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MB III RAMPART & CYCLOPEAN WALL OF TELL ES-SULTAN/JERICHO

The Middle Bronze Age is the most flourishing period of the pre-Classic Southern Levant through the two principal directions of maritime contact with Egypt and the influx of the great Amorrean culture of Syria and Mesopotamia: this is certainly the period in which is more evident the cultural unit constituted by Syria and Palestine. Especially fortification systems, one of the most visible and impressive features of the period, due to their variety and size, are expression of this continuity. They were found in Syria in sites like Tell Mardikh/Ebla[1] and Qatna[2], where exhibit a greater scale than that in Palestine, where only the embankments of Hazor are comparable to the Syrians ones.

Earthen ramparts spread over Southern Levant during the Middle Bronze II and III (1800-1550 BC), being restored, or built up against previous fortification, in sites already settled, or erected *ex novo*, in newly founded cities. Ramparts can be split up into two subtypes: freestanding, generally linked with new foundations, and supplemental[3]. The former type is completely built up, usually in plain open areas, such as in the case of Tell Mardikh/Ebla[4], and Qatna[5]; the latter is usually erected exploiting natural or preexisting slopes of tells.

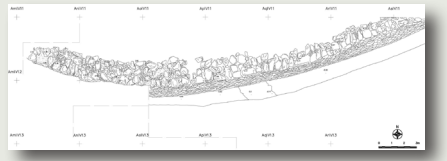
They are generally constituted by an inner retaining wall, the core of the structure, an embankment, and an outer sloping treated surface, the glacis[6].

A. Burke has recognized three types of structural elements which constitute the ramparts[7]: retaining walls, core walls and revetment walls. Retaining walls were constructed to address potential instabilities at specific points, identified during the construction; they were usually built with fieldstones only a few courses high and a few meters long and they were buried within the rampart's fills.

Stone core walls were erected in order to provide a solid foundation for the construction of the town wall and in order to stabilize the rampart.

Revetment walls were exclusively built at the foot of earthen rampart to preventing the erosion. They were better constructed than other structural walls, employing cyclopean masonry and being between two and ten meters high and between one and four meters wide, suggesting a considerable planning involved in the construction of city's defenses.

The Middle Bronze III (1650-1550 BC) rampart at Tell es-Sultan/Jericho (*Figs.* 1, 5)[8] was a supplemental rampart, a monumental rubble embankment supported by a huge stone structure, called Cyclopean Wall, built up at the foot of the tell and a series of triangular retaining walls. This rampart is the third MB fortification built up on the site, above the previous one erected at the end of Middle Bronze I that was articulated into two terraces, and coated with crushed limestone and clay[9]. It supported a rubble filling sealing large part of the southern Lower City and was further sustained by retaining walls, triangular in sections, uncovered in several spots around the site's flanks (north, west and south): W.98 in Area C[10], W.113 in Trench I, W.71, W.72 in Trench III, and W.53 in Area B West[11].



The Cyclopean Wall was traced around the site nearly completely by Sellin and Watzinger[12] and defined as "Israelitische Boschüngsmauer"; subsequently it was again identified by Kenyon, in Trench I, Wall KD, in Trench II, Wall OEO, and in Trench III, Walls NFK, NGJ and NGK[13]; the Italian-Palestinian Expedition newly encountered the wall in Area A, where it was called Wall W.4. Here the erection of MB III defensive system involved a partially razing of the lower town, where the preceding MB I-II fortification system, like Tower A1[14] and the Curvilinear Stone Structure[15], went out of use.

1 Matthiae 1995[3], pp. 136, 141-142.

2 Morandi Bonacossi 2007, pp. 72-73.

3 Bourke 2008, p. 48.

4 Peyronel 2007, pp. 403, 405.

5 Morandi Bonacossi 2007, pp. 72-73.

6 Kempinski - Reich 1992, p. 129.

7 Burke 2008, p. 54.

8 Nigro 2006, pp. 34-35.

9 Marchetti 1998, pp. 141, 145. About stratigraphical situation of MB ramparts at Jericho see Kenyon 1981, pl. 259; Marchetti 1998, p. 142, note 50.

