ROSAPAT 04

ASIDE THE SPRING: BYBLOS AND JERICHO FROM VILLAGE TO TOWN IN THE SECOND HALF OF THE 4TH MILLENNIUM BC

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1. Introduction

Early Bronze Age I is a crucial period in the history of Levant, witnessing the settlement of new human groups and the formation of social entities expression of a new culture¹, which will mark the definitive establishment of sedentary agricultural communities, and will set the bases for the successive rise of the earliest urban societies (fig. 1)².

In this period the two sites of Byblos (Jbail) in Lebanon and Jericho (Tell es-Sultan) in Palestine show a somewhat similar growth, during what may be called an incipient urban phase of progressive transformation and cultural flourishing, with several similar cultural elements deserving further investigation. In spite of a sometimes puzzling archaeological periodization³, and of tricky terminological correlations (tab. 1)⁴, a comparison of material and cultural developments of the two sites allows to highlight some relevant comparable phenomena, which may help in focusing shared socio-cultural aspects typical of the whole Southern Levant in the second half of the 4th millennium BC.

Henceforth, a dialectic parallelism between the two centres in this period will be attempted throughout the examination of threefold archaeological evidence: stratigraphy, architecture and material culture⁵.

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¹ Kenyon 1957, 95-102; 1979, 66-83; Hennessy 1967, 26-48; Lapp 1968, 26-39; 1970, 102-109; Mazar 1992, 92-105.

² Recent excavations in coastal sites of Syria-Palestine from Tell Sianu in Syria (Bounni - al-Maqdissi 1998, 257-261), to Sidon (Doumet-Serhal 2006, 11-17), Beirut (Badre 1997, 12-22) and Tell Arqa (Thalmann 2006, 17-32, 215-223) in Lebanon, have clearly shown that the rise of urbanism was a widespread phenomenon involving the whole Levant in the 3rd millennium BC.

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³ That is true, in particular, for the EB I periodization in Palestine, due to the contemporary presence in this region of different pottery horizons – variably associated with socio-cultural groups – of which a reliable correlation is still to be achieved (Nigro 2005, note 2, tab. 1).

⁴ Especially in Byblos, where the periodization of the site proposed by its excavator (Dunand 1950) adopted a sequence and a terminology independent of the ones elaborated for the contemporary sites of both Syria and Palestine (see tab. 1).

⁵ A first assessment to this matter was offered by A. Ben-Tor (Ben-Tor 1989).

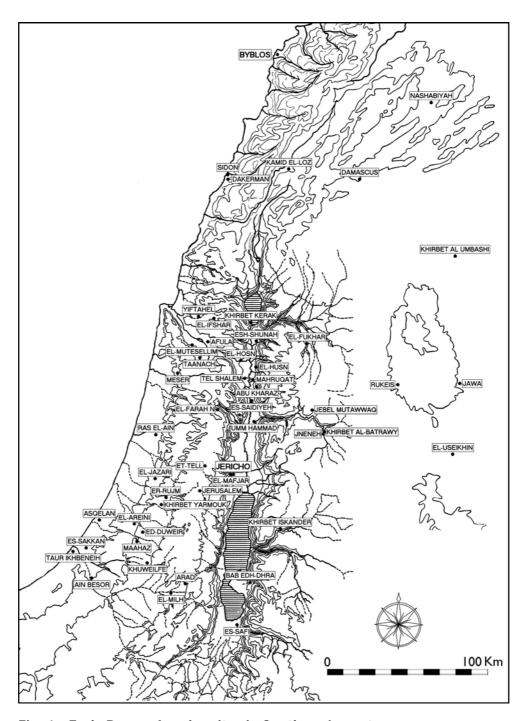


Fig. 1 - Early Bronze I major sites in Southern Levant.

Byblos		Jericho	Palestine	Dating	Egypt ⁶
Phases	Dunand's Phases ⁷	Phases ⁸			
Énéolithique Ancien	<i>Installation</i> IIA	(Sultan IIc)	Late Chalcolithic	3800 - 3500/ 3400 BC	Pre-dynastic Period (Naqada II)
Énéolithique Récent	<i>Installation</i> IIB	Sultan IIIa1	EB IA	3500/ 3400 - 3200 BC	
Proto-Urban Period	Installation III	Sultan IIIa2	EB IB	3200 - 3000 BC	Proto-dynastic Period (Naqada IIIA-B; 0-I dynasties)
EB I-II	<i>Installations</i> IV-V	Sultan IIIb	EB II	3000 - 2700 BC	I-II dynasties (Naqada IIIC-D)

Tab. 1 - Archaeological comparative periodization of Byblos and Jericho during the 4^{th} and the beginning of the 3^{rd} millennium BC 9 .



Fig. 2 - General view of the site of Byblos (Jbail) from the top of he Crusaders' castle towards the sea, from north (2006).

⁸ According to the updated periodization of the recent Italian-Palestinian Expedition at Tell es-Sultan/ancient Jericho (Marchetti - Nigro eds. 1998, 13-14; Nigro 2006a, tab. 1).

⁶ Hartung 1994; Wengrow 2006, tab. 2.

⁷ Dunand 1950.

⁹ For a general chronological reassessment of the *Néolithique* and *Énéolithique* Periods at Byblos in the Southern Levantine context see also Garfinkel 2004.

2. Environmental setting: the Neolithic and Chalcolithic premises

The different geo-morphological environments of the two sites, Byblos on a coastal promontory overlooking eastern Mediterranean (fig. 2)¹⁰, Jericho at the edge of the homonymous oasis in a depression not far from the northern shore of the Dead Sea (fig. 3)¹¹, offered important natural and economic resources for the early flourishing of their communities: at level of primary subsistence, Mount Lebanon piedmont in the first case, the Jericho Oasis in the second, allowed both intensive horticultural cultivation and animal husbandry; while the Lebanese Mountain and the Mediterranean Sea in the case of Byblos, as well as the Jordan Valley and the Wilderness of Judah in the case of Jericho, provided fishes and wild animals (ibex, gazelle, wild boar)¹² to be integrated in the diet of the local populations. Subsistence was, thus, made possible by natural resources well beyond the needs of the Gublian and Jerichoan inhabitants. This presumably protected both centres from dramatic crisis of natural origin, such as dearth, famine and epidemic.

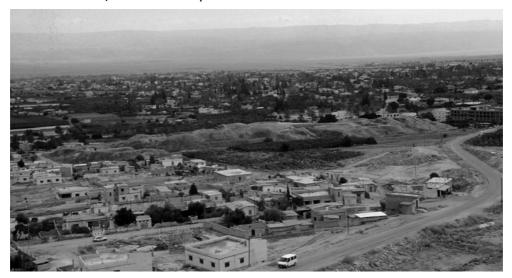


Fig. 3 - General view of the site of Tell es-Sultan/ancient Jericho in the homonymous oasis, from north-west (2000).

¹⁰ On the topography of Byblos see Dunand 1973a, 1-7; Saghieh 1983, x; Margueron 1994, 13-14.

¹¹ Nigro 2005, 4-6.

¹² The gazelle continued to remain a major component of the diet at Jericho during the entire Bronze Age (Clutton-Brock 1979).

These favourable environmental niches were at the basis of the earliest *floruit* of both sites during the Neolithic period, when Byblos and Jericho were characterised by a prominent occupation, which includes them among the key-sites of the whole ancient Near East¹³.

As it concerns Byblos, the Neolithic settlement had an extension of at least 15-20 dunams, and it was displaced on the western and then also on the southern slope of the upper mound overlooking the seashore¹⁴. Stratigraphy testifies to the progressive growth of the settlement, while architecture and material culture illustrate a highly developed community, with houses finely built-up and plastered (fig. 4)¹⁵ and cult installations, among which various symbols (fig. 5)¹⁶ find appropriate comparisons with those known from Palestine, for instance at Jericho itself (fig. 6)¹⁷.



Fig. 4 - Fine-plastered floors of Neolithic houses at Byblos on the western slope of the upper mound (after Dunand 1973a, pl. IX:1).

¹³ Mellaart 1975, 18-69, 227-243; Frangipane 1996, 32-47; Cauvin 2000, 55-60, 76-77, 105-108, 143-154, 171-176, 208-213.

¹⁴ Dunand 1973a, 2, 9-10, 127; 1973b, 15, 59-60.

¹⁵ Dunand 1950, 583-587; 1973a, 9-168; 1973b, 15-16.

¹⁶ Jidejian 1968, 11; Dunand 1973a, 77-79, 123, pls. CX-CXII.

¹⁷ Kenyon 1981, 307, pl. 173a.



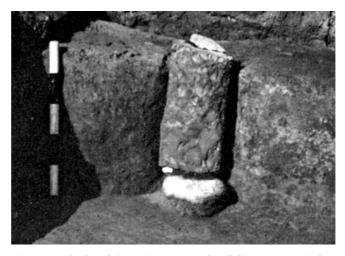


Fig. 6 - Cult object in PPNB building at Jericho (after Kenyon 1981, pl. 173a).

Fig. 5 - Anthropomorphic symbol (n. 24357) from the Early Neolithic settlement at Byblos (after Cauvin 1998, 43).

As it regards Jericho, the settlement was, as it is worldwide known, large and strongly fortified 18 , including some extra-familiar structures such as the Tower excavated in Trench I with the related walls (fig. 7) 19 , and hosted houses very well-refined with lime plaster 20 . A further characteristic was the cult of ancestors, testified to by the modelled and plastered skulls, buried under the floor of the houses 21 .

Fishing and hunting were basic activities of the Byblos and Jericho Neolithic economy, sustaining the earliest steps of agriculture to become the main source of subsistence.

¹⁸ Kenyon 1957, 51-76.

¹⁹ Kenyon 1981, 18-45, pls.4-13, 15-16, 19-20, 23, 26, 203-212.

²⁰ Garstang *et al.* 1935, 167-168; 1936, 68-70; Garstang - Garstang 1948, 58-59; Kenyon 1957, 53-56; Kenyon 1981, 289-308, pls. 159-162, 164b, 168-169, 172a-173.

²¹ Garstang - Garstang 1948, pl. IX,b; Kenyon 1957, 60-64; 1981, pls. 163b, 166-167a, 170b-171.



