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THE BRONZE AGE PALACE AND FORTIFICATIONS AT TELL ES-SULTAN/JERICHO  
THE 6<sup>TH</sup> - 7<sup>TH</sup> SEASONS (2010-2011)  
BY ROME “LA SAPIENZA” UNIVERSITY AND THE PALESTINIAN MOTA-DACH

INTRODUCTION

The sixth and seventh seasons of archaeological activities at Tell es-Sultan/ancient Jericho (*Fig. 1*)<sup>1</sup>, in Palestine, carried out by Rome “La Sapienza” University and the Palestinian Department of Antiquities and Cultural Heritage (MOTA - DACH)<sup>2</sup>, took place in March 2010 and 2011 and were supported by the former Institutions and by the Italian Ministry of Foreign Affairs.



Fig. 1 – General view of the site of Tell es-Sultan from south, with the Middle Bronze Age (1900-1550 BC) fortification works at the southern side of the tell.

<sup>1</sup> On the previous results of the Italian-Palestinian Expedition at Tell es-Sultan see NIGRO 2006a; 2009a; 2009b; 2010; NIGRO - TAHA 2009; web site: [www.lasapienzatojericho.it](http://www.lasapienzatojericho.it).

<sup>2</sup> A deep thank is addressed to the Palestinian Minister of Tourism and Antiquities, H.E. Khoulood Dabeis, and to all the staff of the Palestinian MOTA-DACH.

Renewed investigations at the site were deemed necessary for protecting several areas where erosion and previous excavations left dumps, and in order to further deepen the study of pre-classical Jericho (tab. 1)<sup>3</sup>.

Archaeological Period	Dating	Tell es-Sultan phase
Epipaleolithic (Late Natufian)	10.500-8500 BC	Sultan Ia
Pre-Pottery Neolithic A	8500/8300-7500 BC	Sultan Ib
Pre-Pottery Neolithic B	7500-6000 BC	Sultan Ic
Pottery Neolithic A	6000-5000 BC	Sultan IIa
Pottery Neolithic B	5000-4600 BC	Sultan IIb
Early Chalcolithic	4600-4200 BC	Sultan IIc
Middle Chalcolithic	4200-3800 BC	
Late Chalcolithic	3800-3400 BC	
Early Bronze Age IA	3400-3200 BC	Sultan IIIa1
Early Bronze Age IB	3200-3000 BC	Sultan IIIa2
Early Bronze Age IIA	3000-2850 BC	Sultan IIIb1
Early Bronze Age IIB	2850-2700 BC	Sultan IIIb2
Early Bronze Age IIIA	2700-2500 BC	Sultan IIIc1
Early Bronze Age IIIB	2500-2350/2300 BC	Sultan IIIc2
Early Bronze Age IVA	2350/2300-2200 BC	Sultan IIIId1
Early Bronze Age IVB	2200-2000 BC	Sultan IIIId2
Middle Bronze Age IA	2000/1950-1900 BC	Sultan IVa1
Middle Bronze Age IB	1900-1800 BC	Sultan IVa2
Middle Bronze Age IIA	1800-1700 BC	Sultan IVb1
Middle Bronze Age IIB	1700-1650 BC	Sultan IVb2
Middle Bronze Age III	1650-1550 BC	Sultan IVc
Late Bronze Age I	1550-1400 BC	Sultan V
Late Bronze Age II	1400-1200 BC	
Iron Age I	1200-1000 BC	Sultan VIa
Iron Age IIA	1000-925 BC	Sultan VIb
Iron Age IIB	925-732 BC	
Iron Age IIC	732-535 BC	Sultan VIc
Persian Period	535-333 BC	Sultan VIIa
Hellenistic Period	332-64 BC	Sultan VIIb
Roman Period	64 BC - 324 AD	Sultan VIII
Byzantine Period	324-636	Sultan IX
Early Islamic Period	636-1000	Sultan X
Crusader Period & Middle Islamic	1000-1250	
Late Islamic (Mamluk) Period	1250-1516	
Ottoman Period	1516-1918	Sultan XI

Tab. 1. Correlation between archaeological periodization and the stratigraphic phases of the Italian-Palestinian Expedition at Tell es-Sultan/ancient Jericho.

<sup>3</sup> Information on 2009 season and previous Italian-Palestinian Expedition seasons is given in NIGRO -

TAHA 2009.

Excavations were carried out in four different areas: Area A, where investigations focused on MB I-II (Sultan IVa-b, 1900-1650 BC) Tower A1 and related stratigraphy, MB III (Sultan IVc, 1650-1550 BC) Cyclopean Wall W.4 and connected rampart, and on Iron Age IIC (Sultan VIc, late 8<sup>th</sup> - 7<sup>th</sup> century BC) installations, while a deep sounding down to Pre-Pottery Neolithic (Sultan Ib-c) layers was excavated south of the Cyclopean Wall (§ 1); Area B, with the identification and exploration of the South Gate through the EB IIIA (Sultan IIIc1, 2700-2500 BC) Inner City-Wall (§ 2); Area E, with further investigations on MB II (Sultan IVb, 1800-1650 BC) Curvilinear Stone Structure and connected installations (§ 3); Area G, on the eastern slope of the Spring Hill, where a further portion of EB IIIB (Sultan IIIc2, 2500-2350 BC) Palace G was uncovered (§ 4). Excavations results increased our knowledge on this multi-stratified site, covering a chronological range spanning from the Pre-Pottery Neolithic Period up to the Bronze Age (10<sup>th</sup>-2<sup>nd</sup> millennium BC) and later periods (namely the Iron Age IIC, late 8<sup>th</sup>-7<sup>th</sup> century BC).

Monuments excavated underwent systematic restorations in the general framework of the archaeological park implementation (namely Tower A1 and Palace G, as well as a stretch of the EB IIIA Inner City-Wall in Area Q, on the western side of the tell). Tourist valorisation was also pursued by refurbishing paths, fences, the main entrance to the site, and producing a brochure for visitors, and a series of explanatory panels at the major visible areas on the site (§ 5).

#### 1. AREA A: MB I-II TOWER A1 AND RELATED STRATIGRAPHIC SEQUENCE, MB III CYCLOPEAN WALL AND RAMPART, SOUNDING IN THE PPNB LAYERS, IRON AGE IIC HOUSE AND DEVICES

The investigation of the urban layout and related fortifications of the MB I-III (Sultan IV, 1900-1550 BC) city was carried out in Area A in years 2010-2011 by the exploration and restoration of Tower A1, a huge building located at the south-eastern foot of the tell, and of the open area west of it, and by the investigation of the nearby Cyclopean Wall W.4 supporting the MB III rampart. Excavation were carried out in squares AnIV12 + AoIV12 + ApIV12 + ApIV13 + AqIV13. Furthermore, a deep sounding at the foot of Cyclopean Wall W.4 down to Pre-Pottery Neolithic strata was dug in square ApIV12/AqIV12. The 9 × 4 m trench opened in year 2000 in squares AmIV12 + AnIV12 was also resumed. These operations allowed to definitely fix the stratigraphy and chronology of the southern foot of the tell: twelve main phases were distinguished in Areas A and E (*Fig. 2*), spanning from Pre-Pottery Neolithic (Sultan Ib-c period) up to the 20<sup>th</sup> Century AD (Sultan X period; tab. 1).

##### 1.1. *MB IB-II (Sultan IVa-b) Tower A1: architecture, stratigraphy and chronology.*

The exploration of Tower A1 continued by excavating its monumental stone foundation (W.1659) on the western side (*Fig. 3*) and by digging the open space west of it<sup>4</sup>. This allowed

<sup>4</sup> MARCHETTI - NIGRO 1998, pp. 124-135; 2000, pp. 199-207; NIGRO 2006a, pp. 26, 33; NIGRO - TAHA 2009, pp. 731-734.



Fig. 2 – General view of Areas A and E, from south. In the foreground, MB III (1650-1550 BC) Cyclopean Wall W.4 and MB I-II (1900-1650 BC) Tower A1 (to the right); in the background, MB II (1800-1650 BC) Curvilinear Stone Structure.

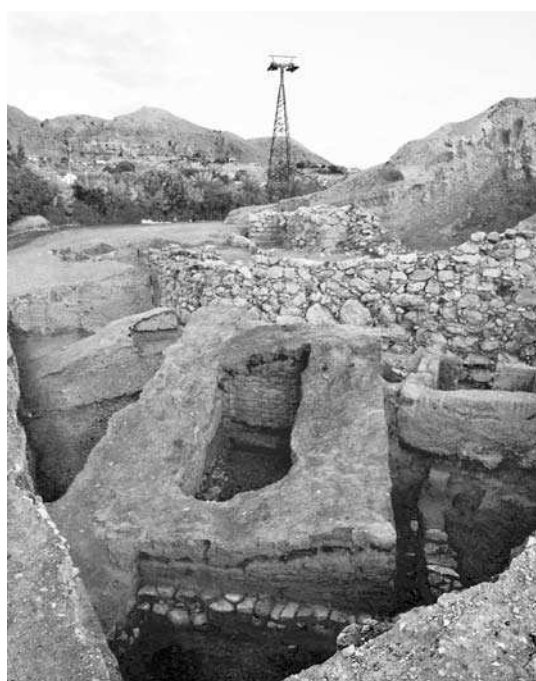


Fig. 3 – Area A: MB I-II (1900-1650 BC) Tower A1, from south-east; to the east, MB IIB (1700-1650 BC) House A3 (L.1666), excavated in year 2009; in the background, MB III (1650-1550 BC) Cyclopean Wall W.4.

to definitely fix its stratigraphy and chronology, spanning from MB I (1900-1800 BC) levelling operation (F.1761) and Tower A1 foundation trench (P.1687), the earliest MB I floor of the court (L.1690 + L.1670), and related MB I destruction (F.1658 and F.1689) and following collapse (F.1652 + F.1693), a later MB II (1800-1600 BC) floor (L.1680 + L.1660), a new MB II destruction (F.1688) and subsequent collapse (F.1685)<sup>5</sup>, both finally obliterated by a sandy reddish-brown layer of abandonment (F.1774). The history of the building can, thus, be summarized as follows. At the beginning of the 19<sup>th</sup> century BC (MB IB), after razing the area at the southern foot of the pre-existing tell, where Neolithic and EB I, II, IV occupational strata had accumulated, a huge building was erected, with walls up to 2 m wide. Its plan was NW-SE oriented, including a rectangular tower (Tower A1), and a at least 15 m long western perimeter wall (W.1659/W.19) facing an open space. The foundation trench of orthostatic wall W.1659 (Fig. 4), was identified

<sup>5</sup> NIGRO - TAHA 2009, pp. 731-734.



