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WHEN THE WALLS TUMBLE DOWN. JERICHO: RISE AND COLLAPSE OF AN EARLY BRONZE AGE PALESTINIAN CITY

1. Premise: the case study of Tell es-Sultan in the perspective of cultural continuity/discontinuity

In a post-processual perspective, as far as «rise» and «collapse» of an early complex society are concerned, Tell es-Sultan, the world renown Biblical Jericho, plays a prominent role in several periods of its long history[1]. Being one of the most extensively excavated sites of Southern Levant (fig. 1)[2], its continuous sequence of occupational layers provides a noticeable set of data, comparable – during the Bronze Age – with those made available by the investigation of the nearby necropolis, one of the largest of the entire ancient Near East[3]. Nonetheless, looking at the history and the archaeology of Tell es-Sultan/Jericho as a continuous overlapping of rises/arrivals and destructions/abandonment seems somewhat reductive[4], since each phenomenon of settlement

[1] Ramazzotti 2000, pp. 112-115.

[2] After the first soundings carried out by Captain Charles Warren of the Royal British Genius in 1868 (Warren 1869), Tell es-Sultan underwent systematic excavations by the Deutsche Orient-Gesellschaft in 1907-1909 under the direction of Ernst Sellin and Carl Watzinger (Sellin - Watzinger 1913). Following excavations were carried out by the British archaeologist John Garstang from 1930 to 1936, on behalf of the University of Liverpool and under the patronage of Sir Charles Marston (Garstang 1930; 1931; Garstang *et al.* 1935; 1936; Garstang - Garstang 1948). A second British expedition directed by Kathleen M. Kenyon of the University College of London operated on the site, and in the nearby necropolis, with an international équipe from 1952 to 1958 (Kenyon 1957; 1981). Finally, the recent Italian-Palestinian Expedition carried out systematic excavations and archaeological researches on the tell from 1997 to 2000, yielding noteworthy results on the occupational sequence, fortifications and urban layout of the Bronze Age city (Marchetti - Nigro 1998; 2000; Nigro 2006a); a second step of the research project was started in 2005 and is in progress.

[3] Kenyon 1960; 1965. See Nigro 2003 and Nigro 2005 as examples of data provided by the necropolis in comparison with those from the contemporary settlements on the tell.

[4] As much as such a reading is rooted in the strictly vertically stratigraphic method of excavation adopted by K.M. Kenyon in the 1950ies, spontaneously leading to a historiographic exemplification based upon explanatory paradigms such as «arrivals», «invasions», «destructions» as major causes of cultural change, Jericho may be considered a very promising site from the point of view of settlement transformations. However, one has to take into consideration that neat changes are often the mere outcome of the excavation method used by K.M. Kenyon, while when an open area strategy was adopted, for example by the Italian-Palestinian Expedition (but also by the previous Austro-German and Garstang's Expeditions), excavation results produced quite complex pictures of changing and overlapping cultural horizons, more contradictory than those offered by simple vertical reading of stratigraphy.

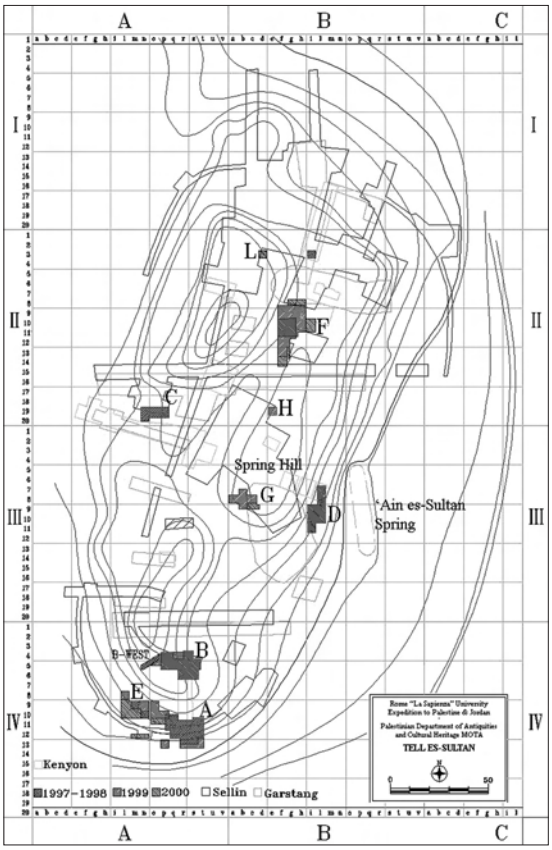

Fig. 1. – General plan of Tell es-Sultan with the areas excavated by the Austro-German and British Expeditions, and by the Italian-Palestinian Expedition in years 1997-2000.

and urban formation, development and crisis has its own complex set of implications and systemic functioning, which archaeology is only partially able to enlighten.

Ten thousands years of life of this key-site have been often seen – looking at the archaeological record – as an impressive succession of human and natural catastrophes, in a syncopated rhythm breaking a flourishing continuous development[5]. In this *mare magnum*, the present paper focuses on the Early Bronze Age for two reasons: first, since in this period for the first time what was called an «urban society» developed in Palestine[6]; secondly, because the Bronze Age at Tell es-Sultan has been object of the excavations carried out by Rome «La Sapienza» University from 1997 to 2000 together with the Department of Antiquities of Palestine[7], and of a renewed series of investigations and studies started since the Ariha Workshop of February 2005[8].

