

Gaza Economy and Trade during the Bronze Age

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Abstract

The geo-strategic location of Gaza on the ancient land route between Canaan in the North and Sinai in the south, has attracted people to settle and create the earliest human sediments since the Neolithic period and then extensively, in the Bronze Age (3200-1200 B.C.). Bronze Age in Canaan witnessed “the emergence of cities” (Mazar 1992: 91) and the evolution of the first great phase of urbanism in the Near East. It also witnessed human cultural developments in metalwork techniques applied in smelting copper and tin ores to produce bronze which is more harder than copper. This is a major development of efficient and effective tools and weapons manufacturers representing a quantum leap in the evolution of civilization (Bar-Yosef 1992: 10-39).

This article discusses the characteristics of Gaza economy and long distance trade during the Bronze Age based on a series of archaeological excavations conducted within the present borders of Gaza Strip, in which the author participated.

The main sources of Canaan economy during the Bronze Age are the archaeological record and the various archaeo-potanic and archaeo-zoologic analytical studies of remains recovered during the excavations. The both Early Bronze sites of Taur Ikhbeineh and Tel es-Sakan, the both Middle and Late Bronze Age sites of Tel el-‘Ajjul and al-Mughraqa as well as the both Late Bronze Age sites of Deir el-Balah (17 km south of the city of Gaza) and Tel Ridan in Khan Younis (23 km south of the city of Gaza) are our major primary sources for this article. In addition, the comparative studies between archaeological discoveries in Gaza and other contemporaneous sites in Canaan are further supporting sources for understanding the economy during this period.

In parallel to the archaeological record and the interpretation of silent evidence (objects) uncovered in excavations, the ancient text is a primarily source but there is a lack of documents in the early Bronze Age. On the contrary, enormous information on the local products and economic indicators are mentioned in the tribute and booty lists of the royal Egyptian annals and letters dated to the Middle and Late Bronze Ages.

In discussing Gaza economy during the Bronze Age we will apply a vertical chronologic approach highlighting the various local economic potentials of each period.

Economy of the Early Bronze Age

The Early Bronze Age marked the first significant economic developments in Canaan. The concentration of Early Bronze Age settlements in Mediterranean zones led to the emergence of the so-called “the Mediterranean economy” beginning of the third millennium onward. It based on a combination of goat and sheep herding with cultivation, especially of the olive, vine, and other fruit trees, which led to a surplus of food and increase in population (Ben-Tor 1992: 96). This happened in parallel to changes occurred in the settlements as they became more urbanized and experienced the construction of solid fortifications, developed urban planning and architecture as evident in Gaza at Tel es-Sakan and at the later Middle and Late Bronze Age sites of Tel-el-‘Ajjul and the Late Bronze Age site of Deir el-Balah.

Animal domestication, agriculture and industry are, generally, the main potentials of Gaza economy during Bronze Age. Our information on animal domestication and agriculture of the Early Bronze Age are little compared with the later Bronze Age periods due to the poor preservation of organic remains (with the exception of bones) in the Mediterranean climate. Accordingly, the laboratory results of these articles are few. Nevertheless, there are considering conclusions resulted from archaeo-zoological and archaeo-botanical analysis of organic remains recovered at the Early Bronze Age site of Tel es-Sakan. Abundant of faunal remains studied by Naomi Sykes attest sheep, goat and cattle, which were most probably domesticated either at the site itself or in its vicinity for food and hunting. These animals are supplemented by fish bones and numerous shells, which also prove the people depending on the sea (Miroshedji and Sadeq: 2000 and 2001).