Fig. 7 - The Pre-Pottery Neolithic Tower in Trench I at Jericho (1998).

In spite of their somewhat amazing growth during the Neolithic Period, when both settlements expanded and extended their dimensions and prosperity, they were not able to fill the gap towards a further stage of social complexity and economic organization in the following Chalcolithic Period. The post-Neolithic horizon in both centres shows many aspects of interest: a new model of agricultural society begins to develop, less structured but capable of quality improvements, above all in the metalwork and craftsmanship productions.

Nonetheless, the Chalcolithic occupation marks a further step in the historical development of Byblos and Jericho, even though with different intensity, since Byblos shows a prominent cultural horizon (Dunand's "Énéolithique Ancien"), characterized by the appearance of curvilinear architecture (fig. 8), adults jar-burials, and the introduction of copper items²², while Tell es-Sultan was not at that time the main settlement in the oasis, and thus provided only sparse remains of this phase (Sultan IIc)²³.

²² Four copper hooks were found respectively in Tombs T.1380 and T.1669; another one has been retrieved outside tombs (Dunand 1973a, 170, 184, 186, 207-108, fig. 135).

²³ A cornet base and a churn were found by K.M. Kenyon in Trench I (Holland 1987, 22), a flint hammer and a fan scraper were retrieved by the Italian-Palestinian Expedition in Area F (Nigro 2005, 120, note 4, 198, note 1). In this

Also the end of Chalcolithic is neatly different in the two sites: at Byblos the shift to an Early Bronze I horizon occurred in a stream of strong continuity (due to this continuity it was called "Énéolithique Récent")²⁴, while in Jericho, EB I (Sultan IIIa) groups clearly represent newcomers settling the tell anew²⁵.

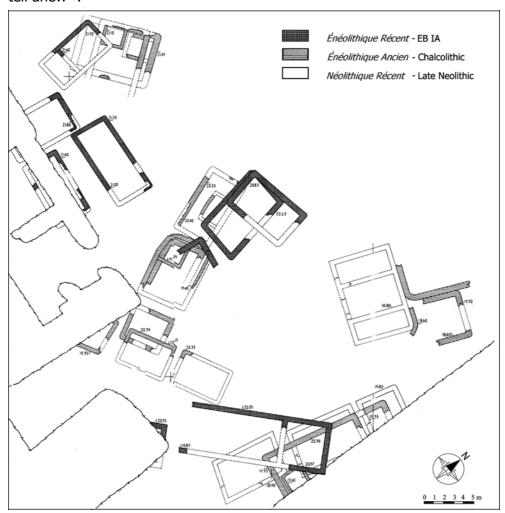


Fig. 8 - Superimpositions of *Néolithique Récent*, *Énéolithique Ancien* and *Énéolithique Récent* buildings at Byblos (after Dunand 1973a, pl. I).

phase the main settlement in the Jericho Oasis was possibly represented by Tell el-Mafjar (Taha *et al.* 2004; Anfinset 2006).

²⁴ Ben-Tor 1989, 50.

²⁵ Kenyon 1957, 95-102.

3. Raw material centralization and exchange control at the mid of the 4th millennium BC

As we move to the second half of the 4th millennium BC, what made possible further decisive cultural achievements was the capability of both centres in gathering and controlling specific raw materials, which were going to become fundamental in the proto-urban economic system of exchange. Byblos and Jericho overcame the limits of a simply husbandry and agriculturally based village economy, including the control and exchange of precious stuff into their economic systems.

In the case of Jericho, these materials were mainly salt, sulphur and bitumen, easily available on the nearby shores of the Dead Sea, and, perhaps indirectly, copper (fig. 9), which was presumably already extracted in the Wadi Feynan ('Arabah)²⁶, and possibly distributed through Jericho itself. Actually, each of these stuff had its own area of distribution, but an analysis of cantonal and interregional diffusion is beyond the goal of this paper. At any rate, Jericho stands as a key point of distribution towards the north, the west and the east, as it was at a pivotal crossroad of the Palestinian exchange network.



Fig. 9 - EB I copper spear-head from Megiddo/Tell el-Mutesellim (after Loud 1948, pl. 283:1).

As it regards Byblos, one has to surmise the beginning of systematic cutting and shipping of cedar timber, as well as the successive export of olive oil and wine, which in this period began to be produced in the Lebanese inland²⁷. These products are very difficult to be detected in the archaeological record, so that their presence was inferred basically from findings in the Pre- and Proto-Dynastic Necropolis of Egypt²⁸, namely at

²⁷ Dunand 1973b, 20; Wengrow 2006, 137-140.

²⁶ Levy 2007, 27-46.

²⁸ Brunton 1927, 41, 62-63; Prag 1986, 71-72.

Saqqara and Abydos²⁹. The discovery of boat-burials made of cedar timber in the Proto-Dynastic necropolis of Umm el-Qaab in 1991 (fig. 10)³⁰ gives a further support to this hypothesis, pointing to strong and developed exchanges between the Levantine centre and Egypt in this period³¹.





Fig. 10 - Boat-burials made of cedar timber discovered in the Proto-Dynastic necropolis of Umm el-Qaab (Abydos).

3.1. Seals and seal impressions

The beginning of goods centralization and exchange under an proto-institutional control during the proto-urban stages at Byblos and Jericho is meaningfully illustrated by the stamp seals and seal impressions retrieved by M. Dunand in the Eneolithic stages at Byblos and by K.M. Kenyon at Jericho (fig. 11). Byblos especially yielded a series of seals in clay, stone and bone/ivory, showing geometric and animalistic motives³², hinting at proto-administrative practices, as attested to in several other proto-urban areas of the Ancient Near East in the same period³³. Along with stamp seals, also some cylinder seals were found in Byblos³⁴ and attributed to the latest stage of the *Énéolithique Récent*, thus extraordinarily demonstrating

²⁹ Emery 1949; 1954; 1958; Petrie 1900; 1901; 1902; 1903; Dreyer *et al.* 1998; 2000; 2003; 2006; O'Connor 1989; Wengrow 2006, 231-258.

³⁰ O'Connor 1991; Wengrow 2006, 249-250, fig. 10.13.

³¹ On the beginning of exchanges between Egypt and Byblos see Kantor 1942, 196-199, 201; Ward 1963, 5-7, 18-19; Davies 1981; Prag 1986, 59-60, 65-73.

³² Dunand 1945, 23-58, pls. II-VI; 1973a, 326-329, figs. 200-204, pl. CLXVIII. A detailed analysis of these seals and seal impressions is in Mazzoni 1992, 85-86, pls. XXVI-XVIII.

³³ Frangipane 1996, 190-192, 206-209, 228-230, 241-249; Mazzoni 1992, 233-237.

³⁴ Dunand 1973a, 328, fig. 203.

the transition in this phase to the urban stage³⁵, when cylinder seals became in Southern Levant a common mean of control and identification of items and products³⁶. As it regards Jericho, a grill-like pattern stamp seal impression similar to the stamp seals of Byblos³⁷ has been found at Jericho by K.M. Kenyon on an EB IA jar sherd from Trench III³⁸ (fig. 11).



Fig. 11 - EB I stamp seals and seal impressions from Byblos (after Dunand 1973a, figs. 200-202, 204, pl. CLXVIII), and Jericho (Kenyon - Holland 1983, fig. 78:16).

4. Aside the spring: the basic value of fresh water

Along with the availability of important raw materials, which in both sites stimulated territorial control and goods exchange on long-distance routes, there is another basic – and apparently obvious – resource similar in Byblos and Jericho. It is fresh water, i.e. the spring, which in both sites represents physically and symbolically the propulsive centre of the village gradually turning into a town. Byblos and Jericho developed respectively around and aside a main water-source, which either in a rocky promontory facing the sea³⁹ or in a desert depression played a never overestimated role.

³⁵ Mazzoni 1992, 83.

³⁶ Mazzoni 1992, 178-196; Greenberg 2001, 192-195; Joffe 2001, 361-364.

³⁷ Dunand 1973a, 326-327, figs. 200 (n. 20004), 201 (n. 21352).

³⁸ Kenyon - Holland 1983, 193, fig. 78:16.

³⁹ Dunand 1973a, 3-4.

The transformation of both springs into regulated and built-up structures (respectively a well⁴⁰ – fig. 12 – and a kind of fountain – fig. 13) begins in the Early Bronze Age, when the two rural villages start to be transformed into towns. This also suggests a regulation of irrigation of the oasis at Jericho (and the establishment of stably cultivable land), and the creation of water reservoirs to be exploited by seamen for ships restocking at Byblos. In the Early Bronze Age I, fresh water started, thus, to be exploited also for extra-familiar socio-economic enterprises, suggesting the existence of a central ruling institution.



Fig. 12 - The "sacred well" at Byblos (2006).



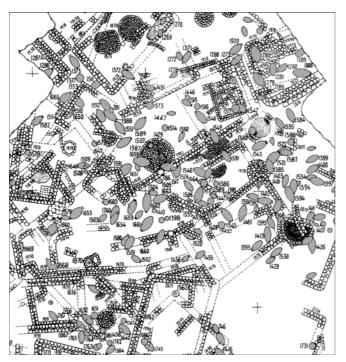
Fig. 13 - The spring of 'Ain es-Sultan at Jericho (1998).

⁴⁰ Margueron 1994, 18-19.

5. The two necropolises: two different funerary customs

Both Byblos and Jericho have provided a large amount of data on the funerary customs of their inhabitants through their necropolises. The two huge necropolises are, in fact, the second macroscopic common element between Byblos and Jericho. They exhibit distinguished burial customs, which neatly define the two EB IA communities.

From the point of view of spatial organization, there is a noticeable difference between the two sites, illustrated by the location of each own necropolis: inside the dwelt area – though not preferably underneath the houses – at Byblos (fig. 14), and in the limestone *plateau* north and west of Tell es-Sultan, well outside the site, at Jericho (fig. 15). This may reflect a tradition which in Byblos descends from the Neolithic and Chalcolithic Periods, while in Jericho is the result of the rather rapid establishment of the necropolis, where multiple burials are adopted in shaft tombs instead of predominantly individual jar-burials of Byblos⁴¹, pointing at a funerary ideology determined by the strong familiar links of an agricultural community. In this respect, the differences in funerary customs (individual *versus* multiple burials) may be also explained looking at the different



socio-economic foundations of the two communities: one seaother oriented, the concentrated in oasis cultivation; both, however, firmly rooted into the ideology of an early agriculture-based society, opened to the new enterprise represented by long-distance trade through the sea and the desert respectively.

