

Urban History of South-Western Palestine during the Bronze Age A Historical and Archaeological Study in the View of Gaza Region

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Abstract

The important geo-strategic location of south-western Palestine has attracted tribes since the 4th millennium BC to settle and create the earliest human sediments, particularly on the sea coast along the ancient coastal route (Horus way)² connecting Egypt (Africa) in the south with Canaan/Palestine, Syria, and Mesopotamia in the north and east (Asia) (Oren: 1997) and on the fertile banks of Gaza valley. This is attested by successive archaeological excavations scraping away layers of sites constituting ruins of major settlements dated to the Bronze Age (3200-1200 BC) providing rich archaeological record of architecture and material culture in a historic sequence. Focusing on Gaza as a case study for history of urbanism in South-western Palestine during the Bronze Age, this paper endeavors to a) illuminate the major elements of human sediment and urbanism exposed so far at excavated Bronze Age sites, b) reconstruct Gaza urbanism during the various phases of the Bronze Age (3200-1200 BC) alongside with the associated economy based on architecture and material culture revealed at old excavations as well as further rich archaeological record resulted from major sites excavated recently by the author at the Early Bronze Age (EB) site of Tell es-Sakan and the renewed excavations at the Middle and Late Bronze Age (MB and LB) sites of Tell al-‘Ajjul and al-Mughraqa.

Introduction

The region of Gaza attracted people to settle since the Late Neolithic (i.e. to the second half of the fifth millennium BC). The first phases of human sediment during this period is evident at the site of Tell Qatif on the coastal road between the cities of Khan Yunis and Deir al-Balah. The site was excavated in 1970s and 1980s. Major occupational strata have revealed several human made pits, bones of domesticated animals, major flint tool types, finely retouched sickle blades, fan scarpers and deeply serrated sickle blades common at most of the Late Neolithic sites of the coastal plain of Palestine. The human sediment is also attested in the site by various types of pottery service and storage vessels. Occupational remains dating to the succeeding Chalcolithic period were also found on a small mound located some 300 m from the Neolithic site of Tel Qatif. Both sites may suggest a relation with the Negev shortly before the expansion of the Chalcolithic (Ghassulian) culture.

The coastal line of Gaza, north of the Late Neolithic and Chalcolithic sites, is characterized by several major archaeological sites dated to all phases of the Bronze Age, such as the Middle and Late Bronze Age site of Tell al-‘Ajjul excavated by Petrie between 1930 and 1934, the Late Bronze Age site of Deir el-Balah excavated by Trude Dothan (between 1972 and 1982) and Tell Ridan excavated by Oren in 1973. In addition to these old excavations, several sites have been excavated during the last two decades revealing rich architecture and material culture dated to several historic periods. On his capacity as the director of the department of Antiquities of Gaza the author has co-directed field surveys at archaeological sites and co-directed several excavations at major Bronze Age sites, particularly at the EB site of Tell es-Sakan, the MB and LB site of al-Mughraqa and the renewed excavations at the site of Tell al-‘Ajjul. The revealed rich archaeological record of Bronze Age Gaza is subject of multifaceted studies focusing on various archaeological and anthropological aspects of the Bronze Age communities and their physical inheritance.

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² It was referred to as Horus way, in the old testament as “the way to the land of the Philistine”, during the Greek and Roman periods as “via maris”, means the sea way and during the Islamic periods as “ad-darb as-sultani”, the sultan way, referring to the Mamluk sultans who used it in their travel between Cairo, their capital, to Damascus.

This paper is focusing solely on the physical remains; particularly the exposed architecture and material culture and discussing to what extent the uncovered archaeological record can assess and reconstruct the urbanization process and human development during the various phases of the Bronze Age (3200-1200 BC).

Earliest urbanism in Gaza

Archaeological record of series of excavations conducted in Gaza Strip do indicate the first phase of sediment at the site of Taur Ikhbeineh on the west bank of Gaza valley, approximately three kilo meters from the sea. It was excavated in 1987 yielding evidence of an Early Bronze Age settlement (Oren/Yektiel: 1990). Based on the material culture study, radiometric analysis of charred wheat grains and calibrated radiocarbon analysis, the site is dated to period between 3400 and 3250 BC (Oren and Yektiel: 1990).

