# Tell es-Sultan (Jericho): The Archaeological Expeditions to Tell es-Sultan (1868-2012)



# An offprint of Archaeology in the Land of 'Tells and Ruins'

A History of Excavations in the Holy Land Inspired by the Photographs and Accounts of Leo Boer

# Edited by Bart Wagemakers

Hardcover Edition: ISBN 978-1-78297-245-7 Digital Edition: ISBN 978-1-78297-246-4



Published in the United Kingdom in 2014 by OXBOW BOOKS 10 Hythe Bridge Street, Oxford OX1 2EW and in the United States by

OXBOW BOOKS 908 Darby Road, Havertown, PA 19083

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Hardcover Edition: ISBN 978-1-78297-245-7 Digital Edition: ISBN 978-1-78297-246-4

A CIP record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Archaeology in the land of "tells and ruins": a history of excavations in the Holy Land inspired by the photographs and accounts of Leo Boer / edited by Bart Wagemakers.

pages cm

Summary: "Recently, a travel account and 700 photographs came to light by the hand of Leo Boer, a former student of the École Biblique et Archéologique Française in Jerusalem who, at the age of 26 in 1953-4 visited many archaeological sites in the area of present-day Israel and the Palestinian Territories. This unique collection of images and essays offers to scholars working in the region previously unpublished materials and interpretations as well as new photographs. For students of archaeology, ancient or Biblical history and theology it contains both a detailed archaeological historiography and explores some highly relevant, specific themes. Finally, the superb quality of Boer's photography provides an unprecedented insight into the archaeological landscape of post-war Palestine for anyone interested in Biblical history and archaeology"--Provided by publisher.

Includes bibliographical references and index.

ISBN 978-1-78297-245-7

1. Israel--Antiquities. 2. Palestine--Antiquities. 3. Bible--Antiquities. 4. Excavations (Archaeology)--Israel. 5. Excavations (Archaeology)--Palestine. 6. Israel--Antiquities--Pictorial works. 7. Palestine--Antiquities--Pictorial works. 8. Boer, Leo, 1926-2009--Travel. 9. Israel--Description and travel. 10. Palestine--Description and travel. I. Boer, Leo, 1926-2009. II. Wagemakers, Bart.

DS111.1.A74 2014 933--dc 3

#### 2013047767

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Front cover: Photograph taken by Leo Boer at Khirbet Qumran on 21 March 1954
Back cover images, respectively: Jerusalem; Khirbet et-Tell; Samaria & Sebaste; Tell Balata (Shechem);
Tell es-Sultan (Ancient Jericho); Khirbet Qumran; Caesarea Maritima; Megiddo; Bet She'an

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#### CHAPTER 6

## TELL ES-SULTAN (JERICHO)

Tell es-Sultan is the site of ancient Jericho. The tell lies 250 metres below sea level in the Jordan Valley, near the northern end of the Dead Sea. Here, a flourishing spring ('Ain es-Sultan, also known as Prophet Elisha's Spring) gave life to a large oasis, inhabited since the Natufian Period (10,500 BCE), and provided one of the oldest settlements in the world the conditions for life.

The Jerichoan community was one of the first to become sedentary and rely on agriculture for subsistence and it offers very early evidence of ancestors worship. At the beginning of the third millennium BCE, the town was defended by mighty fortifications. The monumental ruins of these Bronze Age fortifications, still visible after their final destruction around 1550 BCE, may have inspired the biblical author of the Joshua account to name Jericho as one of the main towns conquered by the Israelites (Joshua 6). The identification of Tell es-Sultan with biblical Jericho has been controversial, as the site was hardly inhabited at the end of the Late Bronze Age, when 'the walls came tumbling down'.

This chapter sketches the fascinating archaeological history of Tell es-Sultan and describes I. W. Cornwall's research of the numerous human remains that were found *in situ* at Tell es-Sultan and his role as pioneer of archaeothanatology.

# The Archaeological Expeditions to Tell es-Sultan (1868–2012)

#### Maura Sala

Leo Boer visited Tell es-Sultan in 1954, during the second British Expedition directed by Kathleen M. Kenyon (1952–1958). He met Kenyon (1906–1978) twice at the tell: the first time when he was travelling around with two friends; the second time when he visited the site in the company of his lecturers and fellow students of the *École Biblique et Archéologique Française de Jérusalem*. At that time, Kenyon had just started her large-scale excavations at the tell and the nearby necropolis. On his visits to these excavations Boer witnessed the use of innovative methods and techniques applied at a site with a rich archaeological history which will be discussed in this contribution.

## Leo Boer at Tell es-Sultan during the second British Expedition (1952–1958)

Kenyon carried out her excavations at Tell es-Sultan – ancient Jericho – between 1952 and 1958 under the Jordanian administration (1948–1967), on behalf of the *University College of London*, the *British School of Archaeology in Jerusalem* and the *Palestine Exploration Fund* (PEF) (Kenyon 1957; idem 1981; Kenyon and Holland 1982; idem 1983; King 1983, 125–28; Drinkard, Mattingly and Maxwell Miller 1988, 48–52; Moorey 1991, 94–99). After the division of the region between Israel and Jordan at the end of the British Mandate in 1948, the West Bank fell, in fact, within the Jordanian borders.