10 Marchetti 1998, fig. 4:44.

11 Sarie' 1998, p. 105.

12 Sellin - Watzinger 1913, pl. 1.

13 Kenyon 1981, pls. 236, 259, 273.

14 Marchetti 2000, p. 219.

15 Nigro *et al.* 2011, pp. 581-583.

The rampart, including layers of mudbrick debris, rubble, stones, limestone and flint chops, in addition to earth, was laid down in a series of overlapping strata of decreasing size from bottom to top. This alternance of material and techniques assured drainage and solidity to it[16]. The clayish revetment prevented the rampart from rain-wash, while silt and in the so-called "sandwich technique" drained water from earthy layers letting it evaporate through rocky layers.

The building technique of Cyclopean Wall W.4 (*Fig.* 2) included a foundation trench (P.1677), 0.8 m wide, filled progressively for laying superimposed courses of big limestone boulders. These were moved and set on place also employing mudbrick or stone ramps[17]. The lowest layer within the foundation trench (*Fig.* 3) of this monumental structure was yellowish soft soil (F.1692) (*Fig.* 4); the latter ended at elevation -1 m being covered by a bed of medium size stones (F.1694) upon which the limestone and flint boulders were laid[18]. The supporting wall, incorporated cyclopean masonry, consisting of medium and large boulders roughly dressed on the outer face and set into the flank of the mound, being tied up by smaller chips set in between them (*Fig.* 2). It is a scarp wall and has a curving profile up to two-thirds of its height, where stones start to be smaller. The crest, preserved at maximum elevation from the bottom of 8 m[19], was covered by mudbrick walls[20] to regularize the top of the wall or the water flow[21]. The Cyclopean Wall was fully buried by the rubble filling of the rampart.

Similar supporting structures were also brought to light in other major cities of Palestine: Wall 9011 at Tell el-Jazari/Gezer[22]; M291 at Khirbet Seilun/Shiloh[23] and Glacis B at Tell Balatah/Sichem[24]. The rampart of Tell es-Sultan/Jericho shares some structural and architectural characteristics with the one of Tell Balatah/Sichem. Both show an inner cyclopean supporting scarp wall and a superimposed recessed straight stone wall[25]; moreover, in both structures, lower walls are erected with a cyclopean masonry with irregular boulders[26], and upper rows are made with smaller and more regular blocks.

Ramparts were constructed to impede the approach of aggressors and have an additional symbolic importance or social significance, changing surrounding landscape, carrying with them the feelings of awe, power, and respect, but they could be not only a symbol of the power of the rulers towards their subjects, but also towards neighboring cultures, considering the international trade revived in the Middle Bronze Age[27]. Supplemental ramparts can additionally protect against the effects of erosion[28]. Building activities of this scale could not be undertaken without sophisticated political organizations, so that rampart are regarded as proof of "city-state" organization[29]. Therefore, MB III Cyclopean Wall W.4 of Tell es-Sultan/Jericho with its great technical ability shows a clear improvement in the defensive system and testifies the presence of a central power ruling over the site.

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16 Pennells 1983, pp. 57-58.

17 Sellin - Watzinger 1913, fig. 35; Marchetti 2000, p. 217.

18 Nigro *et al*. 2011, p. 191.

19 Nigro *et al*. 2011, p. 191.

20 Sellin - Watzinger 1913, pp. 56-62, pls. 11-12; Kenyon 1952, fig. 2, pl. XVII, 1; Ead. 1981, pp. 110, 169-170, pls. 92:a, 93:a, 109-110, 236.