According to the published excavation report, the sediment and urbanism at the site are evident by stratified architectural remains indicating four EB occupational phases comprising sections of hard packed earth floors with brick material, wide and deep pits used for storage, refuse and also faint remains of dwellings. One of the pits was found full of carbonized grain, as well as sediment into which the pits were cut.

The sediment at the site is also attested by fragments of clay ovens *tabuns*, storage vessels, cooking and serving pots. In addition, faunal and botanic remains were also uncovered. The flint assemblage of Taur Ikhbeineh indicates that they were made of the local flint pebbles. Some of the stone vessels fragments belong to well manufactured basalt bowls developed directly from the Chalcolithic stone industry and remained popular during the Early Bronze Age in Canaan. (Oren and Yektiel: 1990). The considerable thickness of occupational debris at the site may evident its extensive and continuous habilitation (Oren and Yektiel: 1990).

The inhabitants industry and relation with the surrounding regions are attested by pottery petrographic analysis and studies representing the Early Bronze age by three distinctive ware groups and technologies: Canaanite, imported Egyptian and locally manufactured Egyptian pottery. The locally manufactured pottery imitating the Egyptian ware does show the interconnection between Southwestern Palestine and Egypt during the very beginning of the Early Bronze Age. According to the excavators, the presence of both locally manufactured Egyptian and Canaanite wares undoubtedly implies that two potter's workshops operated respectively side by side at Taur Ikhbeineh or somewhere nearby indicating part of the close cultural interaction between the two regions. Among other finds at the site are well manufactured basalt bowls, developed directly from the Chalcolithic stone industry and remained popular during the Early Bronze Age in Canaan.

In addition to pottery and basalt wares, the flint assemblage of Taur Ikhbeineh is also local made of flint pebbles similar to other finds at Early Bronze Age sites in Southern Palestine. They include a variety of notches, denticulate, sickle blades, and retouched blades/blade-lets.

Advanced urbanism: Earliest walled city within Gaza

The earliest discovered example of advanced urbanism in Gaza area is located at Tell es-Sakan, bordering al-Zahra' town on the coast, some 7 km southwest of the old city of Gaza. This site was discovered in 1998 during construction activities. A large scale of archaeological excavations have been carried out at the site in September 1999 and in August and September 2000 as a cooperative Palestinian-French cooperative project under the field co-direction of Pierre Miroschedji and the author (Miroschedji and Sadeq: 2000). The site is presently the only third millennium urban settlement known in the Gaza Strip so far preceding the Middle and Late Bronze Age site of Tell el-'Ajjul, located close to it. Approximately 1416 sqm have been excavated recognizing and evaluating the topography and stratigraphy of the site. Nine archaeological strata, all dating to the Early Bronze Age, were distinguished, with the bottom strata (A9-A8) suggesting, at least provisionally, that they date, apparently, to the Naqada IIIb period, during which the Egypt involvement in the economy of southern Canaan became drastically intensified and highly organized as evidenced from the network of large and smaller administrative and commercial posts and settlements established along the North Sinai land bridge into Canaan.

The lowest strata of the site (A9-A8) attest strong Egyptian contact with the site. This is indicated by faint building remains in mud-brick associated with domestic installations (kilns, hearths) of Egyptian type, vessels imported from Egypt including fragments of clay cylinder-seals imprints, several fragments of *Serekhs*, a shell pendant, Egyptian flint tools and arrow heads.

The considerable important evidence of the high level of urbanism at Tel es-Sakan settlement is attested by its fortifications which comprise three successive walls built of sun-dried mud bricks. Two of them are associated with strata A8 and A7 embodying jointly one massive City-Wall reaching a thickness of 7.35 m and protected from the outside by an earthen glacis of around two meters high. This is presently the oldest known city wall discovered so far in Gaza region. The thick layer of ashes debris indicates that the city was burnt as a result of a war or simply an accidental fire. Much later, after the abandonment, the site has been reoccupied in the Early Bronze III (EBIII). A Canaanite walled city has been built constituting the next seven strata of the site. Its wall is 7, 80 m thick and preserved on a height of 4, 60 m and protected from the outside by a glacis built with sun-dried mud bricks of about 4 m high. This glacis was later buried under layers of ashes debris accumulated on a thickness of more than 4 m.

Approximately 465 sqm of the EBIII city have been excavated in area C constituting part of a living quarter (Miroschedji and Sadeq: 2000). The dwellings' rich nature is represented by plastered walls and domestic installations such as hearth, boxes, and small partition walls. The dwellings plan and structure imply a strong degree of urbanism; the rooms are provided by sun-dried benches against one, two or three walls. The archaeological material and small finds uncovered on the dwellings' floors is abundant and varied (pottery, flint tools, domestic instruments and beads). Its characters betray both a strong local particularize and close ties with the sites of inner Palestine.