Fig. 4 – Area A: detail of the western foundation wall (W.1659) of MB I-II Tower A1, made of big stone orthostates, and of its foundation trench (P.1687), from south-east.

a layer of brown clayish soil (F.1761), which is the earliest Middle Bronze layer attested to in the area, and which regularized previous strata with Early Bronze Age and Neolithic residual materials. On top of this layer, the earliest floor related to the use of Tower A1 was exposed (L.1690 in AqIV12, and L.1670 in ArIV13). Several details of the building technique were also illustrated by excavations. The western foundation wall (W.1659) consisted of big boulders (0.9 × 0.8 m), displaced at different elevations, following the slope of the foot of the tell: two steps in the foundations are visible, each of around 0.3 m in elevation, sloping towards south-east (Fig. 4). A line of pebbles, lying on top of the orthostates, protected the foot of the massive mudbrick superstructure 1.6 m wide (W.19) of the tower, made of regular reddish-brown mudbricks (36 × 52 × 15 cm), tied up by a grey mortar, and preserved up to 2.4 m.

The earliest MB IB (1900-1800 BC) floor L.1690 + L.1670 west of Tower A1 was covered by a destruction and collapse stratum including three superimposed layers, from top to bottom: F.1652 + F.1693, a bricky reddish-pale brown stratum of collapse; F.1689, a dark grey ashy layer with big limestone and flint chops; F.1658, a rubble filling with grey-pinkish ash inside; they marked the end of earliest phase of use of the building, ascribed to the end of MB I. The ceramic inventory (Fig. 5) exhibits shapes belonging to a mid to late MB I (MB IB = mid to late MB IIA) horizon<sup>6</sup>, comparable to the assemblages from the *intra moenia* burials excavated in the Spring Hill area by E. Sellin and C. Watzinger (*Grab 1-8*)<sup>7</sup>, J. Garstang (*Burial 2*)<sup>8</sup>, K.M. Kenyon (Tombs HAR, 10, 11)<sup>9</sup>, and by the Italian-Palestinian Expedition (Tomb D.641)<sup>10</sup>, and from Tomb K3 in the necropolis<sup>11</sup>. Comparisons can be traced in the contemporary assemblages from Dan, stratum XII (3-4)<sup>12</sup>; Kabri, stratum 4<sup>13</sup>; Tell Ifshar (Area C, phases C-G)<sup>14</sup>; Aphek (Strata AXVII-XII/BV[c-a]-IV/X18-17)<sup>15</sup>; Khirbet Kerak, Period F (Local Stratum 5)<sup>16</sup>; Tell el-Hayyat, phase 4<sup>17</sup>. This evidence positively indicates that Tell es-Sultan was a flourishing centre already during the mature phase of the Middle Bronze I (MB IB, 1900-1800 BC).

<sup>6</sup> For a comprehensive examination of the Syro-Palestinian MB IB pottery horizon see NIGRO 2000, pp. 1196-1203; 2007, pp. 376-381.

<sup>7</sup> SELLIN - WATZINGER 1913, pp. 70-71.

<sup>8</sup> GARSTANG 1934, p. 119, pl. XVII:15-17.

<sup>9</sup> KENYON 1981, pp. 349-350, 356, figs. 10, 13; KENYON - HOLLAND 1983, figs. 161-162, 174.

<sup>10</sup> NIGRO 2009b.

<sup>11</sup> KENYON 1965, pp. 203-206, fig. 93.

<sup>12</sup> ILAN 1996, pp. 163-165, 213-231, 242-244; MAIER 2010, pp. 39-40.

<sup>13</sup> KEMPINSKI (ed.) 2002, pp. 39-42, 55-57, 68-70, 109-120.

<sup>14</sup> PALEY - PORATH 1993, pp. 611-612.

<sup>15</sup> BECK 2000a, pp. 112-131; 2000b; YADIN 2009, pp. 111-135.

<sup>16</sup> GREENBERG *et al.* 2006, pp. 165-168.

<sup>17</sup> FALCONER - FALL 2006, pp. 49-52.

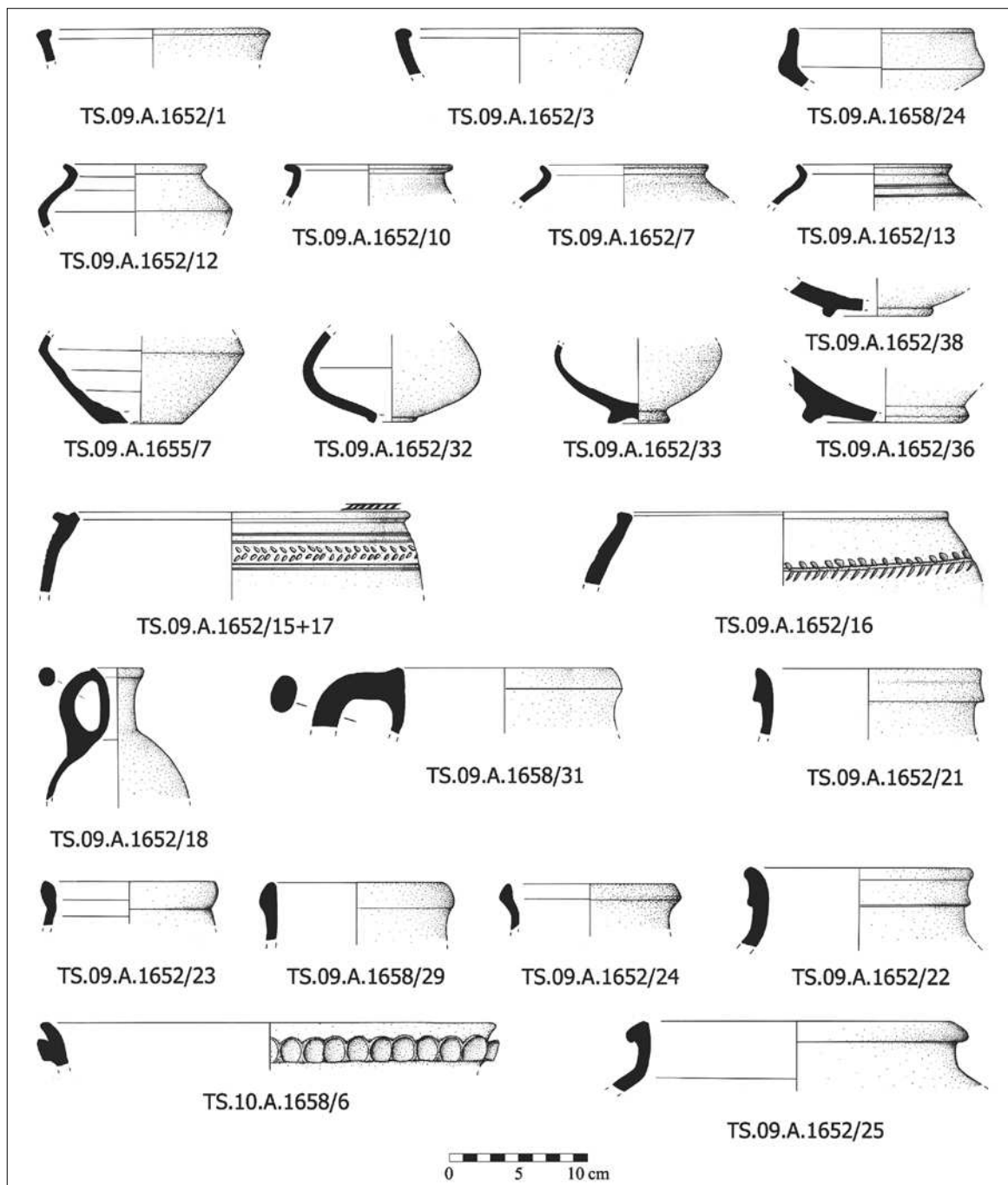


Fig. 5 – Area A: MB IB (1900-1800 BC) pottery from the destruction layers west of Tower A1.

After this fierce destruction, which occurred around 1800 BC, at the beginning of MB II Tower A1 underwent a static problem (due to an earthquake?), and it was reconstructed with reparations and additions: its foundation walls were reinforced at the bottom by walls em-

boldening the existing structures on three sides (west W.1671, south W.1651, and east W.1667), while on the northern side a transversal N-S supporting wall was adjoined to it (W.22)<sup>18</sup>. Inside the tower, the original MB I floor (L.1650) with the stone basement (W.1661) for a wooden staircase was obliterated, and the floor level raised of around 0.3 m, named L.199<sup>19</sup>. Repaired Tower A1, then, remained in use during the whole MB II (Sultan IVb), being surrounded to the east by houses growing up against it<sup>20</sup>. Courtyard floors L.1680 + L.1660 (a beaten earth paving with flint fragments and small pebbles west of the tower) accompany the MB II reconstruction of Tower A1, which ended in a new destruction (end of MB IIA, roughly mid of XIII Dynasty in Egypt), illustrated by a rubble filling with ashes (F.1688). Just upon it, a heap of collapsed bricks (F.1685 = F.23) probably derives from the same event, although it was also hypothesized that it might represent a second collapse at the end of MB IIB, in connection with a later reuse of the area, to which floor L.500 was related. These layers were successively covered by the rubble filling of MB III rampart, and cut through by Cyclopean Wall W.4 foundation trench P.1677.

With the erection of the third rampart supported by Cyclopean Wall W.4 at the beginning of MB III (Sultan IVc, 1650-1550 BC), the southern quarter of Middle Bronze Jericho, including Building A1 and the surrounding houses, was abandoned and the whole area was buried under layers of rubble<sup>21</sup>. The foot of MB III Cyclopean Wall W.4 was reached in the deep sounding opened in square ApIV12/AqIV12 (see below § 1.2). Here, the lowest layer within the foundation trench (P.1677) of this monumental structure was filled up with yellowish soft soil leaning S-N (F.1692); the latter ended at elevation -1 m over a bed of medium size stones (F.1694) upon which the limestone and flint boulders of Cyclopean Wall W.4 were laid. A further stretch of the wall was excavated in the 2011 season, reaching a visible length of around 35 m and elevation from the bottom to the preserved crest of 4-6 m.