21 Kenyon 1981, p. 170.

22 Dever 1974b, pp. 33-36, fig. 3, pls. 61, 63-64.

23 Finkelstein 1993, pp. 35-43, figs. 3:9, 3:11.

24 Dever 1974a, figs. 3, 9.

25 Sellin - Watzinger 1913, pls. 10, 11:a, 12:a; Dever 1974a, figs. 3, 9; Marchetti 1998, p. 150.

26 Marchetti 1998, p. 144.

27 Uziel 2010, pp. 25-27.

28 Kempinski - Reich 1992, p. 129; Bourke 2008, p. 48.

29 Finkelstein 1992, p. 216.

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Riassunto

I sistemi di fortificazione a terrapieno (*rampart*) che si diffondono nel Levante meridionale nel corso del Bronzo Medio II e III, costruiti generalmente sfruttando declivi preesistenti, proteggendo i *tell* dagli effetti dell'erosione, erano usualmente costituiti da due elementi

fondamentali: muri di contenimento e terrazzamento; gettate di terra e pietrisco che ricoprivano tali muri.
Il terrapieno di Tell es-Sultan/antica Gerico fu eretto durante il Bronzo Medio III (1650-1550 a.C.) ed è costituito da un muro di contenimento di pietra, detto Ciclopico in virtù della tecnica costruttiva, che cingeva il *tell* ai suoi piedi, e da uno spesso strato di gettate sovrapposte di terra e pietrisco.

Fig. 1 – General view of Cyclopean Wall W.4 from south-west.

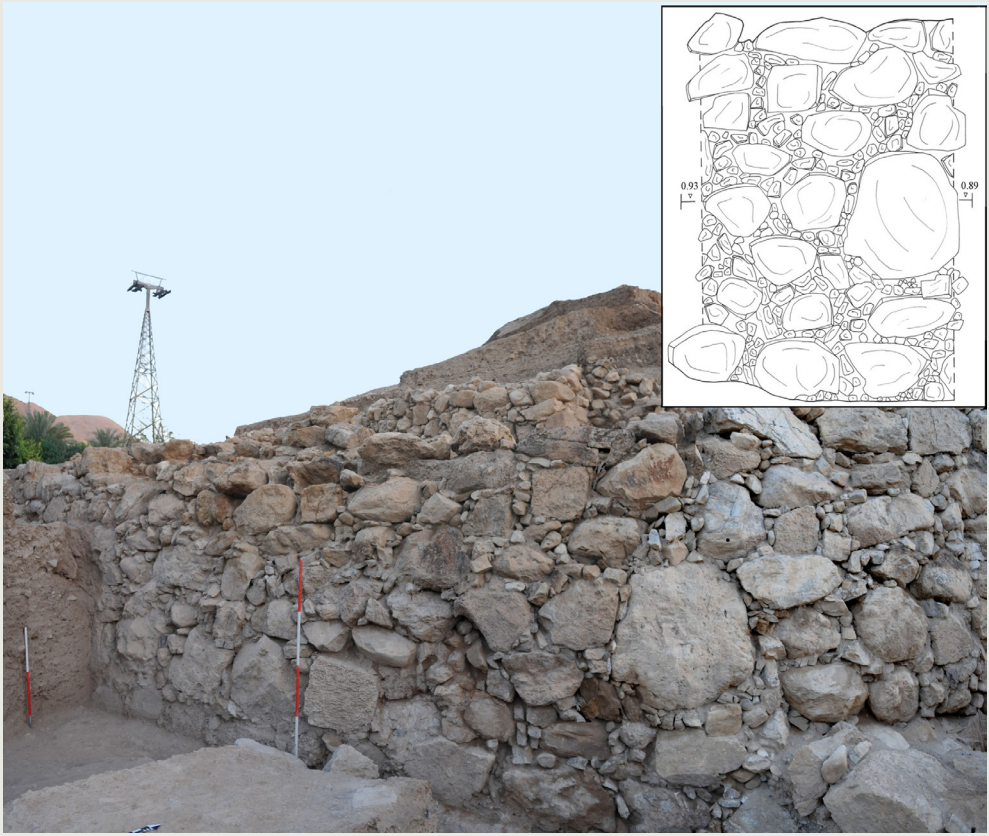

Fig. 2 – Frontview of W.4 with detail of building technique.