Fig. 14 - Jar-burials in the *Énéolithique* settlement at Byblos (after Dunand 1973a, pl. J,a).

⁴¹ Artin 2005; and also in this volume.



Fig. 15 - The limestone *plateau* north and west of Tell es-Sultan; in foreground, Tomb A excavated by J. Garstang in 1931; in background, Tell es-Sultan; from north-west (PEF).

In any case, the two necropolises, as well as the two settlements themselves, allow to follow the progressive cultural developments of the two local communities during the second half of the 4th millennium BC.

6. Tell es-Sultan/Jericho in the Early Bronze I

The proto-urban settlement of Jericho (fig. 16) was explored by the two British expeditions respectively directed by John Garstang (1930-1936) and Dame Kathleen M. Kenyon (1950-1958); a general reassessment of available data, including previously unpublished data form Garstang's last season (1936), was put forward by the present author⁴², with an overall reconstruction of stratigraphy and plans of the village.

6.1. The village of Tell es-Sultan in the Early Bronze IA (Sultan IIIa1) and the speedy growth of a rural community

The earliest EB I village at Tell es-Sultan (Sultan IIIa1, 3300-3200 BC) is one of the – rare – perspicuous illustration of what is usually called "sedentarization". A group of new settlers⁴³ erected over the impressive

⁴² Nigro 2005.

⁴³ The arrival of new groups of settlers has been surmised also on the basis of the analyses of the tombs (Kenyon 1957, 95-102; 1979, 66-83; Nigro 2005, 199).

remains of the Neolithic settlement their dwellings, consisting of a series of juxtaposed circular huts (fig. 17) built-up in mud-bricks laid upon foundations of undressed stones and slabs⁴⁴, with sunken floor and a possible straw or adobe dome (fig. 18)⁴⁵, usually surrounded by installations (such as circular silos and stone platforms) and frequently – if not always – grouped in couples (fig. 19). Each house had its own compound with storage facilities and food production devices, which hint at a copious agricultural production.



Fig. 16 - J. Garstang's excavations in the EB I village on the northern plateau at Tell es-Sultan/ancient Jericho (PEF).

The main topographic feature of the village was a terrace-wall regulating the distribution of houses on different terraces on the eastern slope of the tell⁴⁶, overlooking the spring of 'Ain es-Sultan, while a distinctive intervention was, towards the end of the phase, the outlining of a religious compound, were a bent-axis shrine was erected⁴⁷.

⁴⁴ Garstang *et al.* 1935, 153, pl. LI,a; Garstang - Garstang 1948, 81; Nigro 2005, 23-32, figs. 3.15-3.17, plan II.

⁴⁵ As still in use nowadays in northern Syria (fig. 18).

⁴⁶ Nigro 2005, 18, 23-25, fig. 3.14.

⁴⁷ Nigro 2005, 33-34; Sala 2005b; 2007, 71-79, pl. 5.

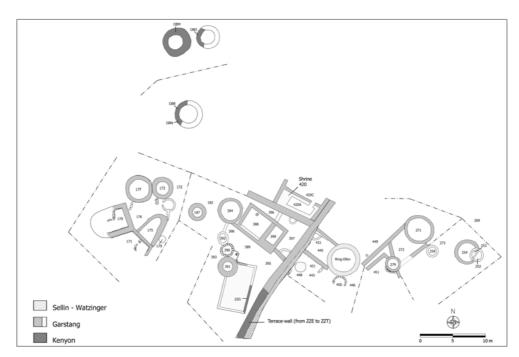


Fig. 17 - Plan of Sultan IIIa1 (EB IA) rural village on the northern plateau at Tell es-Sultan.

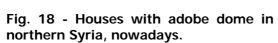




Fig. 19 - The western sector of Sultan IIIa1 (EB IA) village excavated by J. Garstang at Tell es-Sultan, with the circular Houses 173 and 177, and the apsidal House 175 (PEF).

The ceramic inventory of this initial EB phase at Jericho⁴⁸ is characterized by hemispherical bowls and bowls with straight sides, juglets and small jars with lug handles, and storage jars with everted rim (fig. 20). In the earliest layers the commonest decoration is incised, notched or punctuated (the latter is also a distinguished feature of the Southern Transjordanian tradition, visible, for example, in the Bab edh-Dhra' pottery inventory)⁴⁹, while in a more advanced phase, it is noteworthy the first appearance of Line-Painted Ware⁵⁰, a specialized production which in the following protourban phase will become a distinctive indicator (fig. 21). Large containers

such as storage jars and vats are conversely characterized by a white or creamy wash and a wavy band slip. Finally, the attestation of Egyptianizing shapes, such as the so-called "lotus vase" the nearby in 39)⁵¹, necropolis (fig. testifies to the early contacts with Egypt.

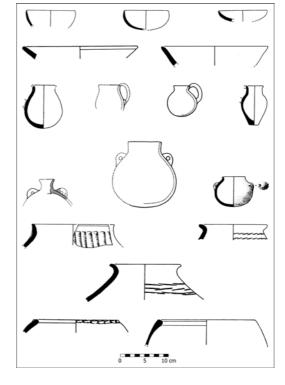


Fig. 20 - Ceramic inventory of Sultan IIIa1 (EB IA) village.

⁴⁸ For an illustration of EB I pottery at Tell es-Sultan/Jericho see Sala 2005a.

⁴⁹ Punctuated decoration in Jericho finds numerous parallels at Bab edh-Dhra', in the occupation of stratum V, dated to Early Bronze IA (Rast - Schaub 2003, pls. 1:9-12, 41; 2:1-2, 32, 34-38; 4:10-12; 6:22, 30, 34; 7:2-3, 31, 33), as well as in the contemporary tombs in the nearby necropolis (Rast - Schaub 1989, 35-203), while it is rarely attested in the settlement of stratum IV, dated to Early Bronze IB (Rast - Schaub 2003, pls. 10:32; 11:30; 12:15, 39, 41; 14:21; 18:26).

Sala 2005a, 174-175, pls. 1:1-3, 2:1-4, 3:1, 20:1:3, 36:1-5.

⁵¹ Kenyon 1960, fig. 17:23 (Tomb A114); 1965, fig. 12:6 (Tomb K1); Sala 2005a, 177-178.

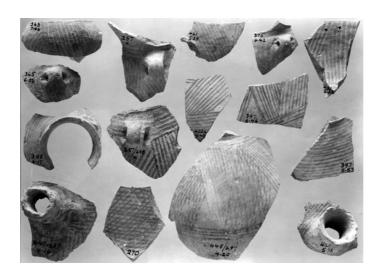


Fig. 21 - Line-Painted Ware from Sultan IIIa (EB I) village on the northern *plateau* at Tell es-Sultan (PEF).

6.2. From rural village to incipient urban community: Jericho in the Early Bronze IB (Sultan IIIa2)

A major stratigraphic and structural change marks at Jericho the passage to Sultan IIIa2 Period, the Early Bronze IB (3200-3000 BC): the original rural village with circular huts displaced on various terraces without a clear order undergoes a noticeable regularization, characterized by the appearance of rectangular houses, sometimes with rounded corners⁵², and of apsidal buildings, probably devoted to a some kind of community or at least extra-familiar function⁵³. Also the inner organization of the village shows the starting of a process of urbanization: a neater partition into domestic compounds of rectangular or trapezoidal shape and the establishment of a street running south-west/north-east, which will remain in use during the whole Early Bronze Age (fig. 22)⁵⁴. The sacred compound is also reconstructed with the addition of an ancillary building (or shrine)⁵⁵, which gives the religious complex the shape of a twin temple, as it happens in other EB Palestinian sites⁵⁶.

⁵² Nigro 2005, 35-41, 115-119, plan III.

⁵³ Kenyon 1981, 322-324, pls. 174, 313a-314; Nigro 2005, 122-124, 200.

⁵⁴ Nigro 2005, 36.

⁵⁵ Nigro 2005, 35, fig. 3.30, plan III.

⁵⁶ Such as the sacred precinct of Tell el-Mutesellim, stratum XIX/level J-3 (Loud 1948, 61, fig. 390; Finkelstein - Ussishkin 2000, 38-52, fig. 3.11; Sala 2007, 56-71).

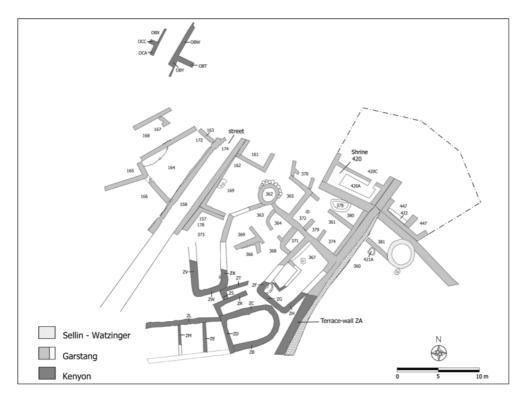


Fig. 22 - Plan of Sultan IIIa2 (EB IB) proto-urban village on the northern *plateau* at Tell es-Sultan.

The increasing social complexity at EB IB Jericho is also testified to by the retrieval of status-symbols, such as limestone and calcite mace-heads (fig. 23), both on the site and in the necropolis⁵⁷, and by the typological diversification of pottery assemblages, again both on the *tell* and in the contemporary tombs of the necropolis (fig. 24)⁵⁸.

Such important finds also hint at a gradual but substantial transformation of the site economic capability, which attests to its political status as a centre at a pivotal crossroad of the Early Bronze IB exchange routes, on the shore of the Dead Sea in the Southern Jordan Valley.

⁵⁷ Sellin - Watzinger 1913, figs. 109-110; Garstang 1932, pl. VII:5 (Tomb A); Holland 1983, 808-810, fig. 365:1-2, 6; Nigro 2005, 200, fig. 3.51.

Namely, in the increasing diffusion of some specialized productions, such as Line-Painted and Red Slip Wares (Kenyon 1960, 4-8, 50-51, fig. 22; Kenyon 1965, 4-6, 21-27, figs. 7-10; Sala 2005a, 171-175).