Kenyon organized a large-scale expedition with an international team and set a new standard in archaeology by introducing the stratigraphic digging method of Sir Mortimer Wheeler<sup>1</sup> to the Near East. This method included the digging of deep squares and trenches, reading their vertical sections, so that the chronological history of the site could be reconstructed; as well as systematically collecting and studying the materials (in particular, pottery) according to their stratigraphic context.

Kenyon's expedition was the second British Expedition working at Tell es-Sultan (following the one directed by J. Garstang in the 1930s; see below), and it investigated all the occupational phases of the settlement, from the Natufian to the Byzantine Period, establishing the chronological sequence of the site, and producing a full re-evaluation of the archaeology of Tell es-Sultan.

Kenyon's excavations were launched with three main aims in mind: firstly, to obtain additional evidence on the date of the fall of the Bronze Age city and its related fortifications, traditionally associated with the Israelite invasion under Joshua according to the biblical account (just as Garstang had confirmed at the end of his campaigns at Tell es-Sultan); secondly, to expose more of the very important Neolithic occupation levels that were first revealed by Garstang; and finally, to investigate more tombs in the nearby necropolis, that was also first discovered by Garstang in the 1930s.

Kenyon excavated three main trenches, expanding the cuts made by previous expeditions on the western (Trench I), northern (Trench II) and southern (Trench III) flanks of the tell, and a series of squares five by five metres and ten by ten metres on the mound itself (Fig. 6.1).

Among the main results of her expedition is the discovery of the Pre-Pottery Neolithic circular Tower in Trench I (Fig. 6.2) and the extensive exposure of the prominent Neolithic phases at the site (Kenyon 1957, 51–76); furthermore, the systematic exploration of the huge cemetery located to the north and west of the site, where they uncovered more than 600 tombs, ranging in date from the Early Bronze Age I to the Roman Period, and often containing rich funerary equipment (Kenyon 1960a; idem 1965); and, eventually, the investigation of the Bronze Age fortifications, defining the morphology and, above all, the chronology of the city walls which had been placed at the heart of the biblical account of Joshua (Kenyon 1957, 169–82, 214–21, 256–65). The examination of the

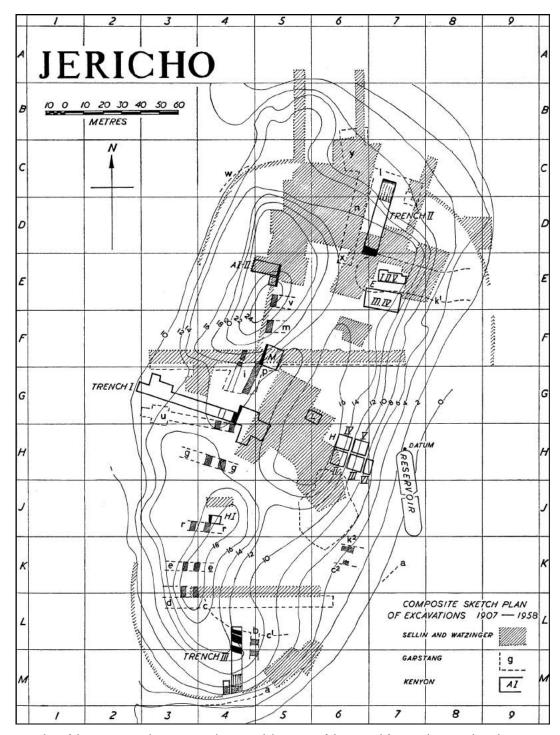


Figure 6.1: Plan of the excavations by K. Kenyon (1952-1958) (Courtesy of the Council for British Research in the Levant, CBRL).

Bronze Age defences started in 1952 from Trench I, which was opened at the middle of the western side of the mound, as well as in Site A, near its north-western corner. In Trench I, the whole sequence of Early and Middle Bronze Age fortifications could be unearthed,

investigated and dated, based on an accurate analysis of associated pottery materials (Kenyon 1981, text, 97–103, 108–11).