### 1.2. Sounding down to Pre-Pottery Neolithic layers.

A stratigraphic probe was excavated underneath both the foundation of the Tower A1 major wall (W.19/W.1659) and the foot of Cyclopean Wall W.4 (Fig. 6), down to the underlying Pre-Pottery Neolithic layers (Sultan Ib-c). The rectangular (2.3 × 1.5 m) sounding was excavated down to elevation -2 m with the aim of checking both the depth of the bottom of Wall 4, and the



Fig. 6 – Area A: stratigraphic probe excavated at the foot of Cyclopean Wall W.4 down to the Pre-Pottery Neolithic layers, from top east.

<sup>18</sup> MARCHETTI - NIGRO 1998, pp. 134-135, figs. 4:15, 4:17; 2000, pp. 194-195, 207, figs. 5:7, 5:24, 5:26.

<sup>19</sup> MARCHETTI - NIGRO 2000, pp. 194, 199-200, figs. 5:15-5:16.

<sup>20</sup> MARCHETTI - NIGRO 2000, pp. 194-195, 207-

216; NIGRO 2006a, p. 33.

<sup>21</sup> MARCHETTI - NIGRO 1998, pp. 135-154; 2000, pp. 217-218; NIGRO 2006a, pp. 34-35; NIGRO - TAHA 2009, p. 734.

<sup>22</sup> KENYON 1981, pp. 175-176, 178-182, pl. 273.



extension to the south of the Pre-Pottery Neolithic layers already reached by K.M. Kenyon inside the Cyclopean Wall in Trench III. Here, Kenyon excavated Pre-pottery Neolithic A-B strata just north of MB III Cyclopean Wall W.4 (= Wall NFK, NGJ, NGK)<sup>22</sup>.

The northern half of the sounding was occupied by the 0.8 m wide foundation trench (P.1677) of Cyclopean Wall W.4 (see above). In the southern half of sounding, instead, just underneath a MB I levelling layer (F.1761), a series of Pre-Pottery Neolithic surfaces were excavated, all of them dating back to Pre-Pottery Neolithic B (7500-6000 BC), and testifying to the southern extension of the PPNB settlement. PPNB houses were excavated by K.M. Kenyon on the southern side of the tell up to the end of Trench III, just north of MB III Cyclopean Wall W.4 (= Kenyon's Wall NFK, NGJ, NGK)<sup>23</sup>. Four PPNB surfaces were recognized in the sounding, alternated to fillings of yellowish-brownish sandy soil with pebbles and limestone scales, sometimes covered by silt accumulation with ashes and charcoals<sup>24</sup>. At the bottom of the sequence so far excavated (PPNA is also present underneath), in a grayish-green clayish compact filling (F.1699) a limestone adze was found.

### 1.3. *The Iron IIC (Sultan VIc) installations.*

Excavations in Area A, south of Cyclopean Wall W.4, were also resumed to the west in trench AmIV12+AnIV12. Here, a NW-SE cut (P.1793) had interrupted the Middle Bronze sequence at the south-western foot of the tell; it was filled up with fine gravel in a pinkish-light brown sandy soil (F.1792). Upon this filling, a rectangular unit (L.1770), built up with whitish mudbricks, was brought to light (Fig. 7), hosting three circular bins with flat base made of unbaked clay sunk into the floor for a depth of around 35 cm, apparently devoted to food storage (Fig. 8): T.1775 (0.62 m in diameter), T.1777 (0.48 m in diameter), and T.1783 (0.60 m in diameter). Just aside them to the west, there was a semicircular installation, lined with radial

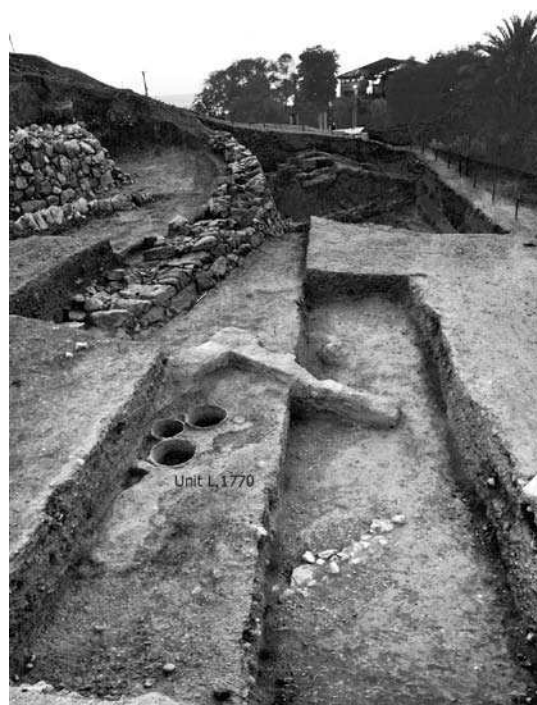


Fig. 7 – Area A: Iron Age IIC (late 8<sup>th</sup> - 7<sup>th</sup> century BC) unit L.1770 with circular bins T.1775, T.1777 and T.1783, from west.

<sup>23</sup> KENYON 1981, pp. 175-176, 181-191, pls. 113-118, 263b-c, 264.

<sup>24</sup> The uppermost layer was a grayish ashy floor (L.1695), with small charcoals inside; underneath there was a filling of greenish-brown sandy soil with rare and small charcoals and stones, called F.1763; this accumulated over a floor (L.1696) made of crushed and pulverized sandstone extended for more than 1.8

m on the east-west axis. Floor L.1696 had sealed a 0.2-0.3 stratum containing a noticeable accumulation of small stones (F.1764); such a layer covered another crushed sandstone floor (L.1697), especially visible in the south-western part of the probe, where it was covered by a 0.15 m thick layer of ash; underneath, there was a 0.6 m thick homogeneous layer of pebbles, dark brown clayish soil with several charcoals (F.1698).

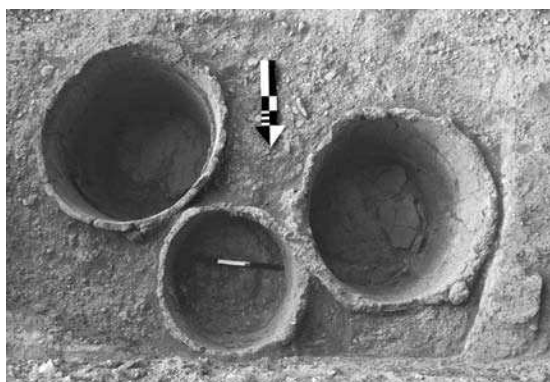


Fig. 8 – Area A: detail of Iron Age IIC bins T.1775, T.1777 and T.1783.



Fig. 9 – Area A: Iron Age IIC (late 8<sup>th</sup> - 7<sup>th</sup> century BC) pottery and objects from unit L.1770.

bricks (W.1785), with an outer floor of compacted beaten earth connected to it (L.1780). Pottery from circular installations illustrates an advanced horizon of Iron II (late 8<sup>th</sup>-7<sup>th</sup> century BC), with two carinated bowls, one with a Red Slip band inside the rim (TS.11.A.1775/1)<sup>25</sup>, four Red-Slip bowls<sup>26</sup>, a cooking pot of reddish fabric (TS.11.A.1775/6)<sup>27</sup>, and a Red-Slip juglet (TS.11.A.1775/2) (Fig. 9). Both within bins T.1775 and T.1783, two spherical loomweights of unbaked clay were found on top of the filling. Inside T.1775 a limestone spindle whorl was also found, identical to another one retrieved in 2010. Objects found in room L.1770, thus, include: two spindle whorls (TS.10.A.131; TS.11.A.73), a quadruped clay figurine with a reddish wash (TS.10.A.126), and the leg of a second one (TS.10.A.127)<sup>28</sup>. Unit L.1770 was interpreted as a small productive device at the household level; it indicates the southern extension of the Iron Age II settlement. The latter arose at Tell es-Sultan in the 10<sup>th</sup>-9<sup>th</sup> century BC on the Spring Hill, where it was largely excavated by the Austro-German Expedition in 1907-1909<sup>29</sup>, and

<sup>25</sup> For a comparison see KENYON - HOLLAND 1983, fig. 27:3.

<sup>26</sup> Bowl TS.11.A.1777/1 and TS.11.A.1775/5 are hemispherical bowls (for a comparison see KENYON - HOLLAND 1983, fig. 25:12), the former with circular burnishing inside and outside on the rim; TS.11.A.1775/4 is a bowl with outer splaying rim and horizontal burnishing inside and outside (for a comparison see KENYON - HOLLAND 1983: fig. 25:14); a similar type without burnishing is illustrated by TS.11.A.1788/2.

<sup>27</sup> For a comparison see KENYON - HOLLAND 1983, fig. 25:26.

<sup>28</sup> Thousands of usually handsized clay figurines, shaped both as humans (mainly female figurines, like the so-called Judean pillared figurines; KLETTNER 1996) and animals, were found in Iron Age II Palestine and Transjordan, mainly from 8<sup>th</sup> - early 6<sup>th</sup> BC contexts

(HOLLAND 1977; 'AMR 1980; GILBERT-PERETZ 1996, pp. 29-41; PRAG 2001, pp. 217-220, 223-228; YEZERSKI - GEVA 2003). Animal figurines, which outnumber the anthropomorphic ones by about three to two, have been interpreted either as toys or as votive offerings/ritual objects. A series of animal figurines of quadrupeds (horses and donkeys) was retrieved in Tell es-Sultan by past expeditions, namely by the Austro-German Expedition at the beginning of the 20<sup>th</sup> century, which largely excavated Iron Age levels on the tell (SELLIN - WATZINGER 1913, figs. 179-183, pl. 40:II.4 [*spätjüdische Epoche*]), and by Kenyon's Expedition (HOLLAND 1982, pp. 555-557, figs. 224:12, 225:6-12).