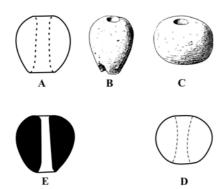


Fig. 23 - A. Mace-head from Tomb A, layer 3 (after Garstang 1932, pl. VII:5); B-C. Mace-heads from the tell (after Sellin - Watzinger 1913, figs. 109-110); D. Mace-head from Sultan IIIa1 village (after Garstang *et al.* 1936, pl. XXXVI:25); E. Mace-head from Site M (after Kenyon - Holland 1983, fig. 365:2).

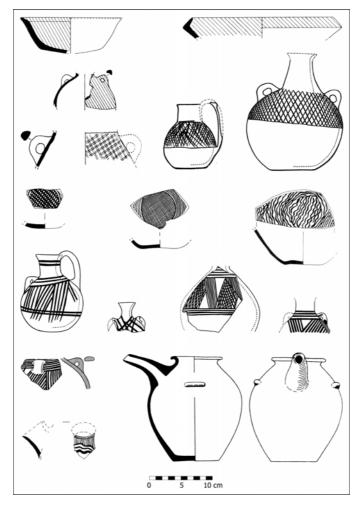


Fig. 24 - Red-Burnished and Line-Painted Wares vessels and spouted jar from Sultan IIIa2 (EB IB) village.

7. Byblos in the Early Bronze I ("Énéolithique Récent" and Proto-Urban Periods)

If one looks now at the earliest Early Bronze Age phases at Byblos, they are perhaps appreciable in a less clear stratigraphic displacement. After the "Installation Néolithique" (*Installation 1*)⁵⁹, M. Dunand singled out the so-called "Énéolithique", which — using Syro-Palestinian terminology — represents a local Chalcolithic horizon ("Énéolithique Ancien"), while the following phase, named "Énéolithique Récent", nearly corresponds to Palestinian Early Bronze IA (3400-3200 BC). A further stage, which truly marks the passage to a proto-urban phase, is that of *Installation III*, called "Proto-Urbain" (a term presumably due to the deep influx of the definition coined by K.M. Kenyon at Jericho itself), roughly corresponding to Palestinian Early Bronze IB (see tab. 1).

In spite of its intrinsic complexity, Dunand's periodization points out what seems a main feature of Byblos development between the Neolithic and the Early Bronze Age: it does exhibit a high degree of cultural continuity, since the Early Bronze I seems to develop directly from the previous Chalcolithic cultural stage; a continuity which characterizes the whole Levantine coast also in the following periods, and that may be related to environmental local specificities. This makes a neat difference with Palestine, where Chalcolithic and Early Bronze I horizons show a greater degree of discontinuity. Nevertheless, Dunand stressed the difference existing between the $\acute{E}n\acute{e}olithique$ and the following $\it Proto-Urbain Installation$, characterized by a regular displacement of rectangular houses, and, especially, by the end of the custom of jar-burials inside the village⁶⁰.

7.1. Byblos in the Early Bronze IA: the Installation "Énéolithique Récent"

As stated above, Early Bronze IA in Byblos may be confidently identified with the *Installation* called "Énéolithique Récent" by M. Dunand. It is very difficult to distinguish the remains belonging to this early rural village among the many overlapping structures excavated by Dunand; it is, however, possible to delimit the dwelt area during this stage, and to single out some relevant houses. EB IA installations were scattered over the northern upper mound, around the central depression and towards the

⁵⁹ Dunand 1950, 583-587; 1973a, 9-168.

⁶⁰ Dunand 1950, 590-593; 1973a, fig. 146; 1973b; 18-20, 55.

south-west down to the seashore (fig. 25)⁶¹, which at the time was used for landing the boats of the fishers and of some sailor.



Fig. 25 - Énéolithique Récent (EB IA) Installation on the south-western slope of the upper mound at Byblos overlooking the seashore, from south-east (2006).

<u>Architecture and spatial organization of the village</u>

At any extent, it seems remarkable the presence of circular huts of around 4-6 m of diameter (fig. 26), partly sunk into the preceding layers (and this perhaps has sometimes contributed to stratigraphic confusion)⁶² and sometimes grouped in couples, for many respects similar to those of the Sultan IIIa1 rural village⁶³. Oval-shaped houses are also present⁶⁴, stressing the preference in this stage for curvilinear architecture (fig. 27)⁶⁵. As noticed in Jericho, circular dwellings and curvilinear architecture are usually typical of new settled areas, as they need no pre-existing constrains. In this case, the slope south of the spring was regularized by means of one or two terrace-walls before re-occupying it. Underneath the floors of free spaces

⁶¹ Dunand 1950, 16; 1973a, 213-215, 219-220.

⁶² Dunand 1950, 588; 1973a, 217-219, pl. CXXVI:1-2.

⁶³ Nigro 2005, 23-32; see above § 6.1., figs. 16-19.

⁶⁴ Oval-shaped houses are exemplarily attested to in the contemporary Lebanese village of Dakerman, south of Sidon (Saidah 1979, 31-38, figs. 2-13).

⁶⁵ For a general overview on the curvilinear architecture in the EB I Southern Levant see Braun 1989; Ben-Tor 1992, 60-62; Enea 1996; up to the recent discovery of the EB IA village of Sharaya in the Leja region in Southern Syria: Nicolle - al-Maqdissi 2006.

between these circular and oval dwellings, jar-burials were commonly interred (fig. 14)⁶⁶, according to a funerary custom which is spread all over the Lebanese coast in the 4th millennium BC, as it is shown also by Dakerman, the EB IA village south of Sidon, where burying dead in jars (*pithoi*) scattered among the houses of the living people is also attested to⁶⁷, though in a smaller figure in respect of Byblos.



Fig. 26 - Circular hut in the *Énéolithique Récent* village at Byblos (after Dunand 1973a, pl. CXXVI:2).



Fig. 27 - Circular and oval-shaped houses in the *Énéolithique Récent* (EB IA) village at Byblos (2006).

Dunand 1937-1939, pls. XXII, CLXXVIII-CLXXXVIII; 1950, 587-588; 1950-1958, pl. XVIII; 1973a, 246-260, pls. CXXXIX-CXL; 1973b, 18, 57-58.
 Saidah 1979, 42, figs. 14-15.

EB IA material culture: pottery and stone tools

The ceramic horizon of this stage (Dunand's "Énéolithique Récent") is very well illustrated by numerous finds, mainly retrieved in the tombs⁶⁸. Pottery shapes inventory can be quite easily compared with the classic EB I Palestinian tradition, with bowls, sometimes with one handle, and high-looped cups, two-handled jars and small globular jars, bottles and jugs with tall neck, twin-vessels and jars with everted rim (figs. 28-29).

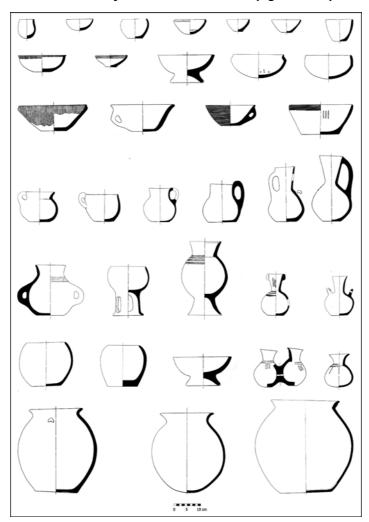


Fig. 28 - EB IA ceramic inventory from Byblos.

⁶⁸ Dunand 1937-1939, pls. CLXXXIX-CC; 1950, 588-589; 1973a, 268-301, figs. 149-177, pls. CXLVIII-CLI; 1973b, 17-18.



Fig. 29 - EB IA vessels from Byblos (after Dunand 1973a, pls. CXCII, CXCIII, CXCVII).

Pedestal vessels⁶⁹, instead, remain a classical coastal type in the Bronze Age, and are seldom present in Palestine. Jugs and jars are usually decorated by punctuated or stroke bands on the neck and on the shoulders, as a typical local feature, which, however, occurs as stated above in several regional ceramic groups, such as those of Jericho itself⁷⁰, Bab edh-Dhra' and of other southern Transjordanian sites⁷¹.

Specially relevant seems the high frequency of large *pithoi*, which points, as at Jericho⁷², to a sharply increasing agricultural production and storage⁷³. Actually, a large number of these *pithoi* were expressly made for

⁶⁹ Dunand 1937-1939, pls. CXCVII-CXCIX; 1973a, 300, figs. 158-159, 161.

⁷⁰ Kenyon 1960, figs. 10:3, 11:5,14, 12:5,14,15,21,27,28, 13:7,17,30, 18:15; Kenyon - Holland 1983, figs. 11:23,24, 15:3, 44:12,13,22, 45:5,15, 111:6, 124:14, 126:25,32,33, 127:30, 129:19,33; Sala 2005a, 170-171, pl. 33:1-2, 4, 8-9.

⁷¹ Rast - Schaub 1989, figs. 12-14, 18-21, 29-31, 38-39, 44-45, 49-50, 52, 57-58, 66-68, 70-74,79-86, 97-99, 111-114; 2003, pls. 1:9-12, 41; 2:1-2, 32, 34-38; 4:10-12; 6:22, 30, 34; 7:2-3, 31, 33.

⁷² Nigro 2005, 37, fig. 3.33, pls. 6-7.

⁷³ Dunand 1973b, 18.

funerary utilization, thus letting Dunand put forward the interpretation which linked an agriculturally based ideology of rebirth with seeds conservation and storage⁷⁴.

Lithics are largely developed in this period, and include: denticulate blades and Canaanean blades; awls, scrapers and chisels; arrow-heads and daggers⁷⁵. As it regards the stone tools, mortars of various typologies⁷⁶ and counterweights are attested to, as well as some spindle whorls, belonged to domestic looms⁷⁷. Worked bones were also part of the domestic inventory of EB I Byblos⁷⁸, usually used as kohl sticks, palettes, but also for personal ornaments. In some cases pierced bones may be interpreted as ritual objects, perhaps music instruments like the so-called "flutes" of Jericho⁷⁹. The transformation of the village towards the end of "Énéolithique Récent" In an advanced phase of the same *Installation*, the erection of the *Enceinte* Sacrée with its temenos 80 and the flanking stone-paved street 81 is a major transformation, accompanied by a sensible growth of the village, which probably causes that rectangular houses, usually with rounded corners, take the place of round huts, and, exactly as already observed at Jericho, a few apsidal buildings also appear⁸², suggesting a more specific function for such structures (figs. 30-31).