The photograph taken by Boer from the Mount of Temptation (Fig. 6.3) offers an overview of the tell

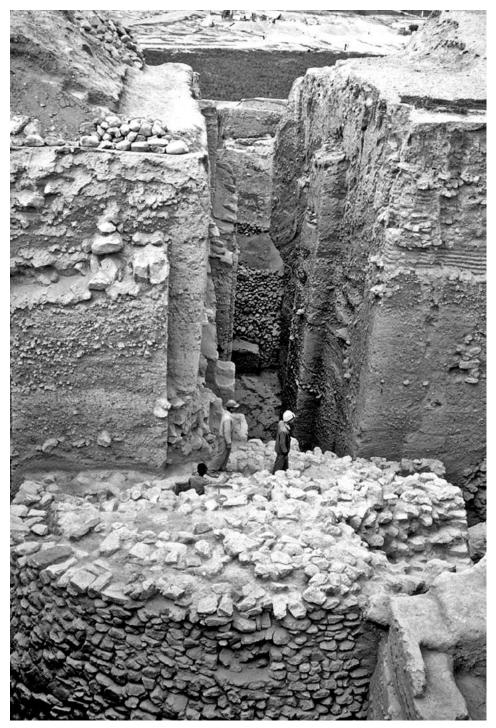


Figure 6.2: Work at Kenyon's Trench I and PPNA (8500-7500 BCE) Tower at the time of Kenyon's excavations in 1952-1958 (Courtesy of the Council for British Research in the Levant, CBRL).

during Kenyon's excavations in 1954, showing the cut of Trench I open since 1952. When Boer visited Tell es-Sultan, Kenyon's excavations in Trench I had already exposed the whole sequence of Bronze Age fortifications (Kenyon 1953, 8–10; idem 1954a, 47, 58–

60). In the adjacent Squares DI and FI they had brought to light the Pre-Pottery Neolithic B layers, <sup>2</sup> exposing a settlement characterized by houses of a considerable size with both walls and floors covered with a smooth lime surface, by burials beneath the floors (as the



Figure 6.3: General view of the site of Tell es-Sultan from the Mount of Temptation (Jebel Quruntul) in 1954. Note the deep cut of Kenyon's Trench I across the western side of the mound (white arrow), and the refugee camp located next to the northern side.

ones portrayed in the photograph taken by Boer; see Figure 6.13 in the contribution of Bocquentin and Wagemakers in this chapter), and by plastered skulls associated with funerary rituals (Kenyon 1957, 60-64; idem 1981, plates 50b-59c). These houses had a multiroom rectangular plan, showing a main room with inner partitions constructed with cross-walls (opened both along the central axis and against the sidewalls), and adjoining storage bins, as well as floors laid upon a bed of reeds, and inner walls and floors refined by burnished coloured plaster (Kenyon 1957, 52-56). Characteristic sun-dried, handmade, cigarshaped mudbricks were used, showing a herringbone pattern of thumb-impressions on the surface, laid as stretchers and set in thick layers of clay (Kenyon 1981, plates 115–116a, 138b-c, 170a).

When Boer visited the site in March 1954, many other areas were under investigation apart from Trench I and Squares DI and FI (Kenyon 1954a):

namely Squares EI-EII, opened inside the huge North-Eastern Trench excavated by Garstang, where they continued the examination of the earliest Pre-Pottery Neolithic layers; Square EIII, south of Garstang's Trench, where they examined the layout of the Early Bronze Age city; Squares HII-HIII, located on the eastern slope of the Spring Hill (which had already been extensively excavated by Sellin and Watzinger's and Garstang's expeditions), where a few Middle Bronze Age houses, positioned along a street, were excavated, as well as a flimsy, superimposed Late Bronze Age floor with an oven (which was the first identification of Late Bronze Age layers during Kenyon's excavations); Square MI, opened at about 30 metres north of Trench I, enlarging a pre-existing trench where the Germans and Garstang had worked previously, in which they investigated both Early Bronze Age and Pottery Neolithic layers; and, finally, Trench II and Trench

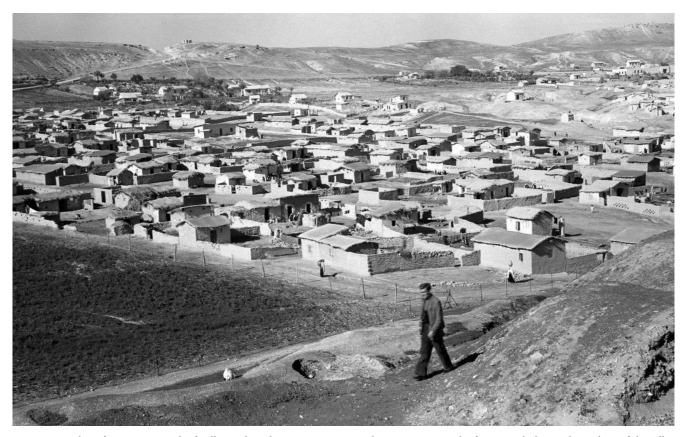


Figure 6.4: The refugee camp north of Tell es-Sultan during Boer's visit at the site in 1954; in the foreground, the northern slope of the tell.

III, opened across the northern and the southern sides of the tell respectively, in which the northern and southern boundaries of the ancient settlement could be established (Fig. 6.4).