Actually, «rise» and especially «collapse» are typical features of Early Bronze Age Jericho, from a «physical» point of view, since the architecture at the site in this period was mainly made of mud-bricks, a building material easy to be piled up and in the meantime to tumble down. Early Bronze Age Jericho seems, thus, a favourite case study for the analysis of the archaeological dynamics of continuity *vs*. discontinuity[9].

The most suitable piece of evidence (which also involves the problem of defining what is «urbanization» in Palestine) are the impressive superimposed defensive systems of the ancient city, which are the most direct and tangible result of a new socio-economic organization and, for this reason, may be considered a major hallmark of the fully urban status of the settlement[10]. Such massive public works reflect at many extents not only – as like as in

[5] Such a Vicoan cyclic interpretation of the Jericho history and archaeology is exemplarily illustrated by the popular books written by both the British archaeologists who excavated the site, John Garstang (Garstang - Garstang 1948) and K.M. Kenyon (Kenyon 1957).

[6] De Miroschedji 1989.

[7] Marchetti - Nigro 1998; 2000. For the most updated synthesis of the Italian-Palestinian excavation results see Nigro 2006a.

[8] Nigro - Taha 2006.

[9] Palubicka - Tabaczinsky 1986.

[10] Garstang 1931; Garstang *et al.* 1935, pp. 150-152; Garstang - Garstang 1948, pp. 84-85; Kenyon 1957, pp. 167-185; Nigro 2006b, pp. 355-375.

many other archaeological sites – the history of the city with its peaks and downs, but also provide various insights into the social organization and urban layout of the earliest urban community of Jericho. Moreover, since the archaeological period preceding the urban grow (the Early Bronze I, or Proto-Urban Period) is all the same well documented[11], Tell es-Sultan seems a very suitable site for studying the phenomena which brought about the rise of an earliest urban society[12]. The archaeology of Jericho not only can, thus, epitomize very well the dynamics of «rise» and «collapse», but it may indeed provide interesting insights in the identification of the «reasons for change» in the cultural and socio-economic development of the city and its urban society.

In the general panorama of early urbanization in Palestine, a phenomenon which took place between the end of the 4th and the beginning of the 3rd millennium BC[13], beyond general explanations invoking systemic interactions facilitating and stimulating cultural changes and social aggregation and diversification connected with urban rise and development[14], Tell es-Sultan offers some peculiar environmental conditions, which should rule out many external factors often called for having basically influenced urban grow: a previous long-lasting noteworthy occupation; the presence of a constant supply of fresh water; the location in an extremely favourable ecological niche; the role of crossroad along some major routes of Southern Levant[15]. Especially the unique opportunity of benefiting of a perennial flow of fresh water generously provided by ʻAin es-Sultan, should have given to Jericho a higher degree of stability against recurring crisis and resistance against social complexity oscillations[16]. Apparently, and anticipating the final statements of this paper, this seems true only in a very extended time span, as a demonstration that collapses, destructions and abandonment affecting Bronze Age Palestinian cities were normal structural events of this kind of «secondary» urbanization[17]. What, however, seems noteworthy is that around 2300 BC the site was definitely abandoned and after a short while resettled by new groups, only partly sharing earlier traditions[18]. Why did it happen?

[11] Kenyon 1957, pp. 93-102; Holland 1987; Parr 2000. For a general reassessment of Tell es-Sultan in the Proto-Urban Period see Nigro 2005.

[12] Nigro 1996-1997.

[13] Many studies have been devoted to the analysis of this phenomenon, from the earliest studies of historical-cultural character (Amiran 1970; Lapp 1970; de Vaux 1971), to the diversified analyses of the 1980ies, with the introduction of anthropological, systemic and processual approaches (Kempinski 1978; Serangeli 1980; Schaub 1982; Richard 1987; de Miroschedji 1989), up to most recent studies of the last decade (Joffe 1993; Gophna 1995; Finkelstein 1995; Nigro 1996-1997; Nicolle 1999; Philip 2001; Rast 2001; Greenberg 2002; Chesson - Philip 2003; Harrison - Savage 2003; P. de Miroschedji in this volume), which finally brought back the application of theoretical models (as the notions of chiefdoms, state and urbanism) to a more punctual examination of the specific data and local particularisms actually offered by the Palestinian region.

[14] See, for example, Esse 1989.

[15] Nigro 2005, pp. 4-6.

[16] Esse 1989; 1991.

[17] Fried 1967, pp. 240-242; Esse 1989. The secondary character of Palestinian Early Bronze Age urbanization has been highlighted both in respect of pristine Mesopotamian (Late Uruk) and Egyptian (Pre- and Early-Dynastic) urban *floruit*, with which, especially the latter, is strictly related. On the relationships between Egypt and Palestine in the late 4th and 3rd millennia BC see van den Brink - Levy (eds) 2002.

[18] Nigro 2003.

Environmental Setting

The Jericho Oasis was a very suitable environment for an early agricultural community[19], while the surrounding wilderness, as well as the nearby hospitable habitat along the Jordan River, offered favourable space and food for wild and tamed animal species[20] in advantage to pastoralists and hunters. Primary subsistence was thus easy assured[21], nonetheless the site offered other important strategic resources, such as its location at an important junction on the east-west and north-south routes of inland Palestine and Transjordan; and the availability of raw materials from the Dead Sea (such as salt, sulphur, bitumen, and some Kilometers to the south even copper and turquoise in the Wadi 'Arabah).