In addition, it is also observed that pig constitute 21% of the zoological remains, which indicate the possibility of pig domestication at the site of Tel es-Sakan (Miroshedji/Sadeq: 2000 and 2001). It is also worthy to mention remains of a donkey burial in stratum IV of area "C" (Miroshedji/Sadeq: 2000). They appeared at other Early Bronze Age sites in Canaan as the donkey served in traction and loading, in farming and in harvesting, as well as a transport means. They, together with ox, were a central element in improving the standard of living in developing the trade system (Ben-Tor 1992: 84). In addition to the donkey, several loci in areas "B" and "C" at Tel es-Sakan attest bones of hippopotamus suggesting that these animals lived in the third millennium B.C. most probably at the mouth of Gaza valley (Miroshedji and Sadeq 2000: 41).

As for agriculture, the EB II-III sites of Canaan experienced more developed living standard in subsequent to the increase of population number which, in turn, led to the emergence of many small human agricultural villages in the vicinity of the-walled cities such as the uncovered villages few kilo meters east of Gaza in the vicinity of Tel Far'a North, and those in the Saba' Valley near Tel Arad (Ben-Tor 1992: 96).

In addition to the food (mainly fish) brought from the sea, the archaeo-botanical researches at Tel es-Sakan (the flotation of some 3000 liters of sediments enabled Margarita Tengberg) resulted the recovering of a considerable quantity of vegetal debris, mainly cereals (wheat and barley), legumes (mostly peas and lentils) but also olive and grapes which were the most important crop grown extensively during the Early Bronze Age (Miroshedji and Sadeq 2000: 41). Their production are always connected historically with the Mediterranean culture as olives and grapes can be grown in poor soil and accordingly does not require much care. They produce rich food and can extract oil and wine, which can be conserved for Long period. So it is understood why oil and wine are among the leading and strategic products delivered to Egypt and mentioned in Egyptian annals. The discovery of large number of wine jars (some of them bear the *Serekh* (emblem or cartouche of Narmer, the first pharaohs of the Old Dynasty) at Tel es-Sakan attests, most likely, the existence of wineries at the site, the cultivation of grapes in farms (or villages) outside the city walls. The jars may also attest a kind of common interests or, probably, commercial relation maintained between the urban settlers of Tel es-Sakan and their neighboring farmers.

The agricultural products in Gaza fit, in fact, the same agricultural characteristics of the other Canaanite sites which experienced an increase in cereal crops, vegetables and legumes (i.e. lentils and Chickpea, peas, beans), fruits (i.e. almonds, walnut, figs, plums and dates and pomegranate). These products led to the rise in living standards and the increase in population, and even provided a surplus to export abroad, considering that trade relation with Egypt in the Early Bronze Age has had a greater effect on the southern Canaanite sites (Ben-Tor 1992: 97).

Economy of the Middle and Late Bronze Ages

Gaza archaeological record evidencing Gaza economy during the Middle and Late Bronze Age is much comprehensive than of the preceding period. It is evident in the long lasting excavations in Gaza at the sites of Tel al-'Ajjul (Fischer and Sadeq 2001 and 2002; Tufnell: 1993; Kempinski: 1993; Petrie: 1906 and 1931-34) and Deir el-Balah (Dothan: 1972, 1978, 1981, 1985, 1998) as well as the excavations at al-Mughraqa (Steel 2002; Steel, Manley, Clarke and Sadeq 2002). Unlike the Early Bronze Age, in which the contemporary text is scarcely, the Middle and Late Bronze Ages in Canaan witnessed various texts complementing, in much the archaeological record. Most importantly are the Egyptian annals and Tel el-'Amarna letters.

The potentials of Gaza economy (agricultural products, animal domestications, and industry) remained almost the same during the Middle and Late Bronze Ages. Despite a series of Canaanite sites experienced decline in urbanism, politic and administrative system during the Late Bronze Age, their economy was not impacted as inferred from the fact that Canaanite local rulers and individuals were able to deliver quantities of precious articles, such as Silver, as tributes to the pharaohs and also inferred from the quality of the architecture and associated material culture exposed in various sites dating back as down as to the 13th century B.C. (Na'aman 1981: 185).