Architecture is now characterized by a more accurate use of unworked stones of medium and small size, also with the employ of a large number of river-smoothed pebbles, also in floors (fig. 32). Limestone mortars embedded into floors (fig. 33), raised platforms, silos, slab-paved surfaces (figs. 34-35) are common devices in this phase, when a flourishing agriculture household production is the solid basis of Byblos subsistence economy⁸³. Almost identical devices are attested to in contemporary Tell es-Sultan houses⁸⁴. In both sites, the following step will be the gradual

⁷⁴ This interpretation – which became classic in pre-historical reconstructions – is illustrated by Dunand (Dunand 1973a, 264-265) and by other scholars basing upon his work (Cauvin 1998, 45).

⁷⁵ Dunand 1973a, 301-304, figs. 178-180.

⁷⁶ Dunand 1973a, 266, pls. CXXXIV.

⁷⁷ Dunand 1973a, 313-315, pl. CLXI.

⁷⁸ Dunand 1973a, 308-311, fig. 184, pls. CLVII-CLIX.

⁷⁹ Dunand 1973a, pl. CLIX (ns. 20782, 26756); Kenyon 1960, 48; 1965, 13, fig. 5:1-7.

⁸⁰ Dunand 1973a, 235-241, fig. 143, pl. J,c; 1982, 195; see Sala in this volume, § 2.

⁸¹ Dunand 1973a, 233-235, pl. J,c.

⁸² Dunand 1973a, 213-214, fig. 139; 1973b, 17.

⁸³ Dunand 1973a, 266-267, pls. CXXXII-CXXXIV.

⁸⁴ Nigro 2005, figs. 3.15-3.16, 3.18, 3.25-3.26.

centralization of such production activities in expressly devoted spaces and, even, buildings, as well as the creation of extra-familiar storage devices.

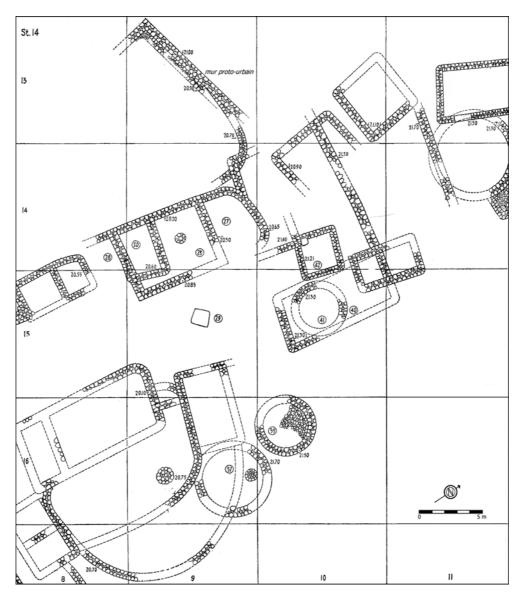


Fig. 30 - Rectangular houses with rounded corners, apsidal buildings and boundary-walls of the EB IA settlement at Byblos in the final stage of the *Énéolithique Récent* (after Dunand 1973a, fig. 139).



Fig. 31 - Western sector of the $\it En\'e olithique \, \it R\'ecent \, installation$ at Byblos (after Dunand 1973a, pl. J,a).



Fig. 32 - Structures of the final stage of the *Énéolithique Récent* settlement at Byblos (after Dunand 1973a, pl. CXIII:1).



Fig. 33 - Limestone mortar embedded into the floor (after Dunand 1973a, pl. CXXXIV:7).



Fig. 34 - Slab-paved silos (after Dunand 1973a, pl. CXXXI:1).

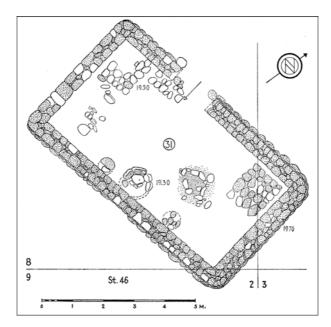


Fig. 35 - Rectangular house with rounded corners, raised platforms, silos and slab-paved surfaces, in the *Énéolithique Récent* settlement at Byblos (after Dunand 1973a, fig. 141).



Fig. 36 - Boundary-wall on the south-western slope of the upper mound in the *Énéolithique Récent* settlement at Byblos (2006).

At Byblos, as in Jericho, one major indicator of a growing social complexity is the inner spatial organization of the settlement, subdivided both by boundary-walls (fig. 36) and terrace-walls⁸⁵.

What, of course, deserves a special mention is the outlining of the sacred compound just aside the spring at the end of this period, delimitated by a solid *temenos*⁸⁶. Again as in Jericho, the establishment of a main sanctuary in the village took place when an overall spatial organization of the settled area was accomplished, towards the end of the Early Bronze IA (around 3300 BC).

The first appearance of copper in Byblos

The introduction of copper was a distinguished innovation of the productive and exchange system during the 4th millennium in the Levant, which would have deeply influenced the successive development of the proto-urban

economy87. Installation IIB at Byblos is the earliest in which copper items appear⁸⁸, mainly in jar-burials, but also in the houses. They are usually daggers and hooks (fig. 37)89, pointing both at symbolic and practical purposes. The provenance of the metal is unknown, even though Cyprus may be indicated as a possible source, and, at any rate, the first appearance of such metal testify to a further growth of Byblos socio-economic capabilities, indicating the establishment of regular exchange of local goods for copper. The question of which were these local goods is still open.

Fig. 37 - Copper hooks and daggers from the *Énéolithique Récent* settlement at Byblos (after Dunand 1973a, pl. CLX).



⁸⁵ Dunand 1973a, 215-216, 239, pls. J,b-c.

⁸⁶ See above note 80.

⁸⁷ Shalev 1994; Nigro 2003.

⁸⁸ Dunand 1973b, 17.

⁸⁹ Dunand 1937-1939, pl. CLXXXIX; 1973a, 311-313, fig. 186, pl. CLX.

Together with cedar timber, which, as stated above, is attested to in Egypt, one may surmise the production of olive oil and also transformed fish, even though the latter industries are not clearly discernible in the archaeological record. Well-fired ("Metallic") storage jars and *pithoi* clearly used for olive oil are, in fact, attested to only from the following period (Early Bronze IIA, 3000-2800 BC)⁹⁰.

Egyptianizing status-symbols: mace-heads and palettes

Byblos has provided a distinguished series of limestone and calcite maceheads (fig. 38)⁹¹, fully comparable with those found in Palestine, well epitomized by the already mentioned Jericho examples⁹². The piriform and the globular mace-heads appear, thus, as Egyptianizing symbolic items related to rank throughout the Levant still in Early Bronze IA. At Byblos, they are attested to both in jar-burials (two specimens from Tomb 84 and one from Tomb 1402)⁹³ as well as in the settlement⁹⁴, like in Jericho⁹⁵. Also stone palettes are present in the Byblos inventory, both of the elongated type (known at Jericho from a specimen retrieved by Sellin & Watzinger which possibly bears a *serekh*)⁹⁶, and of the square type, known in Palestine at Jericho itself⁹⁷, and in the necropolises of the Ghôr (see the specimens from Bab edh-Dhra')⁹⁸. The latter seems to be a perspicuous Egyptianizing funerary equipment, apparently characterizing female burials⁹⁹.

⁹⁰ At Byblos (Periods KI-II; Saghieh 1983, 88-89, 108, pl. XXXIX; Engberg - Shipton 1934, 64, note 19) as well as in Palestine, where they appear in a characteristic pattern-combed Metallic Ware production, precisely from the beginning of the Early Bronze II (Greenberg - Porat 1996, 5-6, figs. 2:3-6, 3:2-5, 5-13).

⁹¹ Dunand 1973a, 304-306, figs. 181-182, pl. CLV (ns. 19332, 27360, 33669).

⁹² Garstang *et al.* 1936, pl. XXXVI:24-25; Garstang - Garstang 1948, 79; Kenyon 1965, fig. 5:8 (Tomb K2); Nigro 2005, 34, fig. 3.28.

⁹³ Dunand 1973a, fig. 181 (ns. 6763, 23480).

⁹⁴ Dunand 1973a, fig. 181 (ns. 24558, 28504).

⁹⁵ See above p. 19, note 57.

⁹⁶ Sellin - Watzinger 1913, fig. 107; Nigro 2005, 12, fig. 2.8.

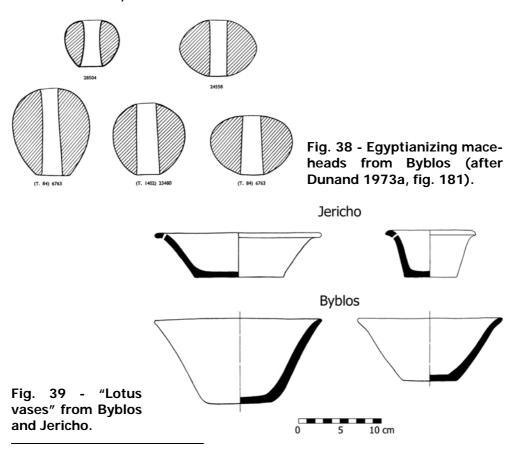
⁹⁷ Garstang *et al.* 1936, pl. XXXVI:26; Nigro 2005, 34, fig. 3.28.

⁹⁸ Rast - Schaub 1989, 452-456, fig. 261. The type is successively known also in other sites of the Jordan Valley, such as Khirbet Kerak (Greenberg - Eisenberg 2002, 214, fig. 13.2).

⁹⁹ These items, in fact, were probably used for grinding face paint (Rast - Schaub 1989, 455-456).

Egyptianizing "lotus vases" in the EB I Gublite pottery inventory

Along with these status-symbols, an Egyptianizing influx may be also detected in the ceramic production of this phase and it is well illustrated by the bowl with outflaring walls (fig. 39), traditionally called "lotus vase"¹⁰⁰, two specimens of which have detected also in the Jericho necropolis and dated to the Early Bronze IA¹⁰¹.