#### Pilgrims and travellers from the Late Roman period to the Renaissance

Because of its religious role and significance, the site of Tell es-Sultan, and, more extensively, the Jericho Oasis, attracted pilgrims and travellers well before the twentieth century, in fact since late antiquity. Travellers started visiting Jericho during the Late Roman and Byzantine Periods as one of the major holy places in Palestine (Hunt 1982). It was mentioned by the Pilgrim of Bordeaux in 333 CE, as well as pilgrims Egeria (381–384 CE), Paula (404 CE), the archdeacon Theodosius (530 CE), and the Anonymous Pilgrim from Piacenza (570 CE). Each of them has left a written account of the places and the numerous churches and

monasteries they visited in the Oasis, among which was the church 'Ain es-Sultan, built near the Elisha's Spring, east of the ancient site of Tell es-Sultan.

After the transit of the Persian army in 614 and the arrival of the Arabs in 638, Jericho fell into decline, which meant that in 670 the French pilgrim Arculf saw nothing but ruins there. When the Crusaders occupied Palestine in 1099, Jericho was nothing more than a 'Saracen Village', as defined by the Russian abbot Daniel in 1106-1107. After the Crusaders had gone, Jericho once again fell into decline and was reduced to a small hamlet, due to the perilous nature of its surroundings: travellers, who visited the Oasis during the Late Medieval and Renaissance Period, recorded a few houses, probably belonging to the village of 'Ain Hajla, or the remains of the Byzantine centre of Tell el-Hassan, a small cluster of houses grouped around a tower. Since the Middle and Late Islamic Periods the site of Tell es-Sultan itself was abandoned definitively and was reduced to a heap of ruins. Nonetheless, memory of it was preserved.

#### Travellers and pioneer archaeologists of the eighteenth and nineteenth centuries

European travellers began to visit Jericho from the seventeenth century onwards. It was Napoleon's campaign to Egypt and the Southern Levant (1798-1799) that launched journeys throughout the Near East for the sake of exploration. The nineteenth century thus saw a growing number of European and also American voyagers visiting the Near East, they would often be artists, painters and photographers, who would leave precious descriptions and information about ancient sites and monuments.4 The American biblical scholar E. Robinson (1794–1863) opened the way for a modern approach to biblical topography. He made his first trip to Palestine in 1838, and a second trip in 1852, together with his pupil E. Smith: they identified more than 100 sites, and they also visited Tell es-Sultan, identifying it with biblical Jericho (Robinson and Smith 1856).

The foundation in 1865 of the *Palestine Exploration Fund* (PEF), and its aim of 'promoting research into the archaeology and history, manners and customs and culture, topography, geology and natural sciences of biblical Palestine and the Levant' (Bliss 1906, viii), launched a new phase of exploration in Palestine, involving not only individual researchers, but teams of specialists supported by the Royal Engineers of the British War Office (King 1983, 7; Moorey 1991, 19).<sup>5</sup>

## C. Warren's (1868–1869) and J. F. Bliss' (1894) soundings

The first preliminary excavations at Tell es-Sultan were undertaken in 1868, within the framework of activities carried out in the Southern Levant by the newly born PEF, by Captain C. Warren (1840–1927), an officer of the Corps of Royal Engineers.<sup>6</sup> He cut the site with east-west trenches of 2.4 metres wide and six metres deep, destroying the double mudbrick city wall on the southern edge of the tell, and missing the Pre-Pottery Neolithic Tower in Kenyon's Trench I by less than one metre. Warren's excavations at Tell es-Sultan did not produce any archaeological results, which led him to conclude that the site lacked any proper historical interest (Warren 1869a; idem 1869b, 14–16).

Investigations at Tell es-Sultan were subsequently renewed in 1894, again on behalf of the PEF, by F. J.

Bliss (1857–1939), who made soundings at the bottom of the tell and – according to the biblical perspective current at that time – believed to have found the remains of the mudbrick walls which 'tumbled down at the sound of Joshua's trumpets' (Bliss 1894, 175–77; King 1983, 20–23).

# The first systematic excavation carried out by the Austro-German Expedition directed by E. Sellin and C. Watzinger (1907–1909)

Renewed archaeological activities at Tell es-Sultan were supported at the beginning of the twentieth century by the *Deutsche Palästina Verein* (DPV), a German cultural institution founded in 1877. Two of its members, the biblical scholar E. Sellin (1867–1946) and the classic archaeologist C. Watzinger (1877–1948), focused their interest on the Jericho Oasis, and resumed investigations at Tell es-Sultan with the support of *Deutsche Orient-Gesellschaft* (King 1983, 14–15, 46–47).

During the years 1907–1909 they undertook at Tell es-Sultan the first scientific and systematic archaeological excavation, which resulted in a detailed report within just a few years, complete with photographs and accurate architectural sections and plans (Fig. 6.5), whereby, for the first time, finds were arranged by periods and classes of evidence (Sellin, Watzinger and Langenegger 1908; Sellin, Watzinger and Nöldecke 1909; Sellin and Watzinger 1913).