In term of agricultural products, archaeo-botanical studies of faunal remains recovered from Middle and Late Bronze Age site of Tel el-'Ajjul during the renewed excavations in 2000 attest various agricultural products including hulled barley, emmer, einkorn, olive, raisin, fig, lentil and broad bean. Like during the Middle Bronze Age, grain seems also to be one of the most important agricultural products in Canaan during the Late Bronze Age. Despite Egypt produced grain during this period, the annals of Thutmoses III mention grains as one of the tribute items delivered by Canaanite rulers to the Egyptian court (Ahituv 1978: 96). Its delivery might be interpreted as a symbol of loyalty to Egypt. In addition, the annals of Thutmoses III and two contemporary Ta'anak letters mention strategic Canaanite food products saved, together with equipment and materials supplies, for future Egyptian Asian campaigns, in storage facilities at sea ports along the eastern Mediterranean. Among the stored Canaanite products bread, cereals, oil and olives, cattle and goats, honey, wine and feed hay (Na'aman 1981:180). The store description might be inferred from the archaeological record. Large contemporary stores (40 X 30 m) have been uncovered at the site of Beth Yerah (Bet Yerah or Khirbet Kerak) located at the southern tip of the freshwater lake of Tiberias. According to Na'aman, this storage capacity of grain exceeded the city needs and might be delivered to its surrounding areas (Na'aman 1981: 104). Gaza might have had such stores because of its fertile soil and agricultural products, as well as its location both, on the Mediterranean coast and on Horus way in the South Canaan. Tel el-'Ajjul might be a strong candidate for the location of these stores as it was a large urban center during the Middle and Late Bronze Ages alike and possessed, as Petrie argues and discussed previously, a harbor adjacent to its southern side dominating the valley (for details, see Petrie Petrie: 1931-34).

None of the excavations carried out at the Middle and Late Bronze Age sites of Gaza has resulted archaeozoologic studies, nevertheless the Egyptian text provide us with information in this respect. Tel el-'Amarna letter mention, for instance, that South Canaan (considering Gaza in its heart) sent 500 cattle and quantities of goats and cheeps to Egypt. The product of these animals seems to be common in Canaan. The same source mentions that the Egyptian army booted 2316 head of goats and Sheep from the city of Megiddo and pointing out that the ratio of goats to sheep is one to ten (Ahituv 1978: 100).

Industry is the next potential of Gaza economy after agricultural products and animal domestication during the Middle and Late Bronze Ages. The excavations of Dothan at the artisan village of Deir el-Balah in Gaza revealed a unique example of an artisan village dating to the period from the reign of Ramses II (1304-1237 B.C.) down to the end of the 13th century B.C. (Dothan 1979: 99). The artisan village is contemporary to Late Bronze cemetery exposed in the vicinity. Besides the residential area (attested by sedentary evident such as *tabuns* and cooking pots), the artisan village contains remains of workshops, raw material and unfinished products. Almost all crafts related to the manufacture of the anthropoid clay coffins and the burial findings at the site are attested in the village. In addition, it is most likely that the exposed circular weights were used in producing linen threads as linen remains were found attached to bronze pieces found wrapped inside the clay coffins. Crushing stone bowls with faint remains of ocher-color also attest their link with the coffins painting.

Of industrial products, ancient text evident that Canaan produced chariots and weapons. Chariots decorated with gold and/or silver and also painted with various colors are mentioned for instance in the booty lists of Thutmoses III and Amenhotep II (Ahituv 1978: 103). Canaan seems to have imported gold, silver, copper and precious stones for its manufacturing workshops. This is evident at the sites of Deir el-Balah and Tel el-'Ajjul, considering that bronze and copper were used for manufacturing tools, weapons and household. Some of these precious products are also mentioned in tribute lists delivered to Thutmoses III as a proof of loyalty (Ahituv 1978: 101, Na'aman 1981:176).