¹⁰⁰ Dunand 1973a, fig. 151 (ns. 28235, 28143). The majority of these vessels was retrieved in the EB IB sites of Southern Palestine, such as Tell el-Khuweilfeh (Kansa - Levy 2002, 190-193, fig. 12.10:c), Tel Ma'ahaz (Amiran - van den Brink 2001, 32-35, fig. 3.2:1-6), 'Ain Besor (Gophna 1990, 145-147, fig. 1:4), Tell el-Yareini (Brandl 1989, fig. 12:12), and et-Tell (Marquet-Krause 1949, pl. 68:59). Moreover, in Northern Palestine "lotus vases" were recently found at Tell el-Mutesellim (Joffe 2000, 170-175; Goren 2000, 496-501; Goren - Ilan 2003), in the cachet within the monumental temple of level J-4/stratum XVIII (Finkelstein - Ussishkin - Peersmann 2006, 50-52).

7.2. Byblos in the Early Bronze IB: the Installation "Proto-Urbain"

The progressive transformation of Byblos into a town is demonstrated by the addition of new rectangular houses in between and sometimes upon the earliest rounded structures (figs. 40-41), which characterizes the final stage of the *Énéolithique Récent* village and the following *Proto-Urbain Installation*. The latter stage shows the crystallisation of processes started in the *Énéolithique Récent*, with the gradual achievement of an urban status.

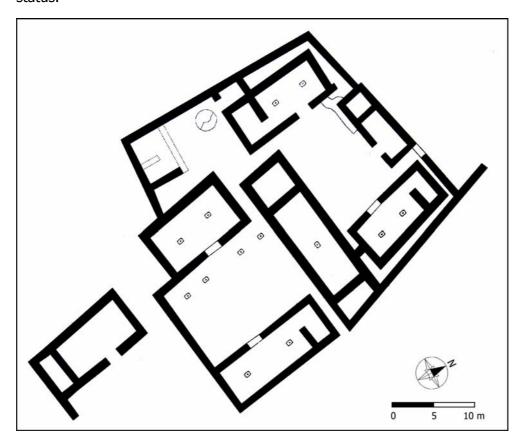


Fig. 40 - Rectangular houses of the *Proto-Urbain* installation at Byblos, south of the spring.

During the proto-urban stage, in fact, the reconfiguration of the village is completed, and it definitely turned into a town¹⁰²: this event, still difficult to be recognized on the ground as well as in the excavation record, anyway,

¹⁰² Dunand 1950, 590-591, 593: 1973b, 18-20.

involved some major elements such as the limits of the settlement, which included also the southern lower mound, the terraced slope of the southern side of the site, down to the sea-shore, and the harbours, which were going to be given a built-up structure¹⁰³, apt to their new commercial role¹⁰⁴. Domestic units of the proto-urban phase are rectangular, usually with an inner partition at two thirds of their length, and are regularly juxtaposed around central courtyards shared by different houses hosting various devices. This indicates a more accurate subdivision of building areas, as well as the individuation of the rectangular domestic unit with two pillars which will become a standard of the earliest urban installation at the beginning of the 3rd millennium BC¹⁰⁵.

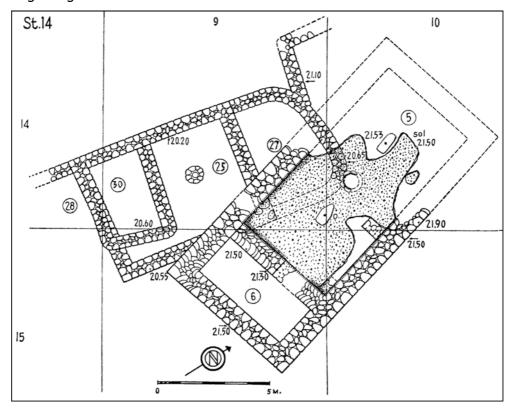


Fig. 41 - Apsidal building of the final stage of the *Énéolithique Récent* settlement at Byblos and superimposed rectangular house of the Proto-Urban Period (after Dunand 1973a, fig. 146).

¹⁰³ Frost 2001; Stefaniuk *et al.* 2005.

¹⁰⁴ Wengrow 2006, 148-150.

¹⁰⁵ Dunand 1983, 93; Ben-Tor 1992, 62-66.

8. Conclusions: a locally experimented way to early urbanization

This necessarily synthetic comparative examination of the parallel developments of the proto-urban settlements of Byblos and Jericho during the Early Bronze I allows the following concluding observations.

Similarities as well as differences between the two sites are useful for raising new questions as a mean of interpretation of the Proto-Urban (let say Early Bronze I) cultures in Southern Levant, and especially to evaluate the specificities of each formative urban phenomenon during the Early Bronze Age. I would let apart the well ascertained strong regionalism of material culture, by drawing out the common trends of development of both sites, which prepared the way to the early stage of urbanization. The original fishermen' and peasants' villages of Byblos and Jericho gradually developed into "incipient towns" by fixing their overall layouts, with the contemporary establishment of a centre (the spring) and some natural and built-up boundaries, and by delimitating private (familiar) and public (extrafamiliar) spaces by means of terrace-walls regularizing pre-existing house-yards, and streets.

In Byblos, in the centre aside the spring, the sacred area (*Enceinte Sacrée*) was located, on the one hand, suggesting that was the religious institution which controlled the access to fresh-water, on the other hand, testifying to the deep religious significance and utilization of this water in the earliest Levantine cultures. A main burial field extended all around this area, including also the dead community into the spaces of the living people. Both ideologically and spatially, thus, the spring became the focus of the expanding town.

The presence of terrace-walls and boundary-walls which define the village layout, well documented both at Jericho¹⁰⁶ and at Byblos¹⁰⁷, moreover, attests to the coordination of public works by an emerging ruling institution.

Also the comparison of some material culture indicators suggests interesting considerations: especially pottery, architecture, and individual items promoted to status-symbols.

Architecture is striking similar in house shapes, from curvilinear to rectangular plan, especially if one considers the different building materials adopted in the two sites, mainly mud-bricks in Jericho and mainly field-stones in Byblos.

¹⁰⁶ See above § 6.2.

¹⁰⁷ See above pp. 26-31.

Pottery exhibits its strong regional, even cantonal, character, though in a widely shared series of broad functional types, such as hemispherical bowls and bowls with straight walls, high-looped cups and bottles, *amphoriskoi* and two-handled jars (with a particular type with upward loop handles)¹⁰⁸, big storage jars and *pithoi*, twin-vessels and vessels with "basket" handles (figs. 20, 24, 28-29, 42)¹⁰⁹.





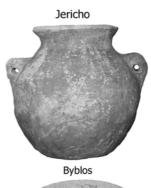




Fig. 42 - EB IA two-handled jars with upward loop handles and EB IB and small jars with round pierced lugs from Byblos and Jericho.

Status-symbols, such as mace-heads and palettes¹¹⁰, clearly indicate that at the end of the 4th millennium BC, Byblos and Jericho were both under a strong Egyptian influence; a datum now corroborated also by the clear identification in both sites of the "lotus vase" typology¹¹¹.

If this is not at all a surprise for Byblos, an Egyptian influence in Jericho at such an early period is quite interesting, and may possibly descend from the early Egyptian activities both in Southern Palestine, and in the Ghôr,

¹⁰⁸ For Byblos see Dunand 1973a, pl. CLI (n. 21882); for Jericho see Nigro 2006b, 20, 24, fig. 11.

¹⁰⁹ For comparisons see also Ben-Tor 1989, 46-50, figs. 2-4.

¹¹⁰ See above p. 19, fig. 23, p. 32, fig. 38.

¹¹¹ See above p. 17, note 51, p. 33, note 100, fig. 39.

during the Early Bronze I^{112} . This new data may, thus, strengthen the historical view which considers the Egyptian impact one of the decisive factors in launching the proto-urban Levantine societies towards the achievement of a full urbanization. The most evident effect of the Egyptian contact seems to be the stimulation of exchange of special goods and the increase of social complexity¹¹³.

With a synthetic expression, one may state that such contact transformed the fishermen of Byblos¹¹⁴ into sailors, and at least some of the peasants of Jericho into merchants, within a new formula of stratified society. However, one has not to forget the role of Syria, which at Byblos as well as at Jericho, has still to be thoroughly investigated.

A precise diachronic assessment of these comparative data is not easy to achieve; however, it seems to me not decisive. We have been giving a glance to a process of cultural growth which was not necessarily chronologically simultaneous, neither symmetrical or even parallel; what appears meaningful is that this process shows comparable stages in its development and ends with the same outcome: the transformation of the village into a town.

This rapid review of data seems to indicate that the human communities at Byblos and Jericho in the second half of the 4th millennium BC eventually gave a similar response to the same endogenous and exogenous *stimuli*. In this case, the contact with Proto-Dynastic Egypt should ingenerate a comparable reaction: a rapid social stratification, with the emergence of social groups and of group-leaders; and the opening of both communities to international trades and to the issue of land and sea routes control, thus producing, in a *long-durée* perspective, the birth of two major Early Bronze Age cities of the Levant: Byblos and Jericho.

¹¹² On the contacts between Egypt and Southern Palestine in the late 4th millennium BC see Harrison 1993; de Miroschedji *et al.* 2001; Amiran - van den Brink 2002. Egyptian presence in Southern Levant during the EB I has been recently further illustrated by the discovery of a monumental *dromos* tomb at Tell el-Khuweilfeh, apparently inspired to the Egyptian tombs of the necropolis of Helwan (Levy *et al.* 1997, 14-16, 34-35; 2002, 424-428).

¹¹³ Esse 1989, 90-93; Harrison 1993; Levy 1995, 242-243.

¹¹⁴ Jidejian 1968, 11.

Bibliography

ANFINSET, N.

2006 "Aspects of Excavation, Cooperation and Management: the Joint Palestinian-Norwegian Excavation at Tell el-Mafjar, Jericho", in L. NIGRO - H. TAHA (eds.) 2006, pp. 61-82.

AMIRAN, R. - VAN DEN BRINK, E.C.M.