<sup>29</sup> Here the large building known as "Hilani", excavated by Sellin and Watzinger (SELLIN - WATZINGER 1913, pp. 67-70, fig. 42, pls. 15-16, I, IV; GARSTANG 1934, pp. 102-104, pl. XIII), should date from early Iron Age II (Sultan VIb), 10<sup>th</sup>-9<sup>th</sup> century BC (this

then spread in the late 8<sup>th</sup>-7<sup>th</sup> century BC on the slopes of the tell, where it was excavated by Kenyon at the foot of Trench I<sup>30</sup>, Trench II<sup>31</sup>, and Trench III<sup>32</sup>.

2. AREA B: THE SOUTH GATE IN EB IIIA (SULTAN IIIc1) DOUBLE LINE OF FORTIFICATIONS

Works were resumed in Area B, on the inner side of the EB IIIA (2700-2500 BC) Inner Wall (Wall 2; prosecution of Kenyon's wall NFB)<sup>33</sup>, in the same area where in 1997-1999 and 2009 EB IIIB (2500-2350 BC) Building B1 was uncovered and restored<sup>34</sup>. Cleaning works on EB IIIA Inner Wall W.2 allowed to identify a gate through it, just 1.8 m east of Kenyon's Trench III, later concealed by the EB IIIB reconstruction of the same defensive structure (Wall 1). This gate (L.1800) opened through the main Inner City-Wall (Wall 2) and was 2 m wide and 4.5 m long (Fig. 10). The eastern and western doorjambs were identifiable thanks to the carbonized remains of



Fig. 10 – Area B: EB IIIA (2700-2500 BC) Inner Gate L.1800, filled up with collapsed mudbricks and burnt beams, from north-east.

two wooden beams (each one approximately 0.2 m wide) set into the wall on both sides of the passage. A third better preserved beam was exposed upon floor L.1616 inside the passage, laid transversely to the gate, apparently the gate lintel (W.1619), measuring 2.4 m long, and 0.2 m wide (the wood was tamarisk [*Tamarix* sp.]<sup>35</sup>). The overall plan of the gate can be reconstructed matching Kenyon's plans of Trench III (Fig. 11). It introduced into a sort of corridor in between the EB IIIA Inner (W.2, Kenyon's Wall NFB) and Outer Walls (Kenyon's Wall NFD)<sup>36</sup>. A trans-

city was related with the Biblical statement that Hiel, king of Bethel, reconstructed Jericho [1 Kings, 16, 34]; as suggested by H.J. Franken probably the latter king erected a garrison or a fortress on the tell/ruins [FRANKEN 1965, 197-198]), and according to Manfred and Helga Weippert it was preceded by an Iron Age I occupation, testified to by some pottery sherds (WEIPPERT - WEIPPERT 1976, pp. 139-146, figs. 8-9); the latter occupation was referred to the Biblical reference to the "city of palm trees" (Judges 3, 13), as well as to the renowned account of Elisha (2 Kings 2, 19-22).

<sup>30</sup> KENYON 1981, pp. 111-113, pl. 232.

<sup>31</sup> KENYON 1981, pp. 171-173, pls. 255c-256a.

<sup>32</sup> KENYON 1981, p. 219. Here Iron IIC buildings were terraced back into the probably eroded MB III rampart.

<sup>33</sup> KENYON 1981, pp. 209-210, pl. 269b; MARCHETTI - NIGRO 1998, pp. 23-24, 32-33, figs. 1:1, 1:15. On the EB III (Sultan IIIc) double city-wall at Tell es-Sultan see MARCHETTI - NIGRO 1998, pp. 81-94; NIGRO 2006a, pp. 9, 18; 2006b, pp. 361-375; NIGRO - TAHA 2009, pp. 738-739.

<sup>34</sup> MARCHETTI - NIGRO 1998, pp. 39-49; 2000, pp. 130-138; NIGRO 2006a, pp. 18-20; NIGRO - TAHA 2009, p. 738, fig. 4.

<sup>35</sup> Paleobotanic analysis was carried out by Alessandra Celant (Dipartimento di Biologia Ambientale, Sapienza Università di Roma). Kenyon's Expedition identified the *Tamarix* as the predominant species among charcoal samples (HOPF 1983, p. 577; WESTERN 1983).

<sup>36</sup> KENYON 1981, pp. 209-212.

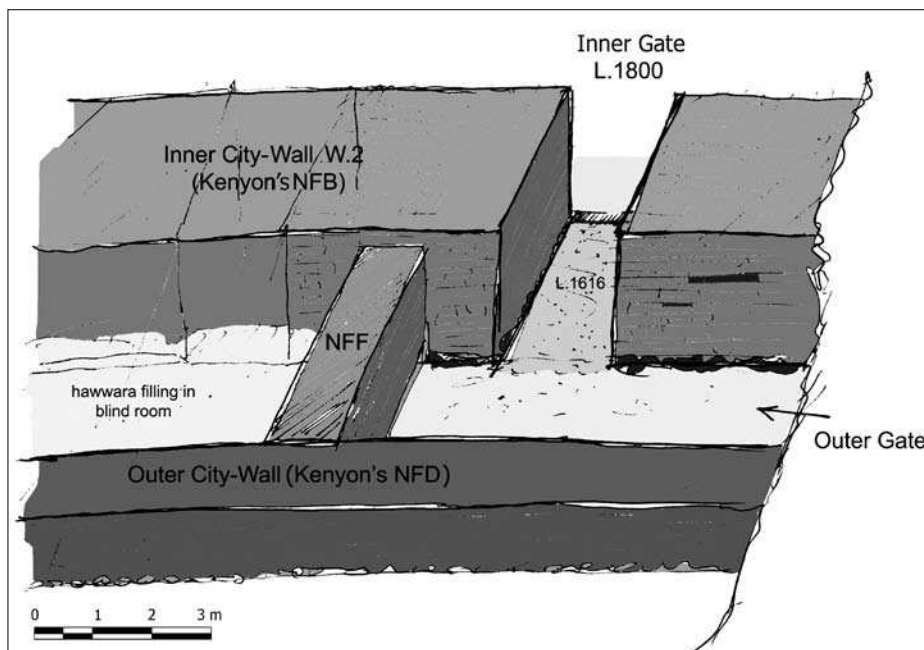


Fig. 11 – Area B/ Kenyon’s Trench III: reconstruction of the bent-axis passageway of the EB IIIA (2700-2500 BC) South Gate.

versal wall (NFF) connecting the two parallel defensive lines blocked the way to the west<sup>37</sup>: this suggests that the passage through the Outer Wall was to the east, and that the gate pathway climbed the hill NE-SW. The South Gate, thus, probably consisted of a bent-axis passageway exploiting for a stretch the gap inside the double-line fortification. Gate L.1800 was obliterated at the end of EB IIIA, after a dramatic collapse accompanied by a fierce fire<sup>38</sup>. It was blocked by walls on the outer and inner sides (the latter nowadays eroded)<sup>39</sup>, while, inside it, collapsed structures were incorporated in the last reconstruction of the Inner City Wall (Wall 1)<sup>40</sup>. EB IIIB Building B1 was, then, erected abutting against the inner face of the latter. It seems, thus, probable that a new gate was opened further to the east possibly connecting directly the spring with the north-south road crossing the site.

### 3. AREA E: MB II (SULTAN IV<sub>B</sub>) CURVILINEAR STONE STRUCTURE AND CONNECTED FEATURES

Archaeological investigations in Area E, northwest of Area A<sup>41</sup>, were focused on the excavations of MB II Curvilinear Stone Structure (hence CSS), a stone wall 1.1-1.7 m wide, preserved with a varying elevation of 1.5 to 3 m, built up with juxtaposed stretches running all around the

<sup>37</sup> KENYON 1981, pl. 269c.

<sup>38</sup> At the same time, the 1.0 m-wide postern excavated in Area Q (just south of Kenyon’s Trench I and Site D), across the Inner Wall on the western side of the fortifications, was also blocked (NIGRO - TAHA 2009, p. 740).

<sup>39</sup> On the outer side the blocking was represented by Kenyon’s wall NFG (KENYON 1981, pl. 269c).

<sup>40</sup> MARCHETTI - NIGRO 1998, pp. 36-39, fig. 1.1, 81-94; NIGRO 2006a, pp. 9, 18; 2006b, pp. 361-375.

<sup>41</sup> MARCHETTI - NIGRO 2000, pp. 181-192; NIGRO 2006a, pp. 29-30; NIGRO - TAHA 2009, pp. 735-737.

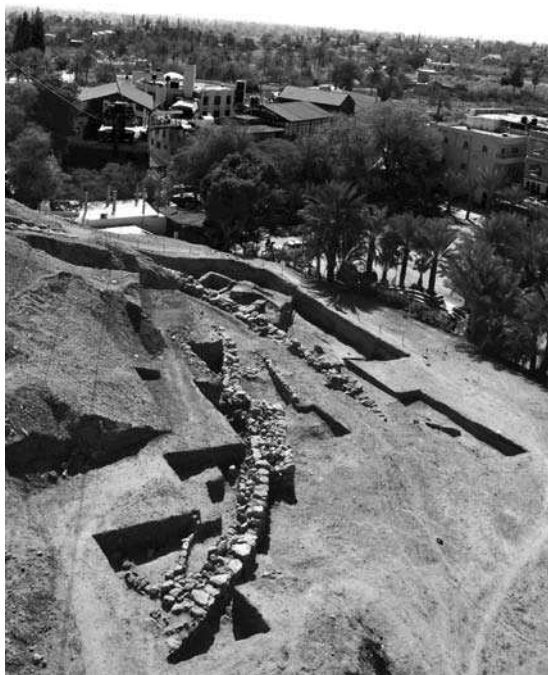


Fig. 12 – Aerial view of Middle Bronze Age fortification works in Area E (in the foreground), with MB II (1800-1650 BC) Curvilinear Stone Structure, and Area A (in the background), from north-west.

south-western foot of the tell, slightly climbing it SE-NW, and on the investigation of the occupational layers grown up outside and inside it (Fig. 12). The CSS was a supporting wall made of large limestone boulders, consisting of a series (five up to now) of juxtaposed stretches with varying heights, widths and lengths, gradually turning from east to west (respectively: Wall 5 [Kenyon's Wall NFP]<sup>42</sup>, Wall 560E, Wall 560W, Wall 1705, Buttress W.270, Wall 274 and Wall 1824).