Gaza Trade during the Bronze Age

Due to its geo-strategic location on the Mediterranean and the ancient way connecting Egypt with Canaan, Gaza played a central role in both; inter-Canaanite trade and long distance trade with Egypt during the Early Bronze Age and also with other eastern Mediterranean regions, such as Cyprus and Mycenae, during the Middle and late Bronze Ages. This trade relation can be inferred from both; the archaeological record and ancient Egyptian Texts.

Gaza inter-Canaanite trade during the Bronze Age:

The demographic aspect, security, open borders, and mutual needs are important requisites for flourishing local trade between the Canaanite human settlements during the Bronze Age. The archaeological objects exposed in various sites are the most important sources of information for the question in which extent the Canaanite settlements have had inter commercial activities during this period. Pottery wares; both locally produced and imported, are always the dominant material culture exposed at all archaeological sites; therefore, they are essential indicator for examining the inter-trade between the Canaanite centers (Ahituv 1978: 105).

Gaza Early Bronze age sites of Taur Ikhbeineh and Tel es-Sakan are characterized with assemblages of locally produced pottery wares following the manufacturing traditions adopted during the preceding period, especially in term of styles and techniques, such as the storage jars, cooking pots, and various types of bowls. The continued manufacturing traditions from period to period are, with no doubt, and indicator for the evolution of a class of potters within the local society who gained accumulated experience inherited from the previous generations, but in an environment of peace, uninterrupted demographic continuation, urban development, flourishing economy and safe local markets.

In parallel to the inherited skills, the Early Bronze Age also experienced new major manufacturing enhancements embodied in new types of wares, such as producing red slip wares and burnish wares decorated with intersecting lines. In addition, the vessels clay became more meticulous and accordingly the vessels were made thinner and their burning became more advanced. Samples of these manufacturing developments have been found at Early Bronze Age sites of Gaza reflecting, with no doubt, an experience gained by a class of potters and workshops. Their production might have exceeded, in quantities and qualities, the needs of their local community and resulted, in presence of peace, open borders and flourishing markets, exporting the surplus to neighboring Canaanite communities. The existing of parallel pottery products at almost all Canaanite sites may be considered as an indicator for the existence of local export and import activities and exchange of manufacturing experience between potters living in the various Canaanite sites.

Local Canaanite commercial activities, even within the one settlement and between the a settlement and its surrounding rural farms or villages, are also inferred from the archaeological record. The large number of wine jars fragments exposed at the Early Bronze Age site of Tel es-Sakan may evident the existence of local winery or wineries at the site and may evident mutual commercial interests between urban settlers and farmers living in the margins of Tel es-Sakan outside the city walls. Grapes, which are attested at the site, can be delivered for wineries of Tel es-Sakan and exchanged against, for instance, products fulfilling the farmer needs such as pottery wares and metal works. In addition to incorporating manpower in the settlement construction projects and in the army, the farmers can also provide the settlement market with various agricultural products, domesticated animals and dairy items as well as traditional handicrafts such as ropes, wool threads and baskets. Nevertheless the farmers various products (with the exception of bones) has not been surviving long periods due to the Mediterranean climate conditions and accordingly harder to be attested at sites compared with the solid remains of ceramic, flint and other material which evident urban products. While the dominating authority usually determined the value of the strategic or basic agricultural products, such as grain and wine, the values of orderly items, which were used by rich and poor people alike, seem to be determined by the local market circumstances of supplies and demand.

The above profile of inter-Canaanite relations and possible trade is applicable, but in a larger scale, during the succeeding periods. The Middle and Late Bronze Age sites of Tel el-‘Ajjul, al-Mughraqa and Deir el-Balah in Gaza are characterized with locally manufactured and imported items. The excavation of Dothan in Deir el-Balah revealed the remains of an “artisan’s village” dated to the Late Bronze Age (Dothan 1979:99). It contains the remains of many crafts and products resembling their parallels at the adjacent contemporary cemetery. Besides the Canaanite local styles produced in the artisan village, there are also various objects imitating the Egyptian products such as scarabs, seals, amulets and finger-rings. As Dothan argues, the impression given is that they also were locally made because their styles of workmanship, which resemble those parallels, exposed at other coastal sites in Canaan (Dothan 1979: 99).