2001 "A comparative study of the Egyptian pottery from Tal Ma'ahaz, Stratum I", in S.R. Wolff (ed.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse* (Studies in Ancient Oriental Civilizations 59), Chicago 2001, pp. 29-58.

2002 "The Ceramic Assemblage from Tel Ma'ahaz, Stratum I (Seasons 1975-1976)", in E.C.M. VAN DEN BRINK - TH.E. LEVY (eds.) Egypt and the Levant. Interrelations from the 4th through the Early 3rd Millennium B.C.E., London - New York 2002, pp. 273-279.

ARTIN, G.

2005 "L'ensemble funéraire de Byblos: Étude de la «Nécropole Énéolithique»", in Bulletin d'Archéologie et d'Architecture Libanaises 9 (2005), pp. 223-247.

BADRE, L.

1997 "Bey 003 Preliminary Report. Excavations of te American University of Beirut Museum 1993-1996", in *Bulletin d'Archéologie et d'Architecture Libanaises* 2 (1997), pp. 6-94.

BEN-TOR, A.

"Byblos and the Early Bronze Age I of Palestine", in P. DE MIROSCHEDJI (ed.) 1989, pp. 41-52.

"Early Bronze Age dwellings and installations", in A. Kempinski - R. Reich (eds.), The Architecture of Ancient Israel. From the Prehistoric to the Persian Period, Jerusalem 1992, pp. 60-67.

BOUNNI, A. - AL-MAQDISSI, M.

"Compte rendu de la cinquième campagne de Fouilles à Tell Sianū sur la côte Syrienne", in *Altorientalische Forschungen* 25 (1998), pp. 257-264.

BRANDL, B.

"Observations on the Early Bronze Age Strata of Tel Erani", in P. DE MIROSCHEDJI (ed.) 1989, pp. 357-388.

BRAUN, E.

"The Problem of the Apsidal House: New Aspects of Early Bronze Age I Domestic Architecture in Israel, Jordan and Lebanon", in *Palestine Exploration Quarterly* 121 (1989), pp. 1-43.

BRUNTON, G.

1927 *Qau and Badari I*, London 1927.

CAUVIN, J.

"La préhistoire. Un aperçu sur la préhistoire du Liban", in *Liban, l'autre rive*, Paris 1998, pp. 38-46.

2000 The Birth of the Gods and the Origins of Agriculture, Cambridge 2000. CLUTTON-BROCK, J.

"Mammalian Remains from the Jericho Tell", in *Proceedings of the Prehistoric Society* 45 (1979), pp. 135-157.

DAVIES, W.

"The foreign Relations of Pre-Dynastic Egypt I: Egypt and Palestine in the Pre-

Dynastic Period", in *The Journal of the Society for the Study of Egyptian Antiquities* 11 (1981), pp. 21-27.

Doumet-Serhal, C.

The Early Bronze Age in Sidon. "College Site" Excavations (1998-2000-2001)
(Bibliothèque Archéologique et Historique - T.128), Beirut 2006.

DREYER, G. et al.

1998 *Umm el-Qaab I. Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse* (Archäologische Veröffentlichungen 86), Mainz am Rhein

1998.

2000 "Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königfriedhof. 11./12. Vorbericht", in *Mitteilungen des Deutschen Archäologischen Instituts,*

Abteilung Kairo 56 (2000), pp. 43-129.

2003 "Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königfriedhof. 13./14./15. Vorbericht", in *Mitteilungen des Deutschen Archäologischen Institute Abteilung Kaire* 50 (2002), pp. 67-139

Instituts, Abteilung Kairo 59 (2003), pp. 67-138.

2006 "Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königfriedhof. 16./17./18. Vorbericht", in *Mitteilungen des Deutschen Archäologischen*

Instituts, Abteilung Kairo 62 (2006), pp. 67-129.

DUNAND, M.

1937-1939 Fouilles de Byblos. Tome I. 1926-1932, Paris 1937-1939.

1945 Byblia Grammata. Documents et Recherches sur le développement de l'écriture an Phénicie, Beirut 1945.

1950 "Chronologie des plus anciennes installations de Byblos", in *Revue Biblique* 57 (1950), pp. 583-603.

1950-1958 Fouilles de Byblos. Tome II. 1933-1938, Paris 1950-1958.

1973a Fouilles de Byblos. Tome V. L'architecture, les tombes, le matériel domestique, des origines néolithiques à l'avènement urbain, Paris 1973.

1973b *Byblos. Son histoire, ses ruines, ses légendes*, Beirut 1973.

1983 "L'avènement urbain de Byblos", in *La ville dans le Proche-Orient ancien. Actes du Colloque de Cartigny 1979* (Les Cahiers du CEPOA 1), Leuven 1983, pp. 93-96.

EMERY W.B.

1949 Great Tombs of the First Dynasty, I, Cairo 1949.

1954 Great Tombs of the First Dynasty, II, London 1954.

1958 Great Tombs of the First Dynasty, III, London 1958.

ENEA, A.

"Per una rilettura delle abitazioni palestinesi a pianta curvilinea del Bronzo Antico I", in *Vicino Oriente* 10 (1996), pp. 85-103.

ENGBERG, R. M. - SHIPTON, G. M.

1934 Notes on the Chalcolithic and Early Bronze Age pottery of Megiddo (Studies in Ancient Oriental Civilizations 10), Chicago 1934.

ESSE, D.

1989 "Secondary State Formation and Collapse in Early Bronze Age Palestine", in P. DE MIROSCHEDJI (ed.) 1989, pp. 81-95.

FINKELSTEIN, I. - USSISHKIN, D.

2000 "Area J", in I. FINKELSTEIN - D. USSISHKIN - B. HALPERN (eds.), *Megiddo III. The* 1992-1996 Seasons (Tel Aviv Monograph Series 18), Tel Aviv 2000, pp. 25-74.

FINKELSTEIN, I. - USSISHKIN, D. - PEERSMANN, J.

2006 "Area J (The 1998-2000 Seasons)", in I. FINKELSTEIN - D. USSISHKIN - B. HALPERN

(eds.), Megiddo IV. The 1998-2002 Seasons (Tel Aviv Monograph Series 24),

Tel Aviv 2006, pp. 25-74.

FRANGIPANE, M.

1996 La nascita dello Stato nel Vicino Oriente Antico, Roma - Bari 1996.

FROST, H.

2001 "The Necropolis, Trench and other Ancient Remains: A Survey of the Byblian Seafront", in *Bulletin d'Archéologie et d'Architecture Libanaises* 5 (2001), pp.

195-217.

GARFINKEL, Y.

"«Néolithique» and «Énéolithique» Byblos in Southern Levantine context", in
 E. Peltenburg - A. Wasse (eds.), Neolithic Revolution. New perspectives on southwest Asia in the light of recent discoveries on Cyprus, Oxford 2004, pp.

175-188.

GARSTANG, J.

1932 "Jericho: City and Necropolis", in *Liverpool Annals of Archaeology and*

Anthropology 19 (1932), pp. 3-22, 35-54.

GARSTANG, J. et al.

1935 "Jericho: City and Necropolis (Fifth Report)", in *Liverpool Annals of*

Archaeology and Anthropology 22 (1935), pp. 143-184.

1936 "Jericho: City and Necropolis (Report for the Sixth and Concluding Season, 1936)", in *Liverpool Annals of Archaeology and Anthropology* 23 (1936), pp.

67-100.

GARSTANG, J. - GARSTANG, J.B.E.

1948 The Story of Jericho, London 1948.

GOPHNA, R.

1990 "The Egyptian Pottery of 'Ein Besor", in *Tel Aviv* 17 (1990), pp. 144-162.

GOREN, Y.

2000 "Technology, Provenience and Interpretation of the Early Bronze Age Egyptian Ceramics", in I. FINKELSTEIN - D. USSISHKIN - B. HALPERN (eds.), *Megiddo III. The*1902-1906 Seasons (Tel Aviv Monograph Series 18). Tel Aviv 2000, pp. 496-

1992-1996 Seasons (Tel Aviv Monograph Series 18), Tel Aviv 2000, pp. 496-501.

GOREN, Y. - ILAN, O.

2003 "The Egyptianized Pottery Vessels of Early Bronze Age Megiddo", in *Tel Aviv*

30 (2003), pp. 42-53.ù

GREENBERG, R.

2001 "Early Bronze Age II-III Palestinian Cylinder Seal Impressions and the North Canaanite Metallic Ware Jar", in S.R. Wolff (ed.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse* (Studies in

Ancient Oriental Civilizations 59), Chicago 2001, pp. 189-197.

GREENBERG, R. - EISENBERG, E.

2002 "Egypt, Bet Yerah and Early Canaanite Urbanization", in E.C.M. VAN DEN BRINK - TH.E. Levy (eds.), *Egypt and the Levant. Interrelations from the 4th through*

the Early 3rd Millennium B.C.E., London - New York 2002, pp. 213-222.

GREENBERG, R. - PORAT, N.

1996 "A Third Millennium Levantine Pottery Production Center: Typology, Petrography, and Provenance of the Metallic Ware of Northern Israel and Adjacent Regions", in *Bulletin of the American Schools of Oriental Research* 301 (1996), pp. 5-24.

HARRISON, T.H.

"Economics with an Entrepreneurial Spirit: Early Bronze Age Trade with Late Predynastic Egypt", in *The Biblical Archaeologist* 56 (1993), pp. 81-93.

HARTUNG, U.

"Bemerkungen zur Chronologie der Beziehungen Ägyptens zu Süd Kanaan in spätprädynasticher Zeit", in *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 60 (1994), pp. 107-114.

HENNESSY, J.B.

1967 The Foreign Relations of Palestine during the Early Bronze Age, London 1967. Holland, Th.A.

"Appendix M. Stone Mace-heads", in K.M. Kenyon - Th.A. Holland 1983, pp. 804-813.

1987 "Jericho and the Proto-Urban Period", in S. Shaath (ed.), *Studies in the History and Archaeology of Palestine (Proceedings of the First International Symposium on Palestine Antiquities), II*, Aleppo 1987, pp. 17-25.

JIDEJIAN, N.

1968 Byblos through the Ages, Beirut 1968.

JOFFE, A.H.