The Austro-German Expedition excavated the tell extensively (Fig. 6.6). The main results of these excavations were: the discovery of the EB II-III city walls made of sun-dried mudbricks along the summit of the mound; the excavation of the MB III rampart at the bottom,7 consisting of a monumental structure made out of big limestone blocks (the socalled 'Cyclopean Wall'); the exploration of the EB III residential quarter on the northern plateau; the excavation of superimposed buildings (from the Iron Age down to Early Bronze Age) on the top and western side of the Quellhügel (the Spring Hill). Furthermore, two east-west trenches were cut across the site north and south of the Spring Hill, reaching, in some spots, the deepest Early Bronze Age layers. Another achievement of the Austro-German excavations was the establishment of an Iron Age sequence on

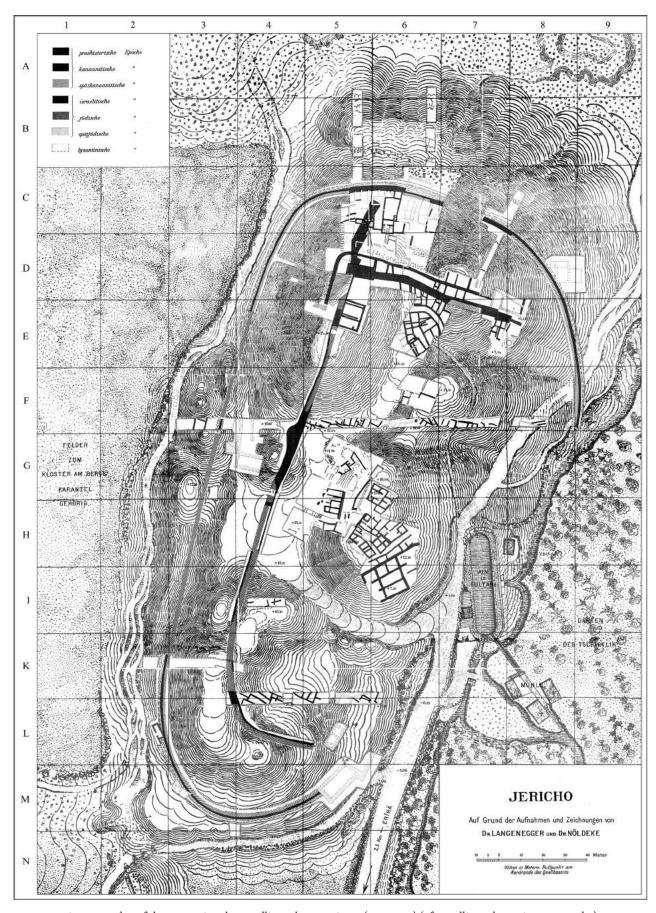


Figure 6.5: Plan of the excavations by E. Sellin and C. Watzinger (1907–1909) (after Sellin and Watzinger 1913, pl. I).

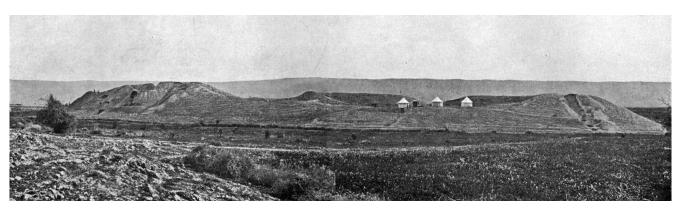


Figure 6.6: General view from the west of Tell es-Sultan during the Austro-German excavations in 1908 (after Sellin and Watzinger 1913, pl. 1a).

the eastern slope of the Spring Hill, which was later reassessed by M. and H. Weippert (1976), suggesting that Jericho was occupied continuously from the tenth to the sixth century BCE.

A periodisation of the site was also developed, which comprehended the prähistorische, kanaanitische, israelitische and jüdische periods. The methodology employed in constructing the chronological grid was very advanced for that time, but the historical reading of it was affected in some instances by the biblical narratives, which led them to adopt an incorrect chronological sequence: they attributed the Cyclopean Wall to the Israelites and the double mudbrick city wall to the Canaanite city conquered by Joshua, according to the biblical account (Nigro 2004, 224–25). Nonetheless, in the light of W. F. Albright's results at Tell Beit Mirsim, C. Watzinger later rectified his original chronological setting (with remarkable, intellectual honesty), suggesting an almost exact attribution of the Cyclopean Wall to Middle Bronze III, and of the double mudbrick city wall to the Early Bronze III (Watzinger 1926).