In parallel to the supposed local market or place of goods exchange there was, perhaps, a “black market” dealing with basic or precious items, which were used to be a royal monopole. The excavators at the Late Bronze Cemetery of Deir el-Balah observed that one of its coffins (in tomb 116) had been stolen shortly after the burial, and conclude that it is obvious that the robbers had taken the gold and carnelian objects and kept those pieces made of pottery, such as beads, gaming pieces and also a clay seal despite the latter bearing the name of Ramses II (Dothan 1979:27).

Gaza long distance Trade

As discussed in a previous part of this article, Gaza Bronze Age sites reveal rich assemblages of imported items made of various materials and for various functions. They reflect, in much, flourishing economy, people wealth and the existence of long distance trade. Egypt was the main supplier to Gaza during the entire historic sequence of the Bronze Age. This is, in fact, due to its close geographic location to South Canaan and also to its historic political domination in southern Canaan. Nonetheless, the Egyptian items (mainly earthenware products) exposed in Gaza are not among the strategic or basic goods which were used to be Egyptian royal monopole, they, most likely, reached Gaza through individual long distance trade via both Horus way and sea routes.

Gaza long distance trade might be obvious in the rich assemblages of various items originated from Jordan Valley, South Lebanon, North Syria, Anatolia, Middle Euphrates, Mycenae and Cyprus. Since these regions have never had any kind of political authority or domination in Gaza during the Bronze Age we may consider the existence of their products in Gaza as a result of long distance trade determined by mutual needs in an environ of good relation, peace and common interests.

The followings are samples of items found at Gaza Bronze Age sites symbolizing long distance trade with Egypt, Cyprus and other eastern, western, and Mediterranean regions.

Trade with Egypt:

It is generally argued that the Egyptian earthenware products at the Early Bronze Age sites of South Canaan (i.e Tel Erani, Tel Maahaz, and Tel Halif) constitute most of the found pottery assemblages (Ben-Tor 1992: 93). This is also applicable for Gaza sites. Approximately 90 to 95 percent of the total pottery wares found within strata IX-VIII of the Early Bronze Age site of Tel es-Sakan are both, Egyptian and locally wares imitating the Egyptian wares. This is also applicable for the Early Bronze Age site of Taur Ikhbeineh. In addition to pottery, the excavations at Tel es-Sakan reveal other Egyptian items such as a fragment of pierced bone object, most likely, a part of etiquette, a carnelian pendant, a figurine of frog (made of soft white limestone), small pieces of heavy weights (originated from the Red Mountain area close to Cairo), parts of a basalt vase, imprints fragments of Egyptian clay cylinder-seals, an ivory “tag”, a shell pendant, flint tools and arrow heads. Samples of Canaanite products bearing the Egyptian manufacturing finishing features are bowls, small vases, jar stands, flint blades, and *tabun* fragments, which were used for bread preparation.

In term of the Canaanite imports in Egypt during the Early Bronze Age we may mention Gaza wine as one of the basic tribute items delivered to Egypt. The royal nature of this product is evident in fragments of wine jars bearing the *Serekh* (emblem or cartouche) of Narmer, the first pharaohs of the Old Dynasty. They were found in stratum IX and VIII of Tel es-Sakan. Similar fragments of Narmer *Serekh* in Canaan were also found at the sites of Tel Erani and Tel Arad evidencing the similar practice during this period (Miroschedji and Sadeq 2001 and 2002; see also Ben-Tor 1992: 93). Despite wine was one of the royal items delivered to the Egyptian court; it is also likely that a surplus of wine was among commercial items carried on in both; local market and long distance trade alike, either as individual trade or by particular merchants for the benefit of the Egyptian court and/or the Canaanite ruling elites.