### 3.1. *The architecture of the CSS.*

The excavation of MB II Curvilinear Stone Structure was mainly carried out by exposing its southern outer face. This allowed to put forward some observations both concerning its building technique and constructive phasing. In square ApIV10, the easternmost preserved stretch is Wall 5, with a length of 4.5 m. It is characterized by a monumental corner, made up with regular (0.5-0.6 × 0.8-1 m) boulders (suggesting the presence of a passage) founded at elevation 3 m. It joints with Wall 560East,

which appears as an additional structure filling a 1.8 m wide gap in between Wall 5 and Wall 560West. Wall 560E, 1.3 m wide, is made of regular blocks around 0.4 m high. The following stretch, Wall 560W is slightly thinner (1.1 m) and turns gently northwards; it is also founded at a higher elevation (3.3 m). The westernmost stretch of the latter, abutting on transversal Wall 1705, seems to have collapsed so that a heap of big stones was uncovered at its bottom (F.1741).

Roughly at the mid of the excavated stretch of the CSS, in squares AnIV9 +10 + AmIV9, a rectangular (7.5 × 2.1 m) bastion (Buttress W.270) protruded 1.4 m in order to strengthen the site defence at its south-western corner (Fig. 13). Buttress W.270 was founded at a varying elevation of 3.4 m (east) to 3.6 m (west), and it was preserved up to four courses of big limestone blocks (1.6 m high).

West of Buttress W.270, the northwest prosecution of the CSS was uncovered in squares AnIV9 + 8 + AlIV8 + 7 + AiIV7 (eastern half). The first stretch, W.274, was a 1.2-1.8 m thick straight wall, 4.5 m long, NW-SE oriented, while the following sector of the wall (W.1824), made of slightly bigger stones and boulders, had a curving layout and a regular width of 1.6 m. Wall W.1824 turned progressively to the north, with orientation SSE-NNW. In its central part,

<sup>42</sup> KENYON 1981, pls. 271a, 272a-b, 273.

this structure had been cut through by a plunder pit (P.1821), reaching its lower courses. At the foot of the wall, in a collapse layer (F.1823), the handle of a fine calcite jar (TS.11.E.89) and a double handled small jar of yellowish-brown colour were found (TS.11.E.1823/1)<sup>43</sup>.

In square AllV7, inside wall W.274 + W.1824, but in an earliest layer, a rectangular unit (L.1740) was uncovered (Fig. 13), with walls made of rows of rectangular stones placed as stretchers. In square AmIV8 a lump of Egyptian Blue (TS.11.G.87) was retrieved in the MB III filling of the latest rampart, presumably a stray find from underlying MB II layers.

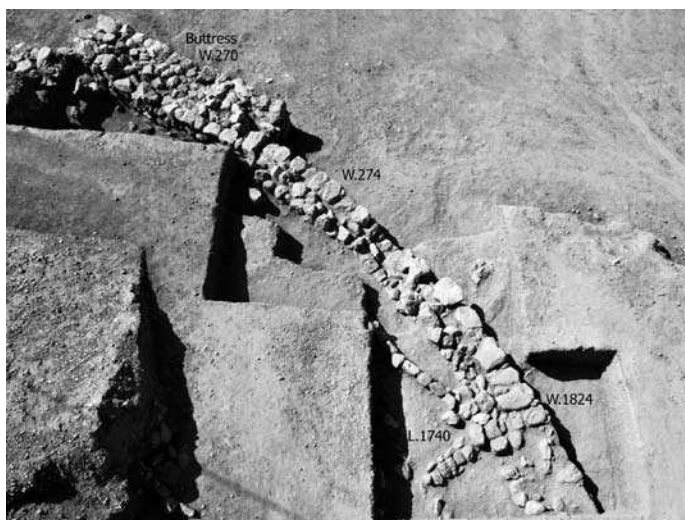


Fig. 13 – Area E: aerial view of MB II (1800-1650 BC) Curvilinear Stone Structure with protruding rectangular buttress W.270, and unit L.1740 inside it.

### 3.2. Structures and installations contemporary to the use of the CSS.

In correspondence with the easternmost stretch of the CCS, in the space facing W.5 and W.560, a low battering wall (W.1703) was uncovered parallel to them, bordering to the north a street (L.1725) running SE-NW; this structure was already partly excavated by K.M. Kenyon (Kenyon's wall NFV)<sup>44</sup>. Layers accumulated north of border-wall W.1703 and to the south, in between it and the preserved top of Cyclopean Wall W.4, were also investigated.

In the space between the CCS and border-wall W.1703, a rectangular unit (L.1706), excavated in 2009<sup>45</sup>, represented the latest occupation of Middle Bronze II (MB IIB). It covered a few bricks of a structure (W.1715) and a floor (L.1732) to be related with more substantial architecture excavated by Kenyon both westwards and eastwards in Trench III<sup>46</sup>. Underneath there was a stratum of collapsed mudbricks (F.1713), and a layer of collapse (F.1712), which represents the regularization of the berm on the southern flank of the site upon which the CSS was erected. F.1712 contained, hence, mostly EB IVB pottery and some diagnostic MB IB types; this stratum is also visible in section under border-wall W.1703.

### 3.3. Occupational layers preceding the CSS.

The CSS cut pre-existing layers on the south-western flank of the site, which were sealed both by F.1712 and F.1713, and thus preceded the MB II occupation. In AnIV10 + AoIV10, everything had been cleared off by the CSS and Pottery Neolithic rubble fillings appeared

<sup>43</sup> This vessel has a comparison in Tomb 351 excavated by J. Garstang: GARSTANG *et al.* 1935, pl. XXXIV: 47.

<sup>44</sup> KENYON 1981, pls. 271a, 272a.

<sup>45</sup> NIGRO - TAHA 2009, p. 735.

<sup>46</sup> KENYON 1981, pl. 272a.



Fig. 14 – Area E: EB II (2850-2700 BC) stone wall W.1739, in between MB II (1800-1650 BC) Wall 5 (right) and border-wall W.1703 (left), from east.

mixed with EB I, II, IV materials. Conversely, in square ApIV10, previous structures were still preserved: a stretch of an EB IVB (Sultan IIIId2, 2200-2000 BC) stone wall (W.1734), ENE-WSW oriented, was uncovered. The wall, 0.7-0.8 m wide, was preserved only for 1.5 m length. It was built over a bricky filling (F.1736) which sealed a floor (L.1720) and a wall (W.1739), dating back from EB II (Sultan IIIB, 2850-2700 BC; Fig. 14). That the EB II town extended southwards was also proved by Kenyon's excavations in Trench III (Kenyon's phases XVI.lxiii - XVII.lxxi)<sup>47</sup>. Wall W.1739 had a NW-SE orientation, and a width of around 0.7 m. It was carefully built up with two lines of stones and an inner filling of limestone scales; on its western side there was a 0.4 m wide bench (B.1744). L.1720 yielded some diagnostic sherds, such as a local Abydos Ware-like fragment and the

neck of a swollen rim white-coated jar. Both structures W.1734 and W.1739 were cut through by the foundation trench (P.1723) of the CSS at the beginning of MB II. The cut of this trench runs 0.3 m south of the foot of Wall 5 + Wall 560E, and it was filled up with crushed mudbricks (F.1742); in 2010 it was further excavated down to its bottom, which was at elevation 3-3.2 m.

### 3.4. Cyclopean Wall W.4 inner side/foundation trench.

South of MB II border-wall W.1703, the edge of denudation had exposed a thick filling of reddish-brown mudbricks, which were thrown within (F.1731) and over (F.1714) the inner foundation trench of Wall 4 (P.1729) and upon the wall itself. On the southern limit of square AnIV10, the crest of MB III (Sultan IVc, 1650-1550 BC) Cyclopean Wall W.4, with big boulders both of limestone and flint, was exposed. In square ApIV11, just below the southern edge of EB II layer F.1736, a grayish-brown stratum was brought to light (F.1743), the lowest layer so far reached, dating to EB IB (Sultan IIIA2, 3200-3000 BC), as a Line-

<sup>47</sup> KENYON 1981, pp. 205-208, pls. 268, 269a; NIGRO 2010, pp. 105-110.

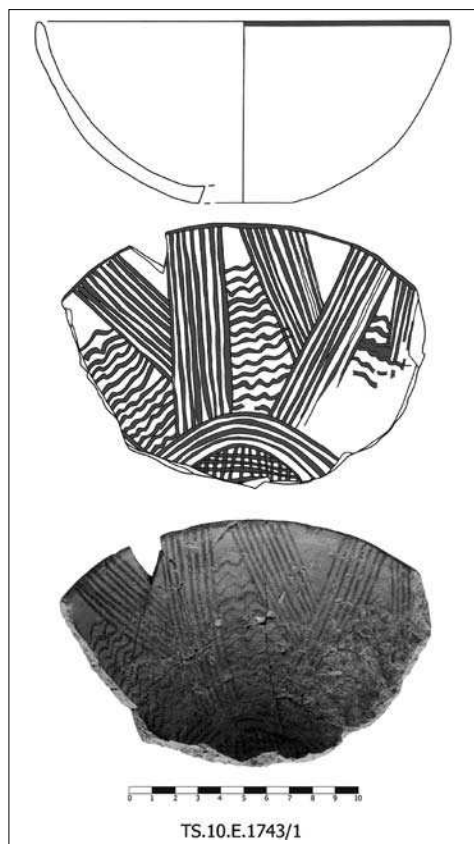


Fig. 15 – Area E: EB IB (3200-3000 BC) Line-Painted Ware bowl TS.10.A.1743/1.

Painted bowl found in it indicates (*Fig. 15*). This find, thus, suggests that the southern slope of the tell was occupied by the huge rural village grown at Tell es-Sultan by the end of the 4<sup>th</sup> millennium BC. Remains of this settlement were also by K.M. Kenyon in Trench III<sup>48</sup>. F.1743 was cut throughout to the south by the inner foundation trench of Cyclopean Wall W.4 (P.1729), filled up with reddish-brown mudbricks (F.1731).