The final historic phase of EBII at the site is the surface stratum, from which about 425 sqm have been excavated (Miroschedji/Sadeq: 2000). Here a street oriented southeast northwest was cleared; it makes two zigzags between two rows of dwellings and converted over time to a drainage forming a deep channel slowly filled up. The first results of archaeo-zoological and archaeo-botanical research attested remains of sheep, goat and cattle lived, probably, close to the site, i.e. at the mouth of the valley of Gaza, in the third millennium BC. Fish bones and numerous shells were also found. Quantities of vegetal debris, mainly cereals (wheat and barley) and vegetables, but also olive stones and grapes have been also attested. The present state of research suggests that the Canaanite settlement is dated solely to the Early Bronze period, the period in which major sites of southwestern Canaan have reached their greatest prosperity. This climax precedes shortly the final abandonment of the Canaanite city of Tel es-Sakan in the beginning of the third millennium BC.

Gaza Urbanism during the MB and LB

Gaza urbanism continued, in a larger scale, during the Middle and Late Bronze Age. Two of the three major sites of this period are located on the northern bank of Gaza valley, namely the sites of Tel-al-'Ajjul and al-Mughraqa area close to it. The third is located further south at Deir al-Balah municipal area.

The abandoned EBII city at Tell es-Sakan was followed by the foundation of a new city in the beginning of the Middle Bronze Age (MB) located about 700 hundred meters south east of it at the site of Tell al-'Ajjul on the northern bank of Gaza valley, approximately 7 km southwest of the old city of Gaza and 1.8 km from the sea. It lies in a strategic position on the *Horus* way between Egypt (Africa) in the south and Canaan (Asia) in the north east with a convenient ancient harbor permitting small vessels to reach the city. Flinders Petrie, who excavated at the site, concludes that Tell al-'Ajjul had been the site of Gaza in the Middle Bronze and part of the Late Bronze Ages, the hypothesis which do not supported by most later archaeologists. It is more probable; however, that the ancient Gaza was located within the confines of the present old city, where a sounding uncovered architectural remains dated to the Late Bronze and Early Iron ages (Phythian-Adams 1923). The site was excavated by the Flinders Petrie between 1930 and 1934 (Petrie: 1931). He estimates the mound size as approximately 13 ha. In a later study, Albright is suggesting its size as approximately 11 ha (Albright: 1938). The mound is definitely smaller today because the erosion and bulldozing. Due to leveling and farming activities over the last decades it is difficult to recognize the eastern limit of the mound in the north-eastern side. However the remaining part of the mound at present is about 10 ha.

MB and LB cities at Tel al-'Ajjul

The site contains the ruins of a cities constructed in several historical phases during Middle and Late Bronze Age. The earliest stage of urbanism at Tel al-'Ajjul is represented by a city with a palace, dwellings, gates and fortification system dating back to the time of Neferhotep I, one of the last strong kings of the Egyptian thirteenth Dynasty, who still had some commercial and political interests along the Syro-Palestinian coast. Two of his scarabs were found in lower strata.

The city was divided into big sections. Its inner area is occupied by grouping of official buildings, a temple, and administration units. The small dwellings are arranged on the northern side of the street and are themselves an indication of a prior planning and organization (EAEHL: 1993). The city was protected by a fosse cut out of the marl of sandstone in the north, west, and eastern sides while the valley secured it in the southern side and gave an access to the sea through the city harbor that erected in this side (Tufnell: 1993). The city layout seems to have a regular plan based on the pattern of the street layout, directed East-West, and meeting other ones running North-South. The city dwellings are built in an orderly array flanking a ring road encircling the city within the line of the fosse. Another thoroughfare ran diagonally from the southeast to the northwest corners leading toward a palace measuring 43 m by 55 m. There was also a branch road took a circuitous route toward the same point and another road was cutting the line of the fosse in the northwest side leading up to the mound from the direction of the sea. The main and original city entry was apparently in the center of the northeast side, facing modern Gaza, where a strip of marl some 7.62 m wide was not removed for the fosse. It formed a convenient causeway entrance, edged with a balustrade of round-topped stones. In term of infrastructure, the city had a tunnel extending some 152 m into the plain provided with openings at intervals in the roofs. It seems that partial destruction occurred in some areas of city manifested by burned layers. A great part of the city structural elements were razed by builders of a palace (palace I).