2. Premises of the urban rise at Tell es-Sultan: Sultan IIIa (3300-3000 BC)

During the Chalcolithic Period, Tell es-Sultan was only partially occupied, the main site of the Southern Jordan Valley being, of course, Teleilat el-Ghassul[22], around 10 Km far to the east, and the most important in the Jericho Oasis probably Khirbet el-Mafjar, around 2 Km north[23].

A distinctive change in stratigraphy and material culture at the site occurred in Period Sultan IIIa1 (mid-end of Palestinian Early Bronze IA), around 3300 BC, when a new group settled just north-west of the Spring[24]. The earliest village was made of circular huts sunk into the regularized previous Pottery Neolithic layers, with many intervals among them (fig. 2)[25]. A major feature was a terrace wall on the eastern flank of the tell – a kind

[19] This is exemplarily shown by the extraordinary Neolithic growth of the site (Kenyon 1957, pp. 51-76).

[20] Alhaique 2000.

[21] Caramiello 2000.

[22] Bourke 2002.

[23] The problem of the identification of a Chalcolithic phase at Tell es-Sultan was raised by R. North (North 1981), and then re-examined by J. Garfinkel (Garfinkel 1999). At least a part of Tell es-Sultan should have been occupied during the Chalcolithic Period: 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. In any case, the hypothesis that the main site of this period was, indeed, located in another spot of the oasis has been corroborated by the excavations resumed by a Norwegian-Palestinian Expedition directed by Hamdan Taha and Randi Haaland, with the field direction of Nils Anfinset, at the Chalcolithic site of Khirbet el-Mafjar, on the eastern riverside of the Wadi en-Nueima not far from Qasr Hisham (Taha *et al.* 2004).

[24] Such phase was first identified and brought to light by J. Garstang, who distinguished it in a trench dug on the north-eastern slope of the tell with «level VII» (Garstang *et al.* 1936, pp. 68, 73-74, pl. XXVIII). In the following British excavations K.M. Kenyon reached this cultural horizon at different spots of the site (in particular, in Trench II - Kenyon 1981, pp. 146-147, pls. 100a, 249a - and Squares EIII-IV - Hennessy 1967, pp. 6-15; Kenyon 1981, pp. 314-325), and called it Proto-Urban Period, thus stressing its direct relationship with the following earliest urban phase of life of the site (Kenyon 1957, pp. 93-102; 1960, pp. 4-10; 1965, pp. 3-6; Holland 1987). An overall reassessment of Proto-Urban layers was proposed by the present author, mainly basing upon the unpublished data of Garstang excavations and on the stratigraphic clues provided by the Italian-Palestinian excavations (Nigro 2005).

[25] Nigro 2005, pp. 15-34, 113-115, 120-122, 198-199.

of communitarian build-work –, and, towards the end of the phase, the foundation of a shrine at its northernmost terrace (fig. 3)[26].

The earliest layers in the contemporary tombs of the necropolis, such as Tomb A excavated by J. Garstang[27], and Tomb K1 and A94 excavated by K.M. Kenyon[28], are characterized by burials of disarticulated human remains, especially grouped skulls. The large number of skulls in respect to long bones may suggest that the first inhabitants of Jericho brought from elsewhere (a Transjordanian nomadic dolmen site for example) a selection of their relatives[29].

The presence of status-symbols and goods of Egyptian influx both in tombs and on the site (presumably related to the shrine)[30], as well as an increasing degree of pottery morphological segmentation and standardization (with the diffusion of specialized productions such as the Line-Painted Ware)[31], illustrate the gradual growth of the community, which definitely flourished in the following Sultan IIIa2 Period (Early Bronze IB), when some important structural interventions signal the transformation of the rural village into a large one: the

Fig. 2. – The western sector of the Sultan IIIa1 (EB IA) village excavated by J. Garstang, with circular Houses 173 and 177, and apsidal House 175, from south-east. In the upper background, the EB III city-wall (after Garstang 1935: pl. LXII,1).

[26] Shrine 420, called by Garstang «Babylonian Shrine» (Garstang *et al.* 1936, pp. 73-74, pl. XLIa; Garstang - Garstang 1948, pp. 78-79, fig. 8), consisted of a rectangular room (6 x 2.6 m), with the entrance located in the south-eastern corner (Nigro 2005, pp. 33-34; Sala 2005a). Continuous benches were lined along the walls inside the room, while its western part was occupied by a large raised plastered dais with some circular depressions («cup-marks») at the opposite side of the entrance. A niche, not noticed by Garstang, was opened just in front of the «cup-marks» in the dais of the shrine. It seems, thus, possible that at least some of the cult furnishings found in the same level and associated by Garstang to the shrine, namely a stone smoothed object of oval section (tentatively interpreted as a *massebah*), a small libation altar, two limestone bases, and two other betyls (Garstang *et al.* 1936, pl. XLIb), originally belonged to the shrine.

[27] Garstang 1932, pp. 18-21, 41-42; Polcaro 2005a.

[28] Kenyon 1960, pp. 16-40 (Tomb A94); 1965, pp. 27-31 (Tomb K1); Polcaro 2005b, pp. 129-130, 133-136.