#### 4. AREA G/SPRING HILL: MB II-III GARSTANG'S "HYKSOS PALACE" AND EB IIIB PALACE G

Investigations in Area G, on the eastern flank of the Spring Hill, were resumed in 2010 after eleven years with the aim of completing the exploration of the public building called Palace G<sup>49</sup>, on the eastern slope of the Spring Hill (*Fig. 16*), and of starting up an overall restoration of this monument. The area was widened towards the north in squares BcIII7 (in order to complete the exploration of Hall L.644) and BcIII7; the south, in squares BcIII9 + BdIII9; as well as towards the east, in squares BcIII7 + 8 and squares column BdIII7 + 8 + 9. Uppermost layers towards the

north and the east were uniquely constituted by superimposed dumps of Garstang's (F.1154) and Kenyon's (F.1152) excavations: the former one consisting of reddish-brown friable soil with a large quantity of big stones and blocks inside (probably deriving from the dismantling by Garstang of Iron II "Hilani" and Late Bronze II "Middle Building")<sup>50</sup>, the latter one, instead, mainly consisting of a soft dark grey ashy soil, with small stones and rubble clusters.

##### 4.1. MB II-III (Sultan IVb-c) Palace foundation walls W.633 and W.1175.

In squares BcIII8 + BcIII9 + BdIII8 + BdIII9, to the east and the south, the exploration of the EB IIIB (Sultan IIIc2) Palace also involved structures belonging to later strata of occupation. Investigations started from BdIII9, where wall W.633, a major structure supporting the MB II-III (1800-1550 BC) Palace of Jericho<sup>51</sup>, was found connected with a perpendicular wall, called W.1175, running east-west. Both structures, thus, belonged to the same building, the MB

<sup>48</sup> KENYON 1981, pp. 193-200, pls. 265c-d, 266, 267a; NIGRO 2005, pp. 116-119.

<sup>49</sup> MARCHETTI 2003, pp. 300-303, fig. 4; NIGRO 2006a, pp. 20-22, figs. 29-32; 2009a, p. 50, fig. 6.

<sup>50</sup> GARSTANG 1934, pp. 102-104, pls. XIII-XV; GARSTANG - GARSTANG 1948, pp. 118-120, 147-148.

<sup>51</sup> MARCHETTI 2003, pp. 299, 312-316; NIGRO 2006a, pp. 25; 2009b, pp. 361-362, figs. 6-7, 9.



II Palace already excavated by previous expeditions: the so-called Garstang's "Hyksos Palace", substantially identified and excavated by J. Garstang in the 1930ies<sup>52</sup>. Underneath W.633 and W.1175, there was a levelling layer (F.1178), probably the filling of W.633 foundation trench (P.959). The limits of the latter can be difficultly identified since the area just to the west of wall W.633 was cut by a modern excavation trench (P.1189), probably dating back to Sellin and Watzinger's time, filled in by Garstang's dump F.1154.

#### 4.2. EB IV (Sultan IIIId) installations.

Further to the west, in square BcIII8, a series of structures were erected upon the collapsed and eroded surface of EB IIIB wall W.637. A double-lined stone wall, W.1173 (elev. 11.80 m), with the associated filling F.1202, represented the EB IVB occupation (Sultan IIIId2, 2200-2000 BC), while, at a lower elevation (elev. 11.20 m), wall W.1179, consisting of a single row of unhewn stones, with associated floor L.1198 and *tannur* T.1199, illustrated the previous EBIVA (Sultan IIIId1, 2300-2200 BC); another *tannur* (T.1193) was connected to the latter features<sup>53</sup>.

Evidence of EB IVA occupation was found also over wall W.1157 and buttress W.1165 of EB IIIB Palace G in square BcIII7. In filling F.1192 a rectangular limestone mortar with a circular hollow (TS.G.11.82) and an envelope ledge handle (TS.G.11.1192/1) were found.

#### 4.3. EB IIIB (Sultan IIIc2) Palace G.

During 2010 and 2011 three different rows of rooms of Palace G were excavated, corresponding to terraces on the eastern flank of the Spring Hill, expanding the area towards the north and the east (Fig. 16). The main hall inside the building, L.644, was completely exposed and finds from it were analysed and restored.

##### 4.3.1. Courtyard L.1200

One basic achievement of the 2011 season was the complete restoration of the main east-west wall of the palace (W.616 + W.1177), a structure at least 1.3 m wide and 12 m long. This structure was built on three steps: the upper terrace, corresponding to rooms L.620 and L.621;

<sup>52</sup> GARSTANG 1933, p. 41; 1934, pp. 99-101, 105, pl. XV (nn. 80, 81); GARSTANG - GARSTANG 1948, pp. 99-101, fig. 4.

<sup>53</sup> After re-evaluating finds of previous Austro-German and British Expeditions on the tell in the light of the Italian-Palestinian updated stratigraphy, and by comparing them with those of the huge necropolis excavated by K.M. Kenyon, the Italian-Palestinian Expedition distinguished an early phase (Sultan IIIId1, EBIVA, 2300-2200 BC) with a hamlet consisting of sparse dwellings on the summit of the Spring Hill, and a second mature phase (Sultan IIIId2, EB IVB, 2200-2000), when the settlement became a huge rural village, and also the slopes of the tell were inhabited (NIGRO 2003, 130-133). The Italian-Palestinian Ex-

pedition identified remains of Period IIIId on top of the Spring Hill in season 1999-2000, including ovens, silos, floors, and flimsy stone and mud-brick walls, often made of reemployed bricks from Period IIIc2 collapsed structures (NIGRO 2003, pp. 130-131; 2006a, pp. 23-24; MARCHETTI 2003, pp. 303-304, fig. 6). It is to be stressed that J. Garstang registered an EB IV occupation beneath the Middle Bronze Palace (GARSTANG *et al.* 1935, p. 147) and underneath the MB III "Palace Store-rooms" (GARSTANG 1934, pl. VX; GARSTANG *et al.* 1935, p. 156; 1936, p. 74) on the eastern flank of the Spring Hill, as well as K.M. Kenyon recorded layers testifying an EB IV frequentation in nearby Square HII (KENYON 1981, p. 339; KENYON - HOLLAND 1983, fig. 159:26-28).

the middle terrace, hosting Hall L.644 and room L.1160; and the lower terrace, brought to light in 2011, where it was called wall W.1177. For this reason wall W.616 + W.1177 can be considered one of the main structures of the palace. Door L.1150, closed in last phase of use of the building, opened in the SW corner of Hall L.644 through wall W.616 towards an open space located south of it. The latter, called Courtyard L.1200, possibly connected the entrance wing of the palace with its central sector.



Fig. 16 – General view of EB IIIB (2500-2350 BC) Palace G; note in the foreground the eastern plastered face of terrace-wall W.637 and transversal wall W.1185 (small meter); from east.

4.3.2. Hall L.644: the architecture

Hall L.644 was completely brought to light by digging in square BcIII7 the north-eastern corner of this room (in between eastern wall W.637 + northern wall W.1161). Here, a long deal was spent in the careful extraction of at least fifteen wooden beams buried in the collapse/destruction layer (F.1158) just over rectangular podium B.645 (Fig. 17). These beams, N-S oriented, had a diameter of 10-15 cm; they formed the podium roofing, while the room ceilings were supported by girders running east-west with a diameter of 20-25 cm. Podium B.645 was lined with square blocks and stones. At both southern corners of the podium there were round stones with a circular hollow in the middle (respectively a mortar and door socket), perhaps reemployed as bases of wooden posts supporting the roofing.

Hall L.644 had a square plan (roughly 6 x 3.8 m), with three doors and a series of installations. Some devices were visible in the floor: on the west, two circular depressions (diam. 0.35 m) probably indicate the locations of a couple of jars set into the floor. Along the opposite eastern side of the room a small circular stone-lined hearth was uncovered (S.1159). Just 0.7 m to the south, a semicircular plastered platform (B.958) abutted on eastern wall W.637. In the south eastern quarter of the hall, a group of collapsed jars was



Fig. 17 – Area G: Hall L.644 with restored EB IIIB (2500-2350 BC) storage jars *in situ*, from south-east.

excavated. They were fully restored in the 2010 and 2011 campaigns (*Fig. 17*) and set on display in the Interpretation Centre at the entrance of the site (for a full description see below).

On the southern side of the room, near the SW corner, a blocked door (L.1150) was identified inside wall W.616, belonging to the original layout of the building. A line of white plaster was still visible on both doorjambes. On the western side of the hall, there was another opening, door L.615, facing B.645, interpreted a secondary entrance, communicating with the higher sector of the palace. The floor of room L.644 slightly sloped NW-SE, with a step in front of door L.615, apparently added in the last phase of use of the room. This detail allows to clarify the two stages of use attested to in room L.644. In the earliest one, the main entrance to the hall was L.1150 and L.615 was used as inner passage towards the uppermost sector of the palace. In the latest one, L.1150 was blocked and a new door (L.640) was opened aside the podium, directly connected with rear room L.621, where a staircase to the upper floor was located (W.627 + W.1191). East of door L.1150, a shallow bench (B.1169) lined southern wall W.616 up to the SE corner of the room. On the opposite NE corner, another small bench (B.1167) flanked podium B.645, and possibly served as step to go upon it.

#### 4.3.3. Hall L.644: the ceramic assemblage

The completion of excavation of the collapse stratum in the hall (respectively, F.1172 and F.1158 over podium B.645) allowed to expose the original floor in the whole room and to collect several finds, including six complete storage jars (TS.10.G.1172/41, /42, /43, /44, /45, /51), one metallic pattern-combed white-coated jar (TS.10.G.1172/40), and one pattern-combed hole-mouth jar (TS.10.G.1172/46), as well as at least 12 jars and several fragments of hole-mouth jars (*Fig. 18*). The inventory from Hall L.644 was characterized by the presence of Red Burnished Ware bowls, jugs and juglets<sup>54</sup>. The rest of the assemblage included miniature bowls, shallow flat-based bowls, bowls with inturned rim, basins, two lamps (*Fig. 19*) and two complete medium-size jars (TS.10.G.1172/47, /48). Objects and tools found in Hall L.644 thoroughly illustrate EB IIIB material culture, comprising bone tools, flint blades, mortars and grinding stones, pestles and grinders, pottery disks and tokens, spindle whorls and pierced sea-shells, possibly used in a kind of tallying system<sup>55</sup>.