## The first British Expedition carried out by J. Garstang (1930–1936)

Archaeological excavations at Tell es-Sultan were resumed between the years of 1930 and 1936 by J. Garstang (1876–1956), on behalf of Liverpool University and under Sir Charles Marston's patronage, sits major aim being to verify Watzinger's claims concerning the chronology of the mudbrick fortifications encompassing the summit of the tell, and demonstrating

the reliability of the biblical account in the Book of Joshua (Garstang 1927; idem 1930). At that time Palestine was under the British Mandatory Government and a Department of Antiquities had been set up in 1920.9

The British Expedition led by Garstang began a systematic exploration of the tell, cutting a series of trenches across the line of the double mudbrick city wall to check the chronology of the Jericho fortifications (Fig. 6.7; Garstang 1930; idem 1931; idem 1932, 6-15). Garstang also cut a big trench on the north-eastern plateau of the mound (Garstang, Droop and Crowfoot 1935; Garstang, Ben-Dor and Fitzgerald 1936), achieving two major results: for the first time an archaeologist exposed and identified the Neolithic layers at the site, the period in which Jericho was one of the most significant sites of the whole Levant (Mesolithic layers were also reached in small sounding); secondly, he investigated the Early Bronze Age layers covering a large area, offering a clear and coherent picture of the Early Bronze Age I village (Fig. 6.8), and of the Early Bronze Age II-III fortified town. Part of the earliest Middle Bronze Age I fortifications, together with a huge mudbrick tower (the so-called 'Eastern Tower') facing the spring of 'Ain es-Sultan, and the Middle and Late Bronze Age buildings on the eastern side of Spring Hill, were also brought to light by Garstang's expedition (Garstang 1932, 15-17; idem 1933, 41-42; idem 1934, 99-130). Finally, he discovered the large necropolis west and north of the site, excavating a series of family tombs from the Early, Middle and Late Bronze Ages, among which is the renowned EB I-III Tomb A (Fig. 6.9; Garstang 1932, 18-21, 41-54; idem 1933, 4-40).

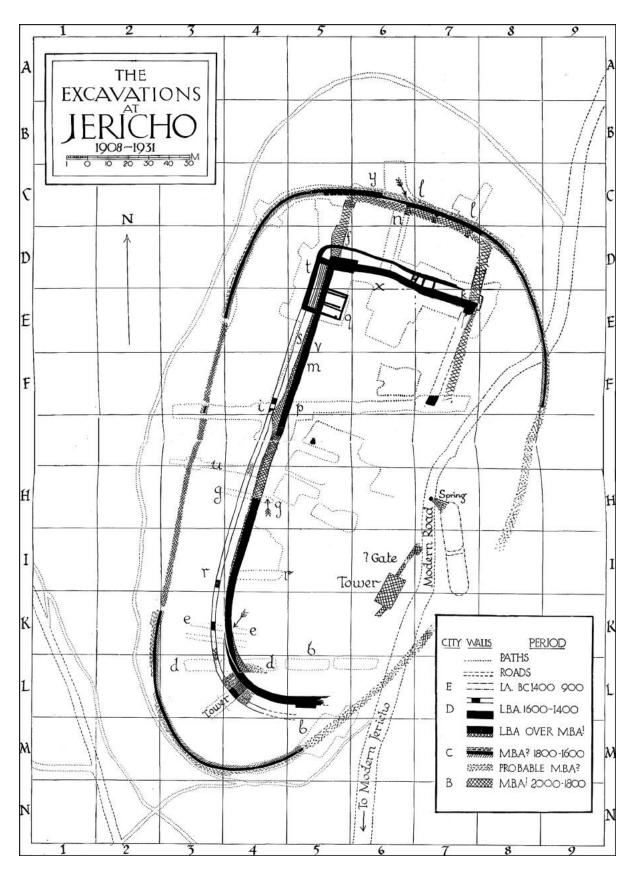


Figure 6.7: Plan of the excavations by J. Garstang (1930–1936) (after Garstang 1931, pl. I).



Figure 6.8: Tell es-Sultan: work at the EB I (3300–3000 BCE) village in Garstang's North-Eastern Trench at the time of Garstang's excavations in 1936 (Courtesy of the Palestine Exploration Fund, London).



Figure 6.9: General view from the west of Tell es-Sultan during Garstang's excavations in 1931; in the foreground, the necropolis with the cut of the Early Bronze Age Tomb A excavated by J. Garstang (Courtesy of the Palestine Exploration Fund, London).

Garstang's expedition thus revealed very important aspects of the multi-stratified history of the site. Nonetheless, in light of the biblical controversy, Garstang eventually attributed the double mudbrick city wall to the Late Bronze Age, thus relating this city wall to the one destroyed by Joshua according to the biblical narrative (Garstang 1935), and he never changed his mind on this subject. The results of Kenyon's excavations would later demonstrate that this interpretation was mistaken (see above).

## Archaeological activities during the Israeli administration (1967–1993)

After the Six Days War (1967), the West Bank fell under Israeli control and the administration of the archaeological activities was taken over by Israeli institutions (Greenberg and Keinan 2009, 3–10). During the 25 years of Israeli control (1967–1993), the Jericho Oasis was surveyed intensively. Tell es-Sultan became one of Israel's National Parks, and was opened to the public in 1984 and exploited as a tourist site (although this caused some severe damage to the monuments on the site itself): a fence was put around the site; a tourist path was laid down; a shade shelter for tourists was built at the highest spot of the site; and some facilities (such as toilets and a parking area) were also set up.