[29] Kenyon 1957, pp. 95-100. This hypothesis gives an end to the analyses of burial custom during Early Bronze Age IA (Palumbo 1992; Polcaro 2006, pp. 283-289).

[30] Two Egyptian or Egyptianizing ceremonial mace-heads and a possible stone palette retrieved by Garstang in the North-Eastern Trench (Garstang *et al.* 1936, pl. XXXVI, pp. 24-26; Garstang - Garstang 1948, p. 79). Two more Egyptianizing ceremonial mace-heads and an EB I stone palette had been found on the tell by the Austro-German Expedition (Sellin - Watzinger 1913, figs. 107, 109-110).

[31] Sala 2005b, pp. 174-175.

Fig. 3. – Shrine 420, from north-west; note the large plastered dais with circular depressions on the western side of the *cella* and the possible traces of a cultic niche in the western wall (Courtesy of Palestine Exploration Fund).

terrace-wall is rebuilt and reinforced[32], with a new course of stone foundations (already brought to light by the Austro-German Expedition)[33]; the shrine is doubled, with the addition of a second room to the east[34]; a street is established between two compounds of

[32] Now Kenyon's Wall ZA (Kenyon 1981, p. 322). Parr differently interpreted this structure as an early fortification wall of the Proto-Urban settlement (Parr 2000, pp. 391-392).

[33] Sellin - Watzinger 1913, fig. 10.

[34] Nigro 2005, p. 35. The addition of this second room (447) makes the plan of the shrine roughly similar to other Palestinian «double» temples of the same period (such as that of Tell el-Mutesellim, stratum XIX [J-3]; Loud 1948, fig. 390; Finkelstein - Ussishkin 2000, pp. 38-52; fig. 3.11).

Fig. 4. – Apsidal building excavated by K.M. Kenyon in Squares EIII-IV (Phases Q-N; Period Sultan IIIa2, EB IB) in 1952-1958 (after Kenyon 1981: pl. 174).

domestic units[35]; and, finally, large apsidal buildings were possibly devoted to some kind of communal function (fig. 4)[36].

That Sultan IIIa2 was a decisive phase of social transformation is further illustrated by the necropolis. In tombs of this period primary deposition is attested to for the first time, and in a single striking case a personage is placed in a very distinctive position, with an Egyptianizing

[35] Garstang *et al.* 1935, pp. 152-154, pl. XXIII; Nigro 2005, p. 36. This street, 2 meters wide, was continuously used during the whole urban period at Tell es-Sultan, even though with some drastic changes in its northern end after the construction of the EB III city-walls: the street first turned slightly to north-east and then, cause of the erection of the city-wall to the north, sharply bended to north-west and ran westwards, where it was first unearthed by Sellin and Watzinger in the south-eastern corner of Square E6 (Sellin - Watzinger 1913, pp. 36-38, fig. 17, pl. II). The southward prosecution of the street of the EB II-III dwelling quarter has been identified by the Italian-Palestinian Expedition in Area F (street L.437, then L.307; Nigro 2000, pp. 22-23, figs. 1:15, 1:17, 1:18; 2006a, pp. 5-6, 10).

[36] Kenyon 1981, pp. 322-325, pls. 174, 313b-314; Nigro 2005, pp. 122-124. A careful re-examination of the stratigraphy allowed to ascertain that different shapes were contemporarily used for buildings during Period Sultan IIIa (EB I): circular huts constituted the basic familiar domestic unit, oval-shaped buildings possibly served for communal activities, while rectangular chambers were devoted to religious functions.

mace-head in between his legs, and the raised arms which repeat a gesture known from the two pictorial documents of Early Bronze Age Palestine[37]: the so-called Stele of Arad[38] and a graffito from the slab-paved courtyard of the contemporary Megiddo Temple of stratum XIX[39]. He can be identified with a community leader (a high priest?).

3. The earliest city: Sultan IIIb (3000-2700 BC)

The establishment of an impressive city-wall and the transformation of the village into a fortified town is the final outcome of a process lasting more than three centuries and marks the passage to Period Sultan IIIb, the Early Bronze II[40]. The main topographic features of the proto-urban layout are retained, such as the street running south-west/north-east, and the terrace-wall at the mid of the eastern slope of the tell. The arrangement of houses, lanes and yards, however, is changed, and more densely inhabited domestic compounds have taken the place of huts and yards. Rectilinear architecture made it possible to juxtapose units, exploiting all room available within the city-wall.

Especially the terrace-wall reconstruction exemplifies the change occurred: it is transformed into the huge city-wall, thus stressing, on the one hand, the continuity of the development between the village and the earliest city; on the other hand, the architecture of the Early Bronze II city-wall exhibits a marked social and economic transformation: it is built of large dune yellowish brick (0.7 x 0.4 m), laid upon a foundation consisting of a single course of limestone boulders with a width varying between 4.5-5.6 m (figs. 5-6)[41]; its whole perimeter can be calculated around 1 km. Semicircular towers were added at some strategic spots of the defence (fig. 7)[42]. The height of the wall was at least 9 m, with slightly battering faces; each 10 m long stretch of the wall included around 8000 bricks, and the whole city-wall around 1.000.000. A worker can produce maximum 100 bricks a day, so that 100 workers for four months are necessary only for the realization of bricks. The building of the city-wall necessitates of at least 500 workers, almost one fourth of the estimated total population of the Jericho Oasis, an extraordinary supply of water (that at Jericho is not a problem), and minimum 6 months, as a variable of the number of workers. Thus, it seems reasonable to surmise that, being the population largely engaged in primary food production, this kind of public works were realized with the help of seasonal workers during summer, when animals and humans were gathered in the Oasis.