#### 4.3.4. A cylinder seal impression from Hall L.644

An utmost find from Hall L.644 is a pottery sherd with a cylinder seal impression showing two decorated registers (TS.10.G.100). In the upper one, a lion catching a gazelle in front

<sup>54</sup> Red-burnished jugs and juglets are mainly known from contemporary tombs in the Jericho necropolis, since they were used as wine, perfume and other precious stuff containers, and they were thus associated to burials. Red-burnished jug TS.10.G.1172/49 (*Fig. 19*), characterized by a red-burnished and polished surface and two plastic knobs applied on the shoulder, finds comparisons in specimens from Garstang's Tomb A (GARSTANG 1932, pl.

VII:7) and Kenyon's Tombs D12 (KENYON 1960, fig. 39:2) and F2 (KENYON 1960, fig. 59:5).

<sup>55</sup> This hypothesis was put forward by J. Tubb on the basis of the evidence of Tell es-Sa'idiyeh, where groups of pierced shells (192 in total) were found on the floor of a sunken room used for the storage of olive oil in the olive oil processing area inside the Early Bronze "palace" (TUBB - DORRELL 1994, p. 63; TUBB 1998, p. 45).

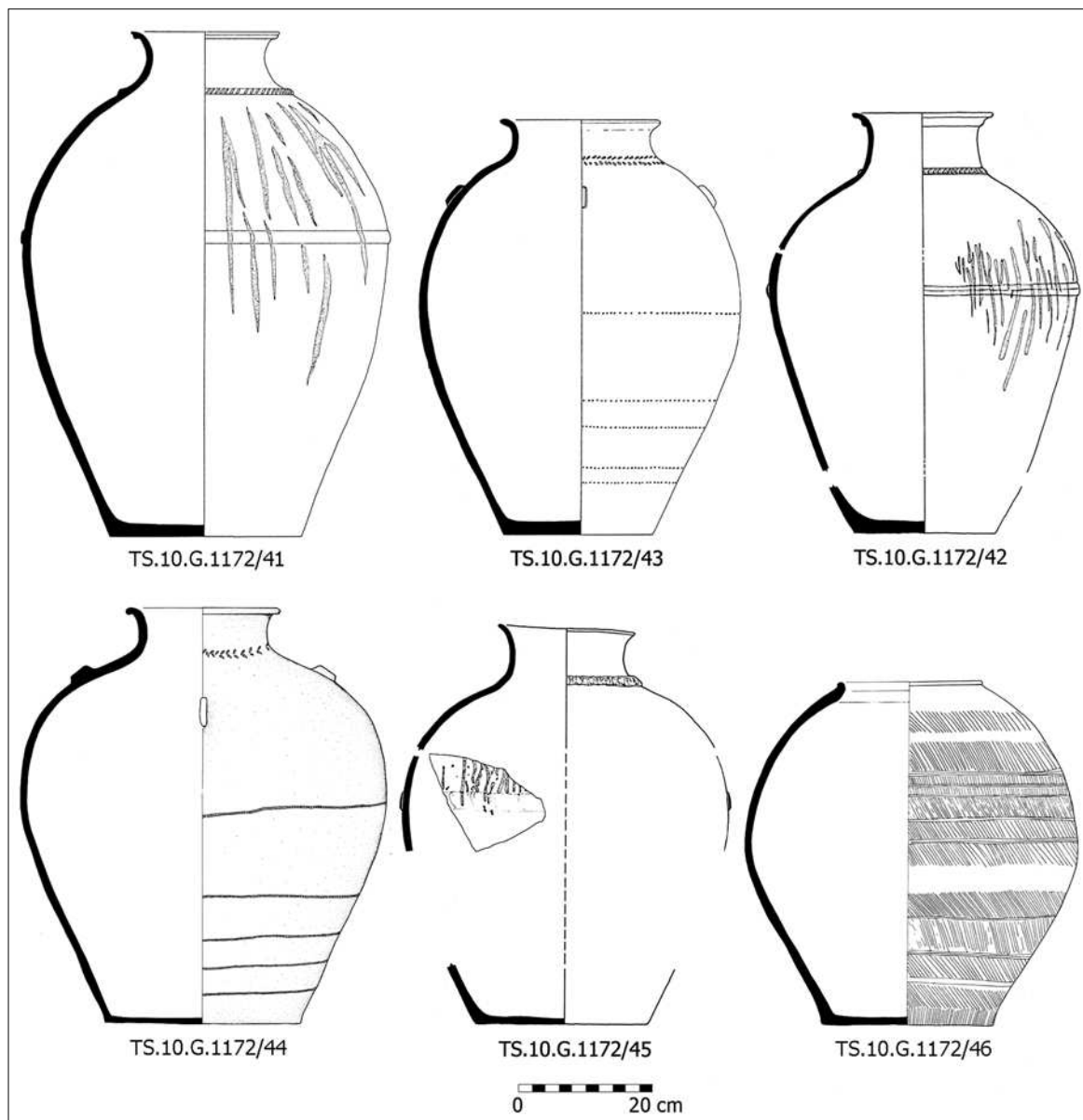


Fig. 18 – Area G: EB IIIB *pitboi*, storage jars and hole-mouth jars from Hall L.644.

of a tree is visible, while in the lower one, a man with a bow and an arrow follows some birds. The orientation of the two registers is boustrophedic. This seal impression recalls one already known from three pottery sherds found by the Austro-German Expedition in 1907-1909<sup>56</sup>, with a similar imagery, and points to a certain control of valuable goods production in EB IIIB Jericho, as well as the concentration of such products in Palace G.

<sup>56</sup> SELLIN - WATZINGER 1913, fig. 66.

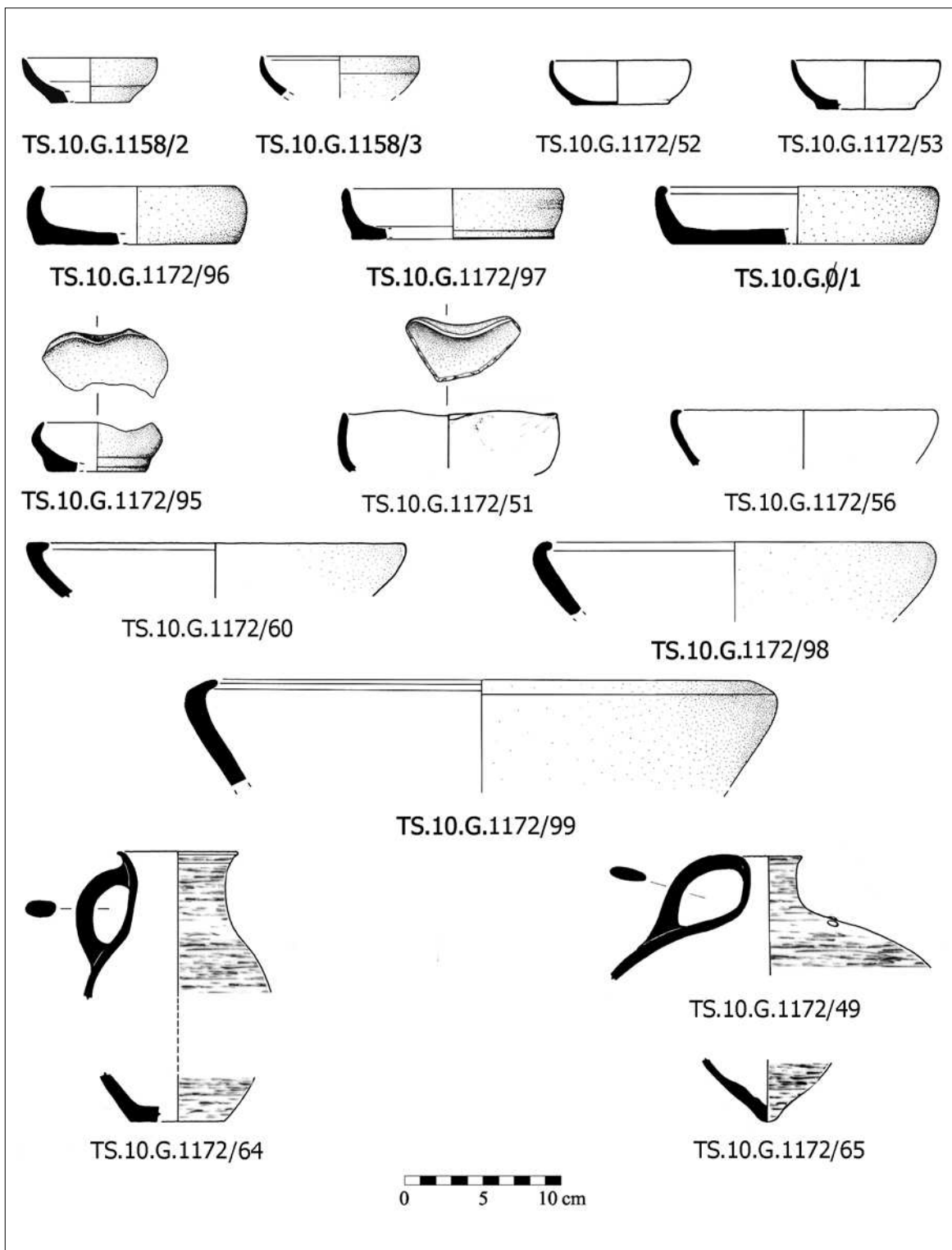


Fig. 19 – Area G: EB IIIB simple ware bowls and lamps, and red-burnished jugs from Hall L.644.