The immediate Canaanite products discovered in Egypt, albeit in a few number and less diversity compared to Egyptian wares in Canaan, has important implications for the relation between both sides. The Canaanite products in Egypt were found at sites of East Delta, especially at Minshat Abu Omar, a region that had strong relations with Canaan, as well as at sites in central Egypt, such as the el-Gerz, Naqada and Abu Sir el-Malaq, where wood and ivory tablets were found in tombs of first Egyptian dynasty. They depict people carrying goods over their heads. Considering their clothing types, they seem to be Canaanites. The scenes are interpreted by scholars as symbolic scenes of commercial relation (dealers with commercial goods) between Egypt and Canaan in the beginning of the EBI, which increased significantly during the EBII (Ben-Tor 1992: 94).

In addition, there are also small vessels found in Egypt which could be attributed (according to Kenyon's pottery classifications) to the groups "A" and "B" of the Proto-Urban pottery. Both groups, which are most likely burial items, were famous in Canaan, and reached South and East Delta as well as Egypt proper by traders from Canaan. (Ben-Tor 1992: 93).

Trade with Egypt during the succeeding period, namely the Middle and Late Bronze Ages, became much extensive. The excavations of both, Petrie at the site of Tel el-'Ajjul and Dothan in Deir el-Balah revealed series of imported items reflecting close relation with Egypt, and the wealth of the people who occupied both sites. In addition, we identified during the renewed excavations at Tel el-'Ajjul and al-Mughraqa, for instance, alabaster vessels and faience/glass objects originated from Egypt and found together with local products imitating the Egyptian wares. Egyptian and Egyptian-style pottery wares are represented, for instance, by shallow bowls and perform and carinated jars. Further Egyptian imports during Late Bronze Ages are small finds include five scarabs well dated to the second period of the 15th Dynasty. Others are made of bronze such as needles, toggle pins, a limb cover (armor) as well as trinkets including a ring and a bead, a pendant of silver and one of gold sheet decorated with the image of Hathor, the Egyptian feminine goddess. There are also stone objects include a dagger pommel, bowls of basalt, clay figurines, faience objects and incised bone plaques.

It can also be inferred from Egyptian written sources the existence of maritime commercial activities of private nature. Captain of the ship and boats taking advantage of their participation in military operations loaded their goods on board of their vessels (Bergoffen 1991: 72). The Egyptian officials did not give this matter the importance because this trade was modest and did not have any impact on the supply of the army, or the economy of the Kingdom.

Trade with Cyprus:

Gaza experienced intensive import from northern Mediterranean regions during the Middle and Late Bronze Age. Cyprus stood as the next supplier after Egypt. The excavations at Tel el-'Ajjul exposed rich assemblages of Cypriot ceramics dated to the Middle Bronze Age and reached its zenith during the second phase of the Late Bronze Age (LBII) (for details, Fischer:2001, Fischer and Sadeq 2002 and 2000). It appears that the commercial relations with Cyprus were not formal in nature, but rather a type of private business. There are no indications in text or archaeology for organized import from Cyprus by local authority. While the Egyptian texts attest Pharaohs communication with kings of Cyprus who delivered copper to Egypt as tribute, the texts scarcely mention other Cypriot products. The commercial relation between South Canaan (including Gaza) and Cyprus was even stronger than that between the latter and North Sinai (in the area between Rafah and Al-Qantara). According to her study on the overland trade in Northern Sinai, Bergoffen argues that while just 279 pieces of Late Cypriot pottery were found in twenty-four sites in North Sinai, the excavations in South Canaan revealed 1434 pieces in just seven archaeological sites (Bergoffen 1991: 69). Two of the sites mentioned by Bergoffen are in Gaza, namely Tel el-'Ajjul and Tel Ridan. The others (Tel el-Far'a South, Tel el-Hasa, Tel Jamma, Tel Sharia, and Tel Harur) are in the Negev, slightly to the east of Gaza.