In any case, the building of the city-wall was an extraordinary effort, in terms of materials, techniques and food supplies for workers, and it itself demonstrates the existence of a political authority, a distinguished capability of accumulation, which the earliest town of Jericho had achieved through the virtuous exploitation of its resources.

[37] Polcaro 2005a, pp. 59-60, 65-68.

[38] Amiran 1972, p. 86; Amiran - Ilan 1992, fig. 87.

[39] Loud 1948, p. 61, fig. 390, pl. 273.

[40] Nigro 2005, pp. 201-202; 2006a, pp. 4-7.

[41] Sellin - Watzinger 1913, p. 17, fig. 3,a, pl. I (the structure called «Massiv» in the report of the Austro-German archaeologists and plotted in purple colour on their plan); Garstang *et al.* 1935, pl. L,c; Kenyon 1981, p. 373, pls. 200-201; Nigro 2006b, pp. 355-360.

[42] Kenyon 1981, p. 97, pl. 79b; Nigro 2006b, p. 359.

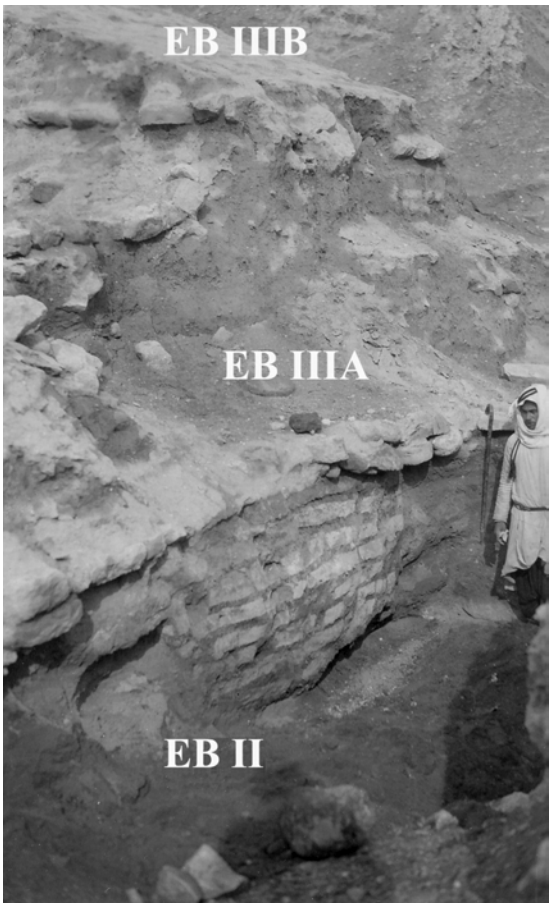

Fig. 5. – EB II city-wall identified by J. Garstang on the north-eastern side of the town (after Garstang *et al.* 1935: pl. L,c).

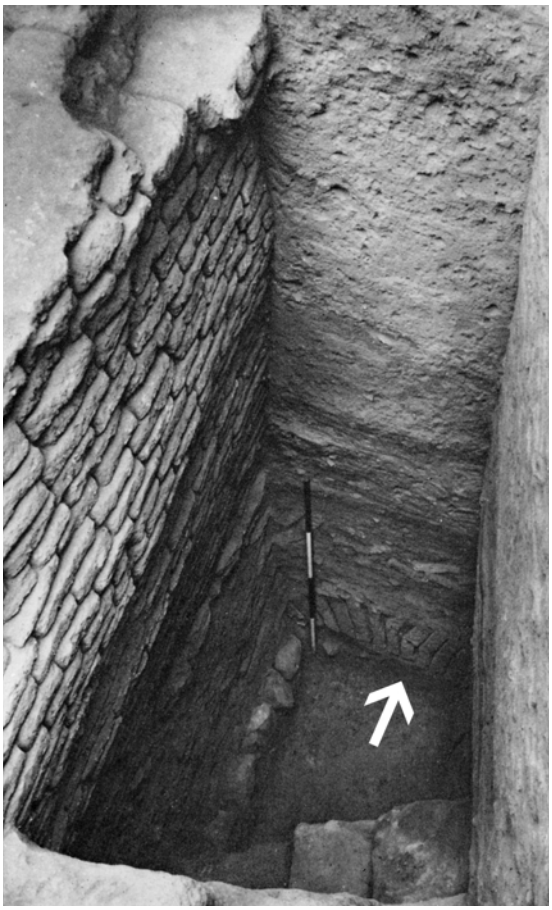

Fig. 6. – The top of the tumble down EB II Town Wall I in Kenyon's Site A (after Kenyon 1981: pl. 200,a).

Fig. 7. – The semicircular tower excavated by K.M. Kenyon against Wall A (after Kenyon 1981: pl. 79b).

This increasing wealth is also demonstrated by the number and dimension of structures used to storage grain and other agricultural products (basically beans), which are largely attested to in the dwelling quarters of the Early Bronze II[43], as well as by a neat development of technology evident especially in pottery, but also in the workmanship of metals, precious stones, animal bones, ivory, wood, leather etc. (fig. 8).