Excavations at the site have attested that a second city was erected on the same outlines of the earlier one, where a smaller palace-fort (palace II) was built during the rule of the fifteenth Dynasty in around 1670 BC on spot using Egyptian techniques. The construction date is testified by scarabs found in the deposits of the city's buildings while its destruction occurred in about 1570 BC based on scarabs and graves dated immediately after the reign of Aa-user-Re (Apophis), i.e after the fall of Avaris (Tell ed-Dab'a) in the hands of Ahmose army. Gold hoards discovered at Tell al-'Ajjul reflect the economic prosperity and political importance of the site at the end of the Fifteenth Dynasty.

The destruction of the second city was probably by the armies of Ahmose, and accordingly the site might be identified with Sharuhén, the last fortification of the Hyksos in Canaan. The remains of the second city had a fort built on the highest point of the mound, from which the garrison could command a view of the coastal road from the north. The city was replaced by a third one with important finds, most interestingly a double seal impression of Thutmose III and Hatshepsut on a jar fragment found in the upper debris testifying the Egyptian contact with Gaza during their co-regency, which ended in 1483 BC. Fragments of this seal have also been found during the recent excavations co-directed by the author in 2000 at al-Mughraqa site on the northern foot of Tell al-'Ajjul.

The decline of the third city in the Late Bronze Age I (end of the 15th century BC) brought almost total abandonment to the site of Tell al-'Ajjul. The only remaining structure was a fort built in two phases: the earlier phase belongs to the 14th century BC and the latest to the 13th/12th centuries BC. They controlled the coastal road, as well as the eastern entrance to the lagoon, where a new harbor was erected at Tell as-Sanam site on the mouth of Gaza valley. The last royal name presented in scarabs and seals found at the cemeteries of Tell al-'Ajjul are attributed to Ramses II. They evident that the city cemeteries were most likely still in use until at least 1200 BC.

People and economy at Tell al-'Ajjul:

The advanced urbanism and economical prosperity at the site of Tell al-'Ajjul are also reflected in its industry. The site ranks among the places that produced the most gold work in the coastal lands of western Asia. Electrum and silver were also employed, and even lead was occasionally used to make ornaments and amulets. The population of Tell al-'Ajjul wore pendants, earrings, and bracelets, elaborately made in sophisticated techniques. Solid-gold toggle pins were richly fashioned, and one of the finest pieces was found in a single grave containing several scarabs, including one naming Aa-user-Re (Apophis), last of the great kings of the fifteenth Dynasty. He reigned for more than thirty years and was still alive at the beginning of the reign of Ahmose, who triumphed over him soon after 1570 BC. It is clear, therefore, that at least some of the gold work was made before the fall of Avaris (Zoan), the Hyksos capital.

No other site in Palestine has produced so many inscribed seals, most of them are scarab shaped. Among the Egyptian royal names represented in seals are a cylinder seals bearing the name of Amenemhet III (1842-1797 BC), Neferhotep I is represented by two scarabs (c. 1740-1730 BC). The people of Tell al-'Ajjul had contacts and trade relation with contemporaneous civilizations. The majority of the imported pottery of Tell al-'Ajjul came from Cyprus but it derives also from Egypt, Greece and the Jordan Valley.

In addition to the local pottery, the excavations of Petrie uncovered an assemblage of imported pottery types attesting strong direct or indirect contact with Cyprus, Egypt, and the Jordan valley. Cypriote imports are base-ring I and II, Bichrome wheel-made, red and black slip, monochrome, red lustrous wheel-made, red-on-black/red-on-red, white painted, white shaved, and white slip. The Cypriot import is also attested in the renewed excavations at Tell al-'Ajjul conducted by Peter Fischer and the author in 1999 and 2000 (Fischer/Sadeq: 2001, Fischer/Sadeq: 2002). The uncovered Cypriot-imported wares include red-on-black, white slip I (mainly bichrome-decorated) and red lustrous wheel-made and possibly also vessels of the bichrome wheel-made ware.