2000 "The Early Bronze Age Pottery from Area J", in I. FINKELSTEIN - D. USSISHKIN - B. HALPERN (eds.), *Megiddo III. The 1992-1996 Seasons* (Tel Aviv Monograph Series 18), Tel Aviv 2000, pp. 161-185.

2001 "Early Bronze Age Seal Impressions from the Jezreel Valley and the Problem of Sealing in the Southern Levant", in S.R. Wolff (ed.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse* (Studies in Ancient Oriental Civilizations 59), Chicago 2001, pp. 355-375.

KANSA, E. - LEVY, TH.E.

"Ceramics, Identity, and the Role of the State: The View from Nahal Tillah", in E.C.M. VAN DEN BRINK - TH.E. LEVY (eds.), *Egypt and the Levant. Interrelations from the 4th through the Early 3rd Millennium B.C.E.*, London - New York 2002, pp. 190-212.

KANTOR, H.J.

"The Early Relations of Egypt with Asia", in *Journal of Near Eastern Studie*s 1 (1942), pp. 174-213.

KENYON, K.M.

1957 Digging Up Jericho, London 1957.

1960 Excavations at Jericho. Volume One. The Tombs excavated in 1952-1954, London 1960.

1965 Excavations at Jericho. Volume Two. The Tombs excavated in 1955-1958, London 1965.

1979 Archaeology in the Holy Land, London 1979.

1981 Excavations at Jericho. Volume Three. The Architecture and Stratigraphy of the Tell, London 1981.

KENYON, K.M. - HOLLAND, TH.A.

1983 Excavations at Jericho. Volume Five. The Pottery Phases of the Tell and Others Finds. London 1983.

LAPP, P.W.

1968 "Bâb edh-Dhrâ' Tomb A 76 and Early Bronze I in Palestine", in *Bulletin of the American Schools of Oriental Research* 189 (1968), pp. 12-41.

1970 "Palestine in the Early Bronze Age", in J.A. SANDERS (ed.), *Near Eastern Archaeology in the Twentieth Century: Essays in honor of Nelson Glueck*, Garden City, N.Y. 1970, pp. 101-131.

LEVY, TH.E.

"Cult, Metallurgy and Rank Societies - Chalcolithic Period (ca. 4500-3500)", in Th.E. Levy (ed.), *The Archaeology of Society in the Holy Land*, London 1995, pp. 226-244.

2007 Journey to the Copper Age: Archaeology in the Holy Land, San Diego 2007.

LEVY, TH.E. et al.

"Egyptian-Canaanite Interaction at Nahal Tillah, Israel (ca. 4500-3000 B.C.E.): An Interim Report on the 1994-1995 Excavations", in *Bulletin of the American Schools of Oriental Research* 307 (1997), pp. 1-51.

"The Protodynastic/Dynasty 1 Egyptian Presence in Southern Canaan: A Preliminary Report on the 1994 Excavations at Nahal Tillah, Israel", in E.C.M. VAN DEN BRINK - TH.E. LEVY (eds.), Egypt and the Levant. Interrelations from the 4th through the Early 3rd Millennium B.C.E., London - New York 2002, pp. 411-445.

LOUD, G.

1948 *Megiddo II. Seasons of 1935-39* (Oriental Institute Publication 62), Chicago 1948.

MARCHETTI, N. - NIGRO, L. (eds.)

1998 Scavi a Gerico, 1997. Relazione preliminare sulla prima campagna di scavi e prospezioni archeologiche a Tell es-Sultan, Palestina (Quaderni di Gerico 1), Roma 1998.

MARGUERON, J.C.

"L'urbanisme de Byblos: certitudes et problèmes", in E. Acquaro *et al.* (eds.), *Biblo. Una città e la sua cultura. Atti del Colloquio Internazionale (Roma 5-7 dicembre 1990)*, Roma 1994, pp. 13-35.

MARQUET-KRAUSE, J.

1949 Les Fouilles de 'Ai (et-Tell), Paris 1949.

MAZAR, A.

1992 Archaeology of the Land of the Bible. 10000-586 B.C.E., New York 1992.

MAZZONI, S.

1992 *Le impronte su giara eblaite e siriane nel Bronzo Antico* (Materiali e Studi Archeologi di Ebla - I), Roma 1992.

MELLAART, J.

1975 The Neolithic of the Near East, London 1975.

DE MIROSCHEDJI, P. (ed.)

1989 L'Urbanisation de la Palestine à l'âge du Bronze ancien. Bilan et perspectives des recherches actuelles. Actes du Colloque d'Emmaüs (20-24 octobre 1986) (British Archaeological Reports, IS 527), Oxford 1989.

DE MIROSCHEDJI, P. et al.

2001 "Les fouilles de Tell es-Sakan (Gaza): nouvelles données sur les contacts égypto-cananéens aux IVe-IIIe millénaires", in *Paléorient* 27.2 (2001), pp. 75-

104.

NICOLLE, C. - AL-MAQDISSI, M.

2006 "Sharaya: un village du Bronze Ancien IA en Syrie du Sud", in *Paléorient* 32.1 (2006), pp. 125-136.

NIGRO, L.

2003 "Dal rame al bronzo (senza trascurare l'argento e l'oro). La metallurgia e la

nascita delle città-stato in Siria e in Palestina nel III millennio a.C.", in G. CAPRIOTTI VITTOZZI (ed.), *L'Uomo, la pietra, i metalli. Tesori della terra dal Piceno al Mediterraneo (Catalogo della mostra, San Benedetto del Tronto, Palacongressi, 13 luglio – 3 novembre 2003)*, San Benedetto del Tronto 2003,

pp. 62-69.

2005 Tell es-Sultan/Gerico alle soglie della prima urbanizzazione: il villaggio e la necropoli del Bronzo Antico I (3300-3000 a.C.) (Rome «La Sapienza» Studies

on the Archaeology of Palestine & Transjordan, 1), Roma 2005.

2006a "Results of the Italian-Palestinian Expedition to Tell es-Sultan: at the Dawn of Urbanization in Palestine", in L. NIGRO - H. TAHA (eds.) 2006, pp. 1-40.

2006b "Alcuni vasi del Bronzo Antico I (3300-3000 a.C.) in Ceramica grigia lustrata dalla necropoli di Gerico nei Musei Vaticani", in *Bollettino dei Monumenti,*

Musei e Gallerie Pontificie XXV (2006), pp. 7-32.

NIGRO, L. - TAHA, H. (eds.)

Tell es-Sultan/Jericho in the Context of the Jordan Valley: Site Management, Conservation and Sustainable Development. Proceedings of the International Workshop Held in Ariha 7th - 11th February 2005 by the Palestinian Department of Antiquities and Cultural Heritage - Ministry of Tourism and Antiquities, UNESCO Office - Ramallah, Rome "La Sapienza" University (Rome «La Sapienza» Studies on the Archaeology of Palestine & Transjordan, 2),

Rome 2006.

O'CONNOR, D.

"New funerary enclosures (*Talbezirke*) of the Early Dynastic period at Abydos", in *Journal of the American Research Center in Egypt* 26 (1989), pp. 51-86

"Boat graves and pyramid origins: new discoveries at Abydos, Egypt", in *Expedition* 33/3 (1991), pp. 5-17.

PETRIE, W.M.F.

1900 The Royal Tombs of the First Dynasty, I, London 1900.

1901 The Royal Tombs of the Earliest Dynasties, II, London 1901.

1902 Abydos I, London 1902.1903 Abydos II, London 1903.

PRAG, K.

"Byblos and Egypt in the Fourth Millennium B.C.", in *Levant* 18 (1986), pp. 59-74.

RAST, W.E. - SCHAUB, R.TH.

1989 Bâb edh-Dhrâ': Excavations in the Cemetery directed by Paul W. Lapp (1965-67) (Reports of the Expedition to the Dead Sea Plain, Jordan, Volume I), Winona Lake 1989.

2003 Bâb edh-Dhrâ': Excavations at the Town Site (1975-1981). Part 1: Text, Part 2: Plates and Appendices (Reports of the Expedition to the Dead Sea Plain, Jordan, Volume II), Winona Lake 2003.

SALA, M.

2005a "Le produzioni ceramiche gerichiote del Bronzo Antico I: materiali stratificati provenienti dal tell", in L. NIGRO 2005, pp. 167-196.

2005b "Il Sacello 420 ("Babylonian Shrine"): luogo di culto di un quartiere abitativo. Struttura e funzioni", in L. NIGRO 2005, pp. 42-47.

2007 L'Architettura sacra della Palestina nell'Età del Bronzo Antico I-III (Contributi e Materiali di Archeologia Orientale XIII), Roma 2007.

SAIDAH, R.

"Fouilles de Sidon - Dakerman: L'agglomération chalcolithique", in Berytus 27 1979 (1979), pp. 29-55.

SAGHIEH, M.

1983 Byblos in the Third Millennium B.C.: a Reconstruction of the Stratigraphy and a Study of the Cultural Connections, Warminster 1983.

SELLIN, E. - WATZINGER, C.

1913 Jericho. Die Ergebnisse der Ausgrabungen (Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft 22), Leipzig 1913.

SHALEV, S.

1994 "The change in metal production from the Chalcolithic period to he Early Bronze Age in Israel and Jordan", in *Antiquity* 68 (1994), pp. 630-637.

STEFANIUK, L. et al.

2005 "Localisation et étude paléoenvironnementale des ports antiques de Byblos", in C. Morhange - M. Saghieh-Beydoun (eds.), La Mobilité des Paysages Portuaires Antiques du Liban (BAAL, Hors-Série II), Beirut 2005, pp. 19-41.

TAHA, H. Et al.

2004 "Preliminary Report on the first season of the Palestinian-Norwegian Excavation at Tell el-Mafjer, 2002, Jericho", in Orient Express 2004/2, pp. 40-

THALMANN, J.-P.

2006 Tell Arqa. Les niveaux de l'âge du Bronze (Bibliothèque Archéologique et Historique T.177), Beirut 2006.

WARD, W.A.

1963 "Egypt and the East Mediterranean from Predynastic times to the end of the Old Kingdom" in Journal of the Economic and Social History of the Orient 6 (1963), pp. 1-57.

WENGROW, D.

2006 The Archaeology of Early Egypt. Social Transformations in North-East Africa, 10,000 to 2650 BC (Cambridge World Archaeology), Cambridge 2006.