4. The collapse of Sultan IIIb and the reconstruction of Sultan IIIc

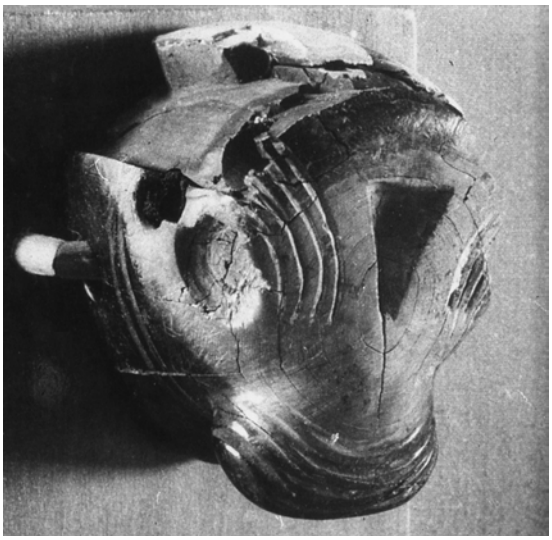

Fig. 8. – Ivory bull head from Garstang's excavations in the Early Bronze II-III dwelling units at the bottom of the Eastern Tower (Square K6) in front of the Spring Hill, on the eastern side of the tell.

The earliest town of Jericho came to a sudden end while it had reached its first apogee around 2700 BC, due to a tremendous earthquake, which made the city-wall spectacularly fall down. The defensive system was, however, immediately rebuilt according to a somewhat new layout at the beginning of Sultan IIIc1 (Early Bronze Age IIIA), characterized by the addition of an advanced outer wall, protecting the flanks of the mound, and creating a long corridor all around the main inner wall (fig. 9), which was used as pathway, storeroom, or simply filled in with *hawwara* at certain spots of the city perimeter[44].

As recent Italian-Palestinian excavations definitely demonstrated, a major public building (a palace), was erected on top of the Spring Hill (fig. 10)[45], and remained in use until the end of the period; as well as the temple, which can be identified in the area excavated by the first Austro-German Expedition[46]. In the meantime, the existence of an Early Bronze Age lower city, all around the Spring, outside the area encircled by the city-wall, had been already proved by Garstang (but never noticed by scholars after him)[47], and allows to extend the dimension of the city to around 1 hectare.

Contemporary data from necropolis show the continuative and intensive utilization of familiar tombs for several generations, where it becomes customary the deposition of ceramic equipments including open shapes and specialized production hinting at a funerary ideology

[43] Garstang *et al.* 1935, p. 152, pl. XXIII,b; 1936, p. 74; Kenyon 1981, pp. 326-334, pls. 177-180a, 316-318a (Squares EIII-IV, Phases L-D).

[44] Marchetti - Nigro 1998, pp. 32-39, 81-94; Nigro 2006a, pp. 8-9; 2006b, pp. 369-372.

[45] Marchetti 2003, pp. 300-302; Nigro 20006a, pp. 20-22; 2007-2008; 2009.

[46] Sellin - Watzinger 1913, figs. 19-20.

[47] The existence of an Early Bronze Age lower city all around the Spring is testified to by the EB II-III domestic units which the British archaeologist unearthed on the eastern side of the tell at the bottom of the Eastern Tower, in front of the Spring Hill (Garstang 1932, pp. 9-12).