The Egyptian and Egyptian-style pottery is represented by shallow bowls, perform and carinated jars, originated most likely from Upper Egypt. The author excavations at the site have also uncovered alabaster vessels and the faience/glass object of unknown function very probably belong to the group of objects which were imported from Egypt, or they were locally produced imitating the Egyptian ware. Among the small finds revealed at the site during the renewed excavations are five scarabs attributed to the second part of the Fifteenth Dynasty, bronze needles, toggle pins, and limb cover (armour), jewelry includes a ring and a bead, a small bowl, a pendant of silver and one of sheet gold with the image of Hathor were also found. Objects of stone include a calcite dagger pommel and bowls of basalt. Some figurines of earthenware, one of which is of Egyptian-style, objects of faience and finally some incised bone plaques, one of them depicts the hind part of a feline (Fischer/Sadeq: 2001, Fischer/Sadeq: 2002).

Imports from the Jordan valley and south Lebanon are chocolate-on-white bichrome, chocolate-on-white, and eggshell ware. There are also two sherds of grey ware originated from the region of Middle Euphrates, Anatolia and northern Syria. In addition, the renewed excavations have uncovered Mycenaean type perform jar dated to the first half of the 13th century. They are added to four body sherds of Mycenaean-type and a partly preserved Mycenaean-type vessel discovered by Petrie. Gold, silver, bronze and lead objects are certainly also imports from different regions of the Eastern Mediterranean.

South LB urban expansion

The coastal area of Deir al-Balah (17 km southwest the city of Gaza) has experienced a further example of urban development during the Late Bronze Age. Here, archeologists have uncovered a settlement constituting a large residential complex (approximately 50 by 20 m) built around an artificial water reservoir, lake or pool (c. 20 by 20 m) recalling the plan and architecture complexes known since the el-Amarna period (late 14th century) in Egypt. Both of them (the complex and the reservoir) are depicted on the map of Seti I's campaigns in Asia (early 13th century), in relief on the northern wall of the hypostyle hall in the temple of Amon at Karnak. The architecture and material culture uncovered at the site do attest contact between the settlement of Deir al-Balah and contemporaneous sites in Canaan as well as contact with Egypt, Cyprus, and Mycenae.

In addition to the castle, the excavations at Deir el-Balah have revealed three principal parts of the site, namely, an administration quarter constituting 20 rooms, an artisan's quarter manufacturing various crafts (figurines, scarabs, seals, amulets, finger rings) and a cemetery constituting two groups of burials; graves containing clay anthropoid coffins filled with various funeral vessels representing wealth and high status, and a second group containing hundreds of graves without coffins representing the majority of ordinary people who lived at the site (Dothan 1979). The anthropoid clay coffins depict the natural features of the faces, shoulders, eyes, eyebrows, straight noses and full lips (Dothan 1998: 29). Some covers show Asiatic facial features with hands not wrapped as the Egyptian ones; pointing to different groups within the cosmopolitan elites of Gaza.

The cemetery appears to have been used from the 14th century BC until the final phase of the Late Bronze Age. It has the largest group of anthropoid coffins yet discovered in Palestine. According to Dothan, who excavated the site, the clay analysis does attest that the coffins were manufactured and fired at the site (Dothan: 1993).

An another contemporaneous urban settlement, albeit small, is Tell Ridan on the Mediterranean coast, approximately 18 km south of Gaza and 4 km northwest of Khan Yunus. Archaeological excavation conducted in 1973 by F. Vitto and G. Edelstein have excavated 350 sqm of the settlement and its adjacent cemetery. The human sediment and urban remains at the site are represented by dwellings built of bricks and coated from the inside by a thick layer of mud plaster. Here, oven (*tabun*) built of bricks, pottery kilns, and pottery vessels such as storage jars, jars, bowls, juglets and cooking pots were found. (Vitto: 1993).

The end of the Bronze Age (1200 BC) was marked by the battles between Ramesses III (c. 1175 -1144 BC) and the appearance of Sea Peoples, mainly the Philistines, on the coast of Canaan. Some managed to settle and expand in the former Egyptian-dominated provinces in Canaan, where they created the Pentapolis cities characterized by the appearance of Mycenaean III C:1b pottery (Dothan 1982: 295). The precise time-span of the Early Iron Age is still an open question and different dates have been suggested by authors such as Albright (1920), Wright (1961) and Finkelstein (1997) (Zwingenberger 2001: 17-18). Nevertheless it is generally accepted that by the end of the Late Bronze Age in Canaan, the major cities had entered a transitional period in which the dominant Egyptian political control was being challenged by the presence and action of new cultural groups that arrived in phases. The so-called Sea People were overwhelming urban centers to differing degrees depending on the geographic location and changes in the environmental setting. These factors impacted socio-economic conditions, inter-relations with imperial powers, the ethnic composition of each city, and the available local human resources.