A sounding directed by S. Riklin was conducted at Tell es-Sultan in 1992, on behalf of the Staff Officer for Judea and Samaria, on the west side of the mound south of Kenyon's Trench I (Riklin 1996): it brought to light a stretch of the double mudbrick city wall, which had already been traced along the summit of the mound in 1907–1909 by Sellin and Watzinger.

# The Italian-Palestinian Expedition (1997–2012), and the archaeological park of the Jericho Oasis

After the Oslo (1993) and Madrid (1994) Peace Agreements, the district of Ariha was handed back to the Palestinian National Authority. Monuments, antiquities and other items of cultural heritage in the Jericho area thus fell under the administration of the Department of Antiquities and Cultural Heritage (MOTA-DACH) of the PNA.<sup>10</sup>

In 1997 this Department and 'La Sapienza' University in Rome started a new project of excavation, restoration and rehabilitation at the site of Tell esSultan (Fig. 6.10). A preliminary survey was carried out in the oasis in the area east of Tell es-Sultan by the joint Italian-Palestinian Expedition. Since then excavation and restoration works were carried out jointly at Tell es-Sultan during eight seasons (1997–2000, 2009–2012), with an interruption between 2000 and 2009, during which, however, research and work on the publication continued steadily. In 2005 and 2008 two international workshops on site management, conservation and sustainable development of Tell es-Sultan were organized in Ariha.

Excavations were resumed in fourteen areas of the site, mainly focusing on the Bronze Age city fortifications and residential quarters. The basic contribution of the Italian-Palestinian Expedition has been to present an overall periodisation of the site, re-examining and matching data produced by all the previous expeditions. In addition, some important monuments of the Early and Middle Bronze Age city were uncovered, both on the summit and along the southern and eastern edge of the tell (Marchetti and Nigro 1998; idem 2000; Nigro and Taha 2009; Nigro et al. 2011). The Italian-Palestinian Expedition continued the excavation of the Early Bronze Age quarter on the northern plateau, and the exploration of the Early Bronze Age III double fortification wall - the double mudbrick city wall - at the south-western corner of the site; it unearthed the Early Bronze Age III Royal Palace on the Spring Hill (Fig. 6.11), and excavated a Middle Bronze Age I built up tomb underneath it, which yielded a scarab inscribed with the ancient Canaanite name of the city (Ruha) in hieroglyphs characters (Nigro 2009). It also brought to light the Middle Bronze Age I-II defence tower A1 and a stretch of the Middle Bronze Age III Cyclopean Wall at the southern foot of the tell, as well as uncovered the imposing Middle Bronze Age II Curvilinear Stone Structure (Fig. 6.12). Finally, it identified the Bronze Age Lower City south and east of the mound (including the spring).

In the meantime, a new Pilot Project was announced by Rome 'La Sapienza' Expedition during the 2005 Workshop, called PADIS (The Palestine Archaeological Databank and Information System), which aims to create a reliable and accurate catalogue of archaeological sites in the West Bank. The project

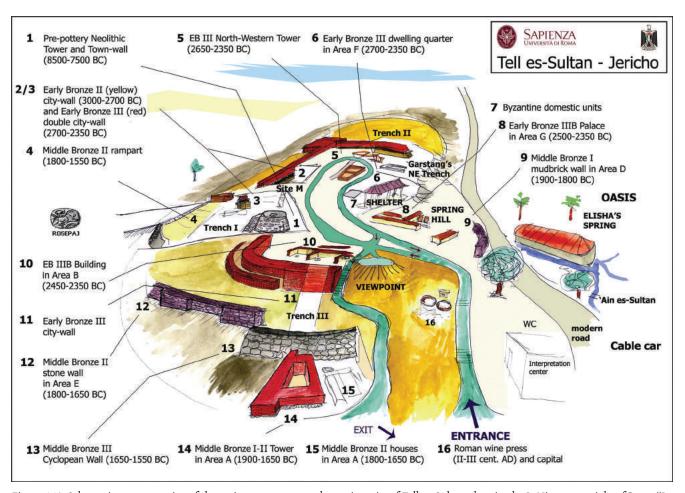


Figure 6.10: Schematic reconstruction of the main monuments at the ancient site of Tell es-Sultan; drawing by L. Nigro; copyright of Rome "La Sapienza" Expedition to Palestine and Jordan (www.lasapienzatojericho.it).