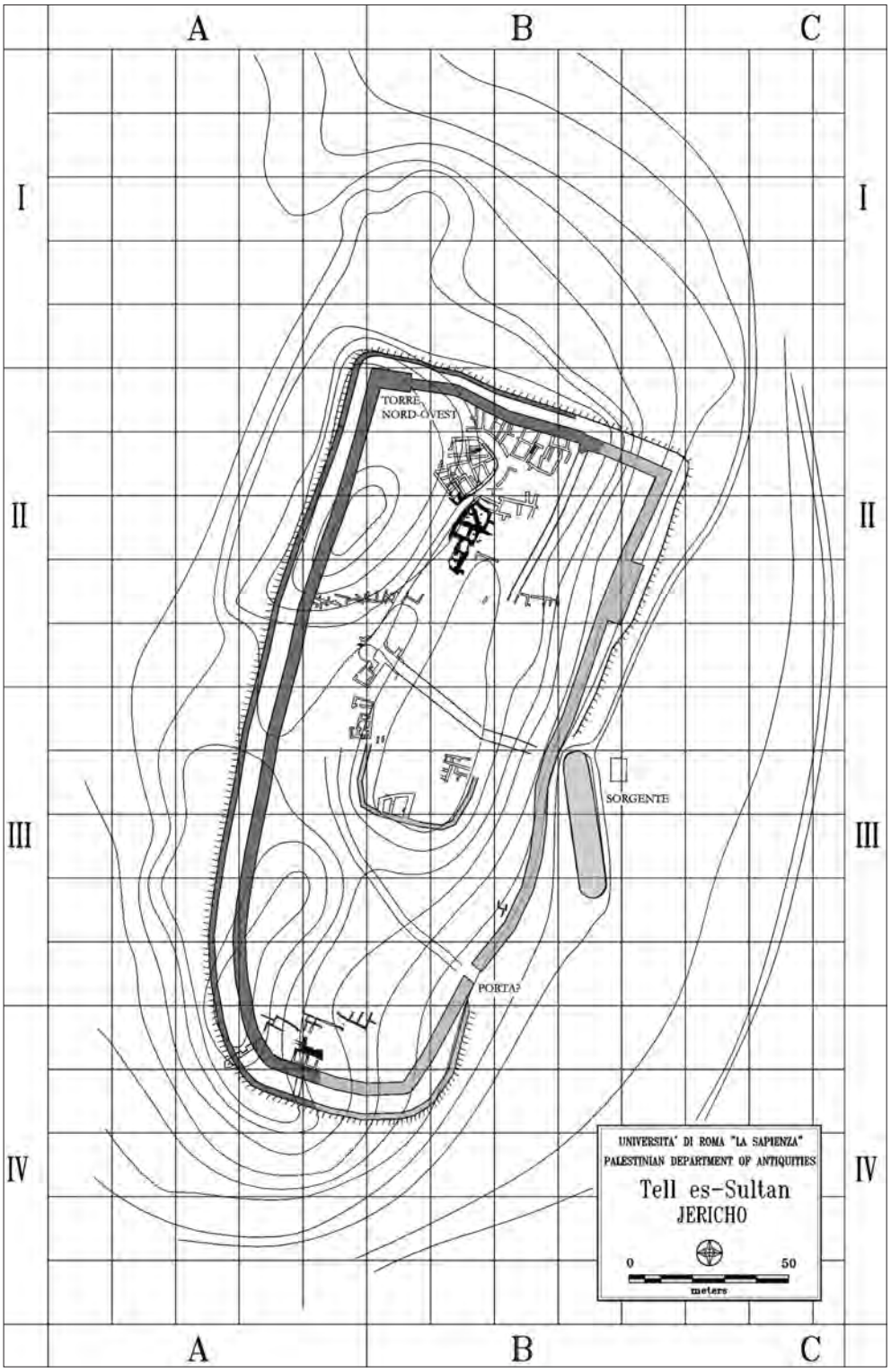

Fig. 9. – Plan of the town and fortification system of Period Sultan IIIc (Early Bronze III).

Fig. 10. – General view of Building G1 (Period Sultan IIIc, EB III), from west.

including food supplies for the death banquet, a typical one of a sedentary agricultural community[48].

Material culture again testifies to the degree of inner social organization and multiple interregional links of Jericho, both with the North, the South-West and, of course, the South, thus suggesting that the food surplus of the city was distributed especially towards the Wilderness of Judah and the South, while special products of the Oasis and the Dead Sea were exported and exchanged with other major cities in the region and to the North.

As an indicator of intra-site development and increasing complexity, one can exemplarily quote specialized pottery productions, including Red Polished and Red Painted Wares, local Khirbet Kerak Ware[49], as well as cylinder seals[50] and tallying items (such as pierced shells and other kind of tokens, largely attested to from this phase) testifying to a kind of administrative practices (fig. 11)[51].

[48] A series of familiar tombs can be exemplarily indicated showing an Early Bronze III utilization: the great Garstang's Tomb A and Tomb 24 (Garstang 1932, pp. 18-22, 38-42), and Kenyon's Tombs D12, F2, F3, F4 and F5 (Kenyon 1960, pp. 94-174).

[49] Nigro 2006a, pp. 15-16; Sala 2008.

[50] A bone incised cylinder seals was found in the domestic quarter on the north-eastern plateau of the tell (Area F) by the Italian-Palestinian Expedition (TS.99.F.299; Nigro 2006a, p. 15, fig. 20); a similar specimen with crosshatched decoration was retrieved by K.M. Kenyon in Tomb A 127 (Reg. no. 56; Kenyon 1960, p. 91, fig. 27,4).

[51] Nigro 2006a, p. 14.

Also this city, that of the Early Bronze IIIA, came at a sudden end, being drastically destroyed around 2500 BC. It is not clear if again an earthquake was the cause of such destruction, or it was due to a military attack, since at some spots fierce fire is documented[52]. However, this destruction did not interfere in the continuous cultural and economic development of Jericho. The city-wall and related structures were immediately reconstructed and further reinforced with the addition of towers and bastions (fig. 12)[53]. This last reconstruction marks stratigraphically the final stage of Period Sultan IIIc (Sultan IIIc2, Early Bronze IIIB), and it is distinguished at the level of material culture in pottery, for example, by a strong standardization of types and productions[54].

Fig. 11. – Weights, spindle whorls, pierced sea-shells, flint débitages and other kind of tokens and tools from House L.303 (Period Sultan IIIc1, EB IIIA), in Area F.

How could the Jericho rulers be able to afford such gigantic building enterprises? One answer may be that they have at their disposal a significant agricultural surplus since they controlled the water and its distribution in the Oasis. Their palace was erected, in fact, just over the Spring, and some related structures (detected under the modern road during the recent restorations of the Ottoman Spring), support this interpretation[55]. They, thus, could maintain a relatively numerous number of workers, especially in summer, when semi-nomads and nomads of Transjordanian Highlands and Judah Wilderness gathered in the Jordan Valley. Large building activities were a way for linking people to the ruling authority and the socio-economic impact of the realization of Palestinian Early Bronze Age fortification systems seems, thus, one of the structural elements basically contributing to the life and development of this kind of early urban society already in this period[56]. They had, of course, an ideological aim, that of manifesting the power of the ruling class and its concern for the community. The more complex the fortifications are, the more powerful one has to imagine the authority which erected them. From this point of view, Early Bronze IIIB fortifications were the strongest ever built at Jericho.