The new phase of urbanism in the beginning of the Iron Age started to emerge in the formerly flourished Late Bronze Age sites such as at the old city of Gaza excavated by Phythian-Adams in 1922 (1922: 13), at Tell al-‘Ajjul as Albright suggests that the palace V (or fortress) of the site does belong to the Iron Age (Albright 1938: 359) and substantial Late Iron Age sherds, albeit in a meager scale, have recently been exposed in horizons 1A-B during the two seasons of the renewed excavations headed by Peter Fischer and the author in 1999 and 2000 (Fisher and Sadeq 2002: 109, 113, 153). In addition, the Iron age urbanism has emerged at the Late Bronze Age settlement and cemetery at Deir al-Balah, where Philistine bichrome pottery is dated “...unmistakably to the beginning of the end of Egyptian domination in the 12th century BC...” (Dothan 1982b: 767-768).

Conclusion

The fertile Southwestern Palestine has attracted tribes to settle and create the earliest human sediments in the Late Neolithic period. This early period is represented in Gaza as well due to its environmental and topographic variant; the sea in the west, mounds and sand dunes in the east, fertile soil along the valley, and huge water reservoir under the sand dunes. In the Bronze Age Gaza experienced the first phases of its urban evolution attested in series of major sites on mounds along the Mediterranean coast, Gaza valley and along the ancient route (Horus way) connecting Egypt (Africa) in the south with Canaan, the later Palestine, Syrian, Mesopotamia (Asia) in the north and east. The Bronze Age sites of Gaza are providing rich architecture and material culture serving as a first hand data for assessing and reconstructing Gaza urbanism during the various phases of the Bronze Age, from the late 4th millennium BC down to the 12th century BC. Gaza archaeological record has attested the earliest sediment in Gaza at the Late Neolithic site of Tel Qatif, the evolution of early urbanism at the EB site of Taur Ikhbaineh, the advanced urbanism represented by city fortifications (rampart) and high degree of domestic architecture during the EBI and EBIII at the site of Tell es-Sakan. The MB and LB urbanism is represented in the major site of Tel al-‘Ajjul, where series of cities, forts, palaces, domestic dwellings, a harbor, tunnels and streets leading to the city centre have been uncovered.

In addition, the advanced urbanism of Bronze Age Gaza is represented by regular city planning, inner city public buildings, fortifications, well planned dwellings, straight intersecting streets and other infrastructural facilities.

The advanced architecture is associated with a wide variety of imported pottery from many cultures. At Tell al-‘Ajjul, for instance, there are imports from Egypt, Cyprus, Mycenae, Euphrates, and Jordan Valley. They, alongside with small finds, local manufactured jewelry and gold, attest economical prosperity and regional contacts and trade relations with these cultures. The MB site of Deir al-Balah, approximately 17 km south of Gaza city, is offering a unique example of a Canaanite stronghold on Horus way as its square layout is identical with the stronghold of depicted in the relief map of Seti I's campaigns in Canaan (early 13th century) in the northern wall of the hypostyle hall of Amon's temple at Karnak.

Sun-dried mud-bricks is the dominant during the Bronze Age. Sand stone is used in a few cases, particularly as a foundation layer for the mud-brick walls and as support against water or for wooden posts. Cemented calcareous (locally called *kurkar*) was also used as it is available along the Pleistocene coastal plain and becoming increasingly older eastwards. Today, the present topographic map of Bronze Age Gaza depicts the major urban Bronze Age sites in the valley zone (Taur Ikhbaineh, Tell es-Sakan, Tell al-‘Ajjul and Mughraqa) reaching in the south as far as the present day municipal areas of Deir al-Balah (the settlement and cemetery of Deir al-Balah) and farther south on the coast of Khan Younus (Tell Ridan). Further Bronze Age sites are most likely expected to be discovered in Gaza regions, particularly under the sand dunes stretching along Gaza coast.