#### 4.3.5. Subsidiary Room L.1160

North of L.644, a small square room (L.1160; 2.4 × 2.2 m) was brought to light (Fig. 20), with a semi-circular slab-paved platform (L.1168) against its western side (W.1157), subdivided into two symmetric niches by a central offset (W.1165). In the destruction layer inside this chamber (F.1162), three collapsed burnt wooden beams (more than 1 m long and 15 cm wide), were sampled<sup>57</sup> and several pottery disks (stoppers or tokens), flint flakes and a polishing pebble were retrieved. In the same filling, together with other pottery fragments, the spout of a cult vessel was found, decorated with a carefully executed



Fig. 20 – General view of EB III B (2500-2350 BC) Palace G, from north; in the foreground, rooms L.1160 (east) and L.621 (west), with ramp W.627 and wall W.1191, originally supporting a wooden staircase leading to the upper floor.

bull's head, painted in red (TS.10.G.1162/1; Fig. 21). This find is almost identical to another ceramic bull's head found by Sellin and Watzinger<sup>58</sup> apparently belonged to a ritual vessel<sup>59</sup>.

#### 4.3.6. Room L.621: architectural phasing

In the uppermost terrace of the Palace, the exploration of room L.621 was completed in 2011, bringing to light its western side (W.624), preserved with height of more than 1 m (Fig. 20). A second wall (W.1191), parallel to wall W.624 and made of large rectangular bricks (0.56 × 0.28 m), occupied the north-western corner of the room, apparently in connection with ramp W.627 (Fig. 20); both structures supported a wooden staircase leading to the upper floor, built in the last phase of use of the room when door L.640 was opened in Hall L.644 in order to reach this staircase. Ramp W.627 was in fact erected just over a rectangular slab (W.1197), possibly the base for a wooden post; wall W.1191 was indeed built on two superimposed courses of bricks, with its base at the same elevation of the ramp.

<sup>57</sup> The wooden beams were NE-SW oriented (samples: TS.10.G.PR.11, TS.10.G.PR.12, TS.10.G.PR.13).

<sup>58</sup> SELLIN - WATZINGER 1913, fig. 171.

<sup>59</sup> Such ritual vessels, spouted *askoi* and *kernoi*, are sporadically attested to in Southern Levant during the late 4<sup>th</sup>-3<sup>rd</sup> millennium BC. Two notable EB III specimens were found at Khirbet Kerak: a ring *kernos* bearing two clay bull's heads, and a zoomorphic libation vessel, modelled in the shape of a bull's or lion's head (MAZAR 2001, pp. 452-454, figs. 23.5-23.6). Other EB II-III bull's heads were found at Jericho, carved in

ivory and limestone: the specimen in ivory retrieved by J. Garstang in contemporary EB III layers at the eastern bottom of the Spring Hill (Room W in Square K6; GARSTANG 1932, pp. 17-18, pl. XX:a; GARSTANG - GARSTANG 1948, pp. 77-78, pl. XIV,b); the one in limestone found by K.M. Kenyon in Tomb D12 (Reg. No. 267; KENYON 1960, p. 125, fig. 40:2, pl. VII:2), dating back to EB II; and the other one, again in fine limestone, now exhibited in the Bible Land Museum in Jerusalem (BLM J 728), possibly from an EB II-III tomb (for a general reassessment on Palestinian EB II-III bull's heads see DE MIROSCHEJJI 1993).

4.3.7. Wall 637 and the lower terrace of the palace

Excavations in BdIII7 + 8 + 9, on the lower terrace of Palace G, allowed to identify the eastern face of terrace-wall W.637, still preserved in the former two squares with a 2 cm thick yellowish plaster (W.1183), though later occupation of the area and modern excavations had heavily cut through this point of the Spring Hill. The overall width of wall W.637, thus, turned out to be 2.5 m, covering an elevation of around 1.2 m. At its northern extremity plaster W.1183 turned eastwards, indicating the presence of a transversal wall (W.1185), around 0.8 m thick, parallel to walls HH and HN excavated by Kenyon in the nearby square HII<sup>60</sup>. These structures possibly delimited long rooms stretching east-west on a terrace dominating the Spring. A small portion of the lowest room (L.1190) so far reached of the palace on the Spring Hill slope was exposed, with a collapse layer inside (F.1194). L.1190 was a 7.7 m long room; in the filling inside it over the floor a copper dagger was found (TS.11.G.63). The tang of the weapon showed the impression and some remains of the wooden handle, fixed by means of three rivets, one of which also bound a copper strip, enroled on the handle and covered by a leather band.

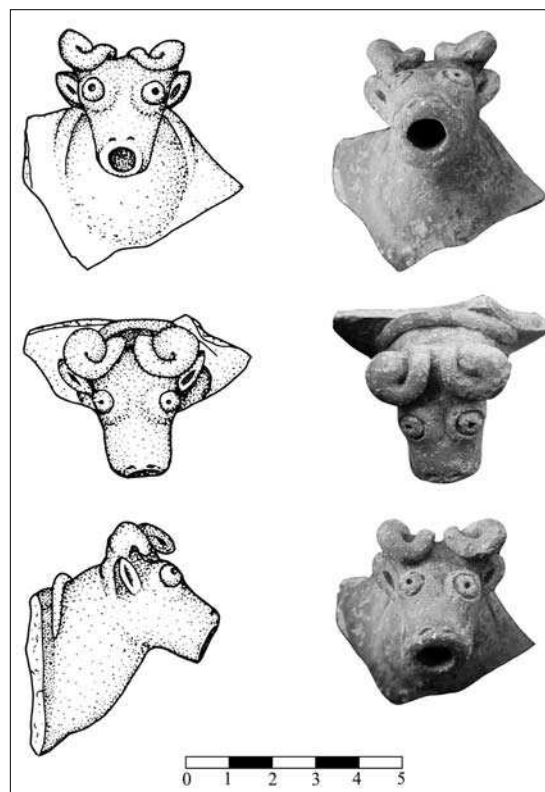


Fig. 21 – Area G: EB IIIB pottery spout TS.10.G.1162/1 from room L.1160, decorated with a bull's head painted in red, belonged to a cult vessel.

4.3.8. Conclusions: the EB III Palace on the Spring Hill

The continuation of the exploration of Palace G during this season allowed to produce a more complete plan and architectural section of the building, which extended at least on three different terraces on the eastern slope of the Spring Hill. The connection with previous excavation plans to the north-west (in Sellin and Watzinger's squares 5G-H)<sup>61</sup> and in Kenyon's square HII (see above note 45), allow to draw out an overall plan of the palace, which was the seat of the rulers of Jericho in the third quarter of the 3<sup>rd</sup> millennium BC. Its monumental architecture and special finds, such as carefully executed *pithoi* and storage jars, seal impressions, ceremonial vessels, as well as the copper dagger, further corroborate this identification<sup>62</sup>.

<sup>60</sup> KENYON 1981, pp. 344-346, pl. 327a-b.

<sup>61</sup> SELLIN - WATZINGER 1913, pp. 39-42, figs. 18-20.

<sup>62</sup> For a general overview on Early Bronze Age palatial architecture in Palestine see NIGRO 1994, pp. 1-27.

## 5. RESTORATION AND TOURIST ENHANCEMENT OF TELL ES-SULTAN

Tell es-Sultan is up today the most visited Archaeological Park of Palestine. Up to four hundred thousand people visit it a year, and the new tourist path with illustrative panels set up in year 2009-2011 by the Italian-Palestinian Expedition, including sixteen monuments, each illustrating a period of life of the ancient city, made it readable to the general public. Systematic restorations of excavated monuments are – of course – a necessary corollary of the pilot project of valorisation of the site, and during the 2010-2011 seasons several interventions of cleaning (in Area A, B, B-West, E, and in Kenyon's Trench II), restoration (Areas G and Q) and tourist enhancement were carried on. The major effort was performed in Palace G on the Spring Hill, where the building structures were restored with traditional technique of plastered mudbricks, which together with reversibility offers a soft impact on monuments, and allow to preserve the general look of mudbrick structures and installations. A second intervention was carried out in Area Q, opened in season 2009 on the western side of the tell, looking Jebel Quruntul, just south of Kenyon's Trench I and Site D<sup>63</sup>, where the EB IIIA Inner City-Wall and postern were restored with a top course of bricks intended as protective layer. Also the stone foundations of the structures were reinforced and protected. The main entrance to the site and the shelter on the top of the Spring Hill, which overlooks the Oasis and the underlying Spring offering a wide and amazing panorama, were fully refurbished.

Finally, the site was provided with an "Interpretation Centre" by the entrance, funded by the Japanese International Cooperation Agency, where an introductory movie is projected (this was also realized by the MOTA-DACH and JICA with the cooperation of the Expedition); in the Centre four *pithoi* and storage jars from Palace G were set on exhibit.

## 6. CONCLUSIONS: JERICHO, 10,000 YEARS OF HISTORY OF HUMANKIND

In October 10<sup>th</sup> 2010 the city of Ariha celebrated 10,000 years of life. During this symbolic event Tell es-Sultan/ancient Jericho was the focus of worldwide culture attention, epitomizing, through its long history written into superimposed layers of earth disentangled by the generous work of generations of archaeologists decisive achievements of Humankind: the birth of agriculture, of communal architecture, of religious thought and ancestor's cult, the invention of pottery, the early diffusion of metal (copper), culminating, at the beginning of the 3<sup>rd</sup> millennium BC in the creation of a heavily fortified city, which in the 2<sup>nd</sup> millennium BC, with the name *Ruha*, was a capital city of Levant<sup>64</sup>.

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<sup>63</sup> NIGRO - TAHA 2009, p. 740.

<sup>64</sup> NIGRO 2009b.



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#### SUMMARY

Dopo la ripresa della ricerca archeologica mirata alla valorizzazione di Tell es-Sultan, l'antica Gerico, in Palestina nel 2009 (NIGRO - TAHA 2009), le attività della Missione archeologica congiunta della Sapienza e del Palestinian MOTA-DACH sono continuate nelle successive campagne del 2010 e 2011 concentrandosi sulle vestigia della città dell'Età del Bronzo, ma anche raggiungendo da un lato strati neolitici, dall'altro resti dell'abitato dell'Età del Ferro. I risultati più significativi hanno riguardato la città del Bronzo Antico III, con l'individuazione della Porta Sud nel circuito interno nell'Area B e un importante ampliamento dello scavo del Palazzo G, dove sono stati ritrovati reperti di notevole interesse, tra i quali un pugnale di rame e un vaso cultuale configurato a testa di toro, e quella del Bronzo Medio con la stratigrafia della Torre A1 e la complessa struttura della "Curvilinear Stone Structure", che hanno chiarito la lunga vicenda storica della città cananea.

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