[52] For example, in the houses of Area F of the Italian-Palestinian Expedition (Nigro 2000, pp. 16-17).

[53] Nigro 20006a, pp. 18-19; 2006b, pp. 367-369.

[54] Especially ceramic materials from Building B1 (Marchetti - Nigro 1998, pp. 44-45; 2000, pp. 132-133; Nigro 2006a, pp. 18-20) and Building G1 (Marchetti 2003, pp. 300-302; Nigro 20006a, pp. 20-22), respectively located inside the southern city-wall and on top of the Spring Hill.

[55] Actually, this spot (Area D of Italian-Palestinian excavations; Marchetti - Nigro 2000, pp. 165-179) was already investigated by J. Garstang (Garstang 1932, pp. 9-17; 1934, pls. XIII, XV) and by K.M. Kenyon (Squares HII, III, VI; Kenyon 1981, pp. 339-371). The presence of Early Bronze Age structures was detected by Garstang in front the Eastern Tower (Garstang 1932, pp. 9-12; see also note 47).

[56] Similar observations were, in fact, put forward about the erection of Middle Bronze Age ramparts (Finkelstein 1992, pp. 212-216).

Fig. 12. – The EB IIIB double city-wall system unearthed by the Austro-German Expedition on the northern side of the tell (Sellin - Watzinger 1913: fig. 4,a).

Fig. 13. – Smashed jars and collapsed materials in Room L.644 of Building G1, with traces of the fierce fire that destroyed the city at the end of Period Sultan IIIc2 (EB IIIB), from south-east.

Fig. 14. – Collapsed wall W.34 in Room L.39 of Building B1 (Sultan IIIc2, EB IIIB), from south.

Nevertheless, around 2350 BC (this date is supported by radiocarbon data), a definitive terrible conflagration documented all over the site (figs. 13-14) destroyed the city, again while all other indicators show that it was a flourishing urban centre. The Palace on the Spring Hill was set on fire and collapsed, as it is shown by a room excavated by the Italian-Palestinian Expedition (fig. 13); Building B1 on the southern fortification line also collapsed in a violent fire (fig. 14). No person was found underneath the collapsed walls: it seems thus unlikely that such a conflagration was caused by an earthquake. Evidence (like the systematic dismantling of big wooden beams from the city-walls) suggests that a violent human action caused such a terrible destruction.

This time Jericho didn't recover, and the ruins were abandoned. Why? Climate variations are, of course, to be taken into consideration: in Sultan IIIc1 hyppopotamus bones are attested to for the last time[57], as well as a considerable presence of bovines which were decisive for a strong growth of the population[58]. These features totally disappear in the following Early Bronze IV village of Sultan IIId. But it seems more likely that this depended on a variation of human cultural decisions and adaptive strategies, and not on deterministic environmental circumstances. What seems meaningful is the violence of the destruction: the upper section of the city-walls was heavily burnt, bricks assumed a colour variable from reddish to dark grey or whitish, when their surface was fully baked, and big cracks cut vertically mud-brick structures causing inner subsiding and collapses[59]. The burnt layer is uniform both on the wide fortification system, and inside the city. This means that the fire was deliberately set on, so that the city could not recover from a radical destruction, which was the final goal of a simple political strategy: to eliminate the centre of power of the city-state.

[57] Alhaique in press.

[58] Alhaique 2000.

[59] The ruins of Sultan IIIc2 city-walls were so impressive that were immediately interpreted first by Sellin and Watzinger, and then by John Garstang as the material remains of the Biblical account of Joshua's attack. This Biblical interpretation mislead the stratigraphic interpretation of Tell es-Sultan stratigraphy until K.M. Kenyon's excavations in the 1950ies (Nigro 2006b, pp. 350-351).

5. War as a systemic element of early urbanization

We are at the point: the Jericho evidence shows that war was a structural element in the development of the Palestinian early urban society. Centralization, monumental architecture, administrative (or proto-administrative) control, hierarchic social organization, goods and agricultural products accumulation, long distance specialized trade, are all shared distinguishing interacting factors in the formation of early urban societies, even in the restricted environment of Palestine; another factor, which was systemically related to the others, was War, as a mean for accumulating or catching resources, imposing the subject supremacy and eliminating dangerous or disturbing competitors. Destructions are, thus, as systemic and predictable as constructions, «collapse» is the regular result of «rise», but, in certain cases, destructions might determine the sudden end of a city, even of a very favourite one, like Jericho, for example, when the population was taken away as the most valuable resource, as it apparently happened at EB IIIB Tell es-Sultan, in this not so far from us violent past of ill-fated Palestine.

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Summary

Tell es-Sultan/ancient Jericho is a favourite site for the investigation of early urbanisation in Southern Levant, especially in a processual perspective, interested in the progressive origins of the urban phenomenon, its regional peculiarities, and sudden end during the 3rd millennium BC. A fresh re-examination of the Jericho stratigraphic evidence, made possible by recent MOTA-DACH - Rome «La Sapienza» Expedition to the site (1997-2000), from the one hand, allows to draw out the historical development of this early Palestinian city, which controlled the Lower Jordan Valley, from the other hand, offers several hints at the explanation of the urban growth, *floruit* and crisis, especially concerning the reasons of its dramatic end in the region.