The strong commercial relation of South Canaan with Cyprus is also observed in the various types of Cypriot ceramic wares found in South Canaan but not in North Sinai such as the ceramic types known as red-on-black, white slip I (mainly bi-chrome-decorated) and red lustrous wheel-made and possibly also vessels of the bi-chrome wheel-made ware. In her study, Bergoffen also observed that it is rare to find more than one Cypriote vessel in the Egyptian grave, while graves in South Canaan contain a number of vessels ranging between two and seven, such as at the site of Tel el-'Ajjul (see Petrie 1932: 53-54) and Tel Ridan in Gaza. The richness and widespread of the Cypriot ceramic products in South Canaan can be also inferred from the observing that they were used by rich and poor alike, while in Egypt their use was restricted in the graves of the middle class, and not of the richer or poorer class (Bergoffen 1991: 69), which also indicate, in turn, that the presence of Cypriot ceramics in South Canaan graves does not necessarily reflect a specific high social status or distinct of the dead as the case in Egypt.

Gaza location as a Canaanite bordering territory towards Egypt might have served as a transit or regional trade center for Cypriot redistribution in the beginning of the Late Bronze Age. The large number of Cypriot pottery with various types and high qualities found at Tel el-'Ajjul (for details, Fischer:2001, Fischer and Sadeq 2002 and 2000) may suggest that the site as a candidate for being a major trade and transit center for Cypriot products delivered to North Sinai, bearing in mind that neither archeological record nor text attest the residence of Cypriot businessmen in Gaza.

Trade with other regions:

In addition to the imports from Egypt and Cyprus, the excavations at Tel el-‘Ajjul reveal various imported items from other Eastern Mediterranean regions. Among the imports from the Jordan Valley and southern Lebanon are chocolate-on-white bi-chrome, chocolate-on-white, and eggshell ware. Two sherds of grey ware symbolize import from their origins in Middle Euphrates, Anatolia and northern Syria. There are also four body sherds and partially preserved vessel of Mycenaean-type.

Gaza seems to have had trade contact with Old Assyrian since the Middle Bronze Age. A steatite cylinder seal in an Old Assyrian style (2.9 cm high, 1.7 cm in diameter) was found during the excavations at al-Mughraqa in 2000. The seal depicts three men wearing crested-dress (or hairstyle) and approaching a group of symbols. The foremost figure wearing a tight-length tunic on the seal is flanked by ball-staff symbols of different sizes. The seal also depicts a bull approaching the three men. It is associated with a scorpion and a bird beneath and above it. According to his study, Dominique Collon argues that the seal of al-Mughraqa in its Old Assyrian style might be dated to the 18th century B.C. and best represented by impressions on clay envelopes found in the merchant colony or *kârum* of Kaneš (Collon 2002: 229), which surrounded the city of Neša, the present day Kültepe in central eastern Anatolia. He also states that al-Mughraqa seal is very similar to one discovered in Kaneš (presently in the British museum) and to another one discovered recently in Ashkelon, concluding that the bull depiction of Gaza seal was probably as a symbol of Assyrian trade (Collon 2002: 232). Once this hypothesis would have been approved it may indicate that al-Mughraqa had commercial long distance link with Old Assyrian on the one hand and with both, Tel el-‘Ajjul and Deir el-Balah on the other bearing in mind the rich assemblages of precious stones found at the first site and an artisan village found in the latter.

TO conclude:

The Bronze Age (3200-1200 B.C.) in Canaan, including Gaza in the south, witnessed the emergence of cities, increase of population, cultural developments and the evolution of metalwork techniques, which resulted the production of bronze. The archaeological records of the Bronze Age sites of Gaza attest strong economy and regional and long distance trade. The economy of this period was a combination of animal domestication, land cultivation, plantation and industry. They resulted a surplus of food, which was exported to close and far regions. This is evident based on archaeo-zoological and archaeo-botanical analysis of organic remains recovered at the Early Bronze Age site of Tel es-Sakan. In addition, the discovery of large number of wine jars at Tel es-Sakan attests, most likely, the existence of wineries at the site, the cultivation of grapes in the vicinity.

