds.) (1994): *History and Technology of Olive Oil in the Holy Land,* (Oléarius Editions and Eretz Israel Museum, Arlington, Va., and Tek Aviv.
- Sa'ed AL-MUBAIED (1994): The Palestinian Arabic coins. Al-haia Al-msria, Gaza, p. 153.
- Shukri 'Arrâf (1993): Tabaqat al-anbiyâ' wa-l-awliya' al-ṣalhin fi alard al-Muqaddasa. Tarshiha: Maktabat Ikhwan Makhul, 1 vols., p. 126.
- STAGER, L. E. (1985): The First Fruits of Civilization. Palestine in the Bronze and Iron

Ages. Ed. TUBB, J.N. London, p. 174.
- Salah Al-Houdalieh (2015): "The oil press complex of Khirbet al-Tireh". Jerusalem Quarterly 62, pp. 84-96.
- Salah Al-Houdalieh (2010): "Visitation and making vows at the shrine of Shykh Shihab Al-Din". *Journal of Islamic Studies* 21 (1), pp. 377-390.
- Salah Al-Houdalieh (2006): "The courtyard (hosh) system in Saffa during the late Ottoman period". An-Najah University Journal for Research-b 20 (3), pp. 666-695.
- Salah Al-Houdalieh (2004): "Roman and Byzantine winepresses in Saffa village". in Archaeological articles on the 10th Anniversary of the Institute of Islamic Archaeology (eds.) Marwan Abu Khalaf and Salah Al-Houdalieh, Jerusalem, p. 6-30.
- Salah Al-Houdalieh (2005), The discovered winepress at Khirbet Shuwayka. An-najah University Journal for Research 19 (4), pp. 1253-1276.
- Salah Al-Houdalieh (2010): "Survey of the Historic core of Saffa Village an Ethno-archaeology Study" Ethnoarchaeology Vol. 2. (2), pp. 173-212.
- Tawfik Canaan (1927): Mohammedan Saints and Sanctuaries in Palestine. Jerusalem, pp. 102-103.
- Victor Guérin (1869): Description Géographique Historique et Archéologique de la Palestine. (in French). 1: Judee, pt. 3. Paris: L'Imprimerie Nationalep. p. 121.
- Yazharn Hirschfeld (1995): The Palestinian Dwelling in the Roman-Byzantine period. Jerusalem, Franciscan printing press, pp. 109-143.
- Zohary, Daniel. and Pinhas Spiegel-Roy (1975): Beginning of fruit growing in the old world. Science. 31, p. 319-327.