Fig. 3 – Detail of the foundation trench of Cyclopean Wall W.4 from east.

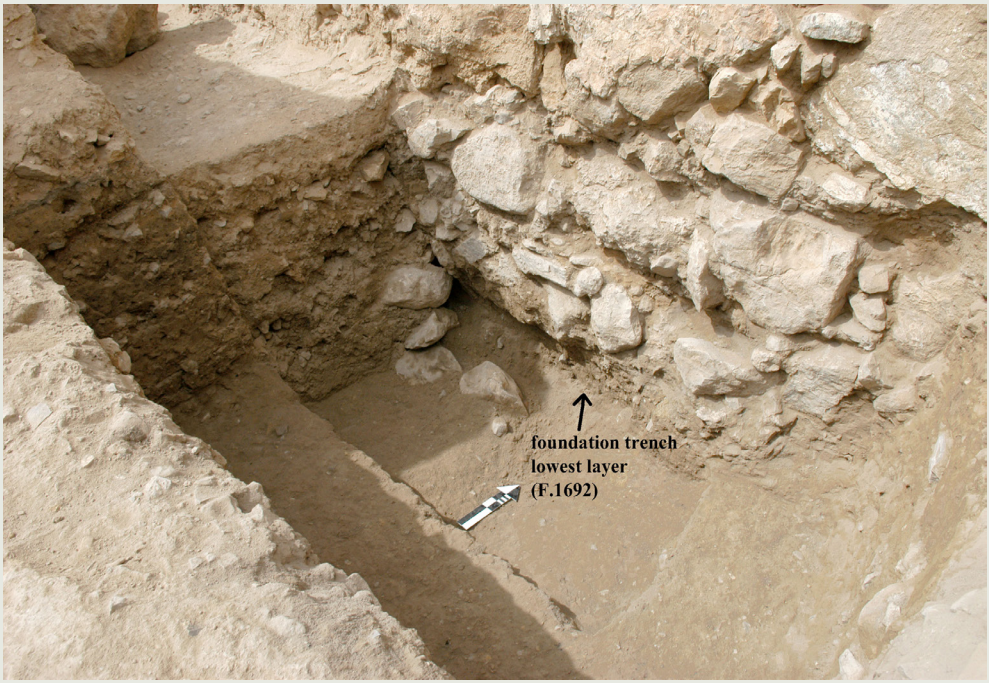

Fig. 4 – Deep sounding in the foundation trench of Cyclopean Wall W.4.

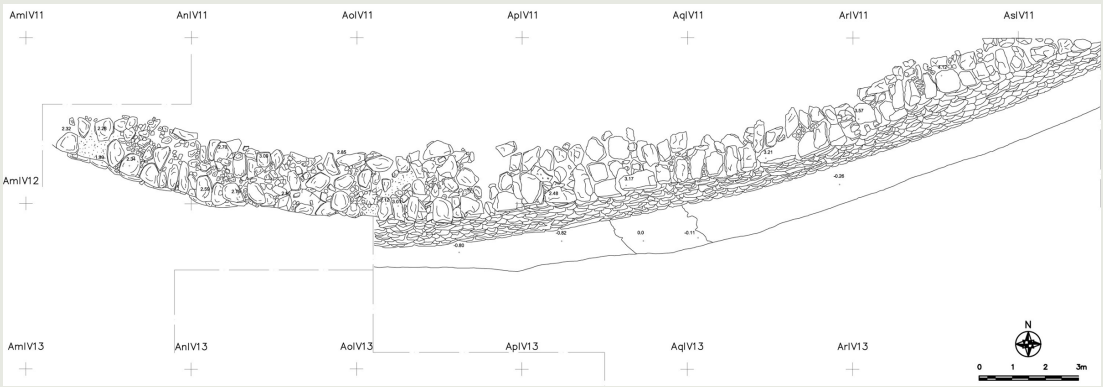

Fig. 5 – Plan of Cyclopean W.4 in Area A.