Gaza economy during the Middle and Late Bronze Age is much comprehensive than of the preceding period. The potentials of Gaza economy (agricultural products, animal domestications, and industry) remained almost the same during the Middle and Late Bronze Ages. Canaanite local rulers and individuals were also able to export quantities of precious articles as tributes to the pharaohs. The renewed excavations at Tel el-‘Ajjul in 2000 attest various agricultural products, among them grain, which, for instance, was one of the tribute sent to Thutmose III as, most likely, a symbol of loyalty to Egypt. In addition, the Egyptian letters of Tel el-‘Amarna mention, for instance, that South Canaan (considering Gaza in its heart) sent 500 cattle and quantities of goats and cheeps to Egypt. The Egyptian army booted 2316 head of goats and Sheep from the city of Megiddo north of Gaza.

Industry is the next potential of Gaza economy after agricultural products and animal domestication during the Middle and Late Bronze Ages. Among the discoveries at the artisan village of Deir el-Balah there are raw material and unfinished products, production of linen threads and clay anthropoid coffins.

Gaza played a central role in both; inter-Canaanite trade and long distance trade with Egypt and eastern Mediterranean regions, such as Cyprus and Mycenae during the Middle and late Bronze Ages. Locally produced and imported pottery wares are always a major essential indicator for examining the inter-trade between the Canaanite centers. Similar pottery types were found at neighboring Canaanite sites, which is an indicator for the existence of local export and import activities and exchange.

While the ruling authority usually determined the value of the strategic or basic agricultural products, such as grain and wine, the values of orderly items, which were used by rich and poor people alike, seem to be determined by the local market circumstances of supplies and demand.

The Middle and Late Bronze Age sites of Tel el-‘Ajjul, al-Mughraqa and Deir el-Balah in Gaza are characterized with locally manufactured and imported items. Besides the Canaanite local styles produced in the artisan village, there are also various objects imitating the Egyptian products.

Gaza Bronze Age sites reveal rich assemblages of imported items reflecting the flourishing economy and the existence of long distance trade with Egypt due to its location close to Gaza.

Approximately 90 to 95 percent of the total pottery wares found at Tel es-Sakan and Taur Ikhbeineh are both, Egyptian and locally wares imitating the Egyptian wares. Among the Canaanite imports in Egypt during the Early Bronze Age are grain, wine and olive oil. Local wine jars bearing the *Serekh* (emblem or cartouche) of Narmer were found at Tel es-Sakan.

Canaanite products in Egypt were found at a series of sites of East Delta, especially at Minshat Abu Omar and in central Egypt, such as the el-Gerz, Naqada and Abu Sir el-Malaq. Trade with Egypt during the Middle and Late Bronze Ages became much extensive. A series of imported Egyptian items at Tel el-‘Ajjul and Deir el-Balah show close relation with Egypt.

Gaza has also intensive import from northern Mediterranean regions during the Middle and Late Bronze Age. Cyprus stood as the next supplier after Egypt. Assemblages of Cypriot ceramics were found at Tel el-‘Ajjul. Graves in South Canaan contain a number of vessels ranging between two and seven, such as at the site of Tel el-‘Ajjul and Tel Ridan in Gaza. In addition to the imports from Egypt and Cyprus, the excavations at Tel el-‘Ajjul reveal various imported items from Jordan Valley and southern Lebanon, Middle Euphrates, Anatolia and northern Syria.

Gaza seems to have had trade contact with Old Assyrian since the Middle Bronze Age. A steatite cylinder seal in an Old Assyrian style date to the 18th century was found during the excavations at al-Mughraqa in 2000. The bull depiction of the seal was probably as a symbol of Assyrian trade with Gaza and the surrounding major Canaanite settlements.

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