References

- Albright, W.
1938 Chronology of a South Palestinian City, Tel El-'Ajjul, *The American Journal of Semitic Languages and Literatures*, vol. LV, No. 4, pp. 337-359.
- Bienkowski, P./Van Der Steen, E.
2001 A New Framework for the Late Iron Age in Southern Jordan and the Negev, *ASOR*, No. 323, pp. 21-47.
- Burdajewicz, M.
2000 Gaza Pendant les Periodes du Bronze moyen et recent et de l'Age du Fer, *Gaza Mediterraneenne, Histoire et archeologie en Palestine*, Paris, pp. 31-39.
- Butt, G.
1995 Life at the Crossroads, Nicosia
- Dothan, T.
1993 Deir El-Balah, *EAEHL*, vol. 1, pp. 343-347.
1982a The Philistines and Their Material Culture, *Israel Exploration Society*, Jerusalem
Dothan, T.
1982b Lost Outpost of the Egyptian Empire, Deir el-Balah-Way Station of Empires, *National Geographic*, Washington, pp. 743-763, 768.
- Dothan, T./Dothan, M.
1992 People of the Sea, New York
- Finkelstein, I.
1995 The date of the settlement of the Philistines in Canaan. *Tel Aviv* 22, pp. 213-239.
- Fischer, P./Sadeq, M.
2002 "TELL EL-'AJJUL 2000", Second Season Preliminary Report. *Egypt and the Levant, an International Journal for Egyptian Archaeology and Related Disciplines*, vol. XII, Vienna, pp. 109-153.
- Garstang, D,
1920 The Walls of Gaza, *Palestine Exploration Fund*, Quarterly Statement for 1920, pp.156-157
- Gitin, S.
2003 Israelite and Philistine Cult and the Archaeological record in Iron Age II: The „Smoking Gun“ Phenomenon, *Symbiosis, Symbolism, and the Power of the Past Canaan, Ancient Israel, and Their Neighbors from the Late Bronze Age through Roman Palaestina*, Proceedings of the Albright/ASOR Centennial Symposium, Jerusalem, May 29-31, 2000, Dever, W and Gitin, S. (eds.), Eisenbrauns, pp. 279-295.
- 1997a Philistines: Late Philistines, *The Oxford Encyclopedia of Archaeology in the Near East*, ed. E. Meyers. New York, Pp. 311-313
1997b Philistia in Transition: The Tenth Century BCE and Beyond, in *Mediterranean Peoples In Transition, Thirteenth to Early Tenth Centuries BCE*, ed. Seymore Gitin, Amihai Mazar and Ephraim Stern, Israel Exploration Society, Jerusalem, pp. 162-183.
- Kempinski, A.
1993 'Ajjul, Tell El, *EAEHL*, vol. 1, Jerusalem, pp. 52-53.
- Mazar, A.
1997 Iron Age Chronology: A Reply to I. Finkelstein, *Levant*, XXIX, pp. 157-167)
- Miroschedji P./Sadeq M.
2001 "Les Fouilles de Tell Es-Sakan (Gaza): Nouvelles Donnees Sur Les Contacts Egypto-Cananees aux IV-III Millenaires" *Paleorient*, Vol. 27/2: 75-104. Paris.
2000 "Tell es-Sakan", *Gaza Mediterraneenne, Histoire et archeologie en Palestine*. Paris.
- Oren, E.
1987 The "Ways of Horus" in North Sinai, in A. F. Rainey (ed.), *Egypt, Israel, Sinai: archaeological and Historical relationships in the Biblical Period*, Tel Aviv University, PP. 69-119.
- Petrie, W. M.
1931-1934 Ancient Gaza, 1-4, London.
- Phythian-Adams, W.J.
1923 Reports on Soundings at Gaza, Etc., *Palestine Exploration Fund, Quarterly Statement*, 55:11-17.
Phythian-Adams, W. J.
1923 The problem of "Deserted Gaza", *Palestine Exploration Fund, Quarterly Statement*, 55, pp. 30-36
- Sadeq, M.
1997 "Development of the Archaeological Sites: Consideration of Several Aspects" Proceedings of the International Conference on Tourism, organized in January 1997 by the Institute of Archaeology and Anthropology of al-Yarmuk University (Jordan).
1999 "Mosaic Pavements Recently Found in the Gaza Strip" The Madaba Map Centenary, Traveling Through the Byzantine Umayyad Period, proceedings of the International conference held in Amman, 7-9 April 1997. Jerusalem.
- Zwingenberger, U.
2001 Dorfkultur der fruehen Eisenzeit in Mittlepalaestina, Universitaetsverlag Freiburg Schweiz.