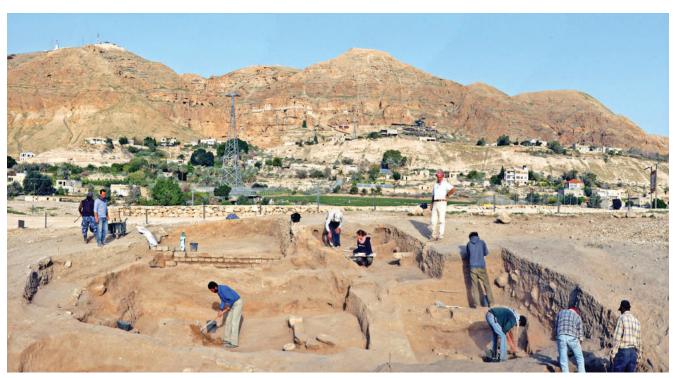


Figure 6.11: Tell es-Sultan: work in EB IIIB (2500-2350 BCE) Palace G, on the eastern flank of the Spring Hill, during the Italian-Palestinian excavations in 2010; in the background, the Mount of Temptation (Jebel Quruntul) (copyright of Rome "La Sapienza" Expedition to Palestine and Jordan).



Figure 6.12: General view of the site of Tell es-Sultan from south, with the Middle Bronze Age (1900–1550 BCE) fortifications excavated by the Italian-Palestinian Expedition at the southern side of the tell in years 2009–2011 (copyright of Rome "La Sapienza" Expedition to Palestine and Jordan).

is now in its first stage consisting of the publication of the volume Archaeological Heritage in the Jericho Oasis. A systematic catalogue of archaeological sites for the sake of their protection and cultural valorization (Nigro, Sala and Taha 2011), which is a comprehensive listing of the archaeological and historic-cultural sites in the Jericho Oasis from pre-historic to modern times, thus establishing their protection and conservation.

A constant endeavour is being carried out by the MOTA-DACH to protect all of the archaeological and historical monuments in the Jericho Oasis from any modern agricultural and building activities, while excavations are currently carried out by the Italian-Palestinian Expedition at Tell es-Sultan, which now forms the core of one of the two archaeological parks of the Jericho Oasis. Each year around 250,000 tourists continue to visit the ancient mound of Tell es-Sultan. Many more than in 1954, when Boer and his fellow students of the École Biblique visited Kenyon's excavations at the site.

#### Acknowledgements

I wish to address a special thanks to both Prof. Lorenzo Nigro and Dr. Hamdan Taha, directors of the Italian-Palestinian Expedition to Tell es-Sultan/ancient Jericho, and to all the staff of the Palestinian MOTA-DACH for their support and hospitality during the joint work carried out at Tell es-Sultan by the Italian-Palestinian Expedition, in which the present author has participated since 2005.

#### **Notes**

- 1 Wheeler's excavation method was based upon square probes of five by five metres with preserved baulks of one metre, which ensured safe, readable vertical sections. Sections were then carefully drawn in order to reconstruct the exact stratigraphic chronological sequence of each spot of the site.
- 2 During this campaign, Pre-Pottery Neolithic A layers were also reached (Kenyon 1954a, 47–53).

- 3 Here Garstang had extensively exposed the uppermost PPNB layers and also reached the underlying PPNA layers until the Mesolithic in a small sounding (Garstang, Droop and Crowfoot 1935, 166–67; Garstang, Ben-Dor and Fitzgerald 1936, 67–70).
- 4 Among the best-renowned contributions are the descriptions by Charles Wilson (1836–1905) and photographic collections by James Robertson (1813–1888) in the second half of the nineteenth century.
- 5 Among the major enterprises of the newly born PEF was *The Survey of Western Palestine*, set up under the direction of Marquess F. W. R. Stewart (1805–1872), followed by Lieutenant C. R. Conder (1848–1910) and Lieutenant H. H. Kitchener (1850–1916), lasting from 1871 to 1878 (King 1983, 7–8), and ending up in the publication of a map of the Southern Levant in 1880, and of the nine volumes of *Memoirs* edited in 1881–1886. During the survey about 9,000 Arab toponyms were registered, many of them for the first time, providing the basis for future work on topography and historical geography of ancient Palestine. Many sites in the Jericho Oasis were recorded in the *Survey*, including Tell es-Sultan itself, identified with biblical Jericho.
- 6 He carried out his probes with the same techniques used for digging tunnels employed in military operations, as he had done in Jerusalem during the previous year.

- 7 This massive wall was thought to be a freestanding structure by Sellin and Watzinger and its function as the inner retaining wall of the Middle Bronze Age III (1650–1550 BCE) rampart has subsequently been clarified by the Italian-Palestinian Expedition in the years 1997–2000 (Marchetti and Nigro 1998, 135–54; 2000, 217–18; Nigro and Taha 2009, 734).
- 8 For a general presentation of the excavation results see Garstang and Garstang 1948.
- 9 The British Mandatory Department of Antiquities was established in 1920, and the law of antiquities was sanctioned in 1929. Afterwards, the Palestine Archaeological Museum (nowadays called the Rockefeller Archaeological Museum) was built in East Jerusalem and opened in 1938, to house the collection of artefacts discovered in the excavations carried out in Palestine during the British Mandate (1920–1948).
- 10 A dramatic moment coincided with the political hiatus in 1993–1994, when Israeli authorities abandoned territorial control, and the absence of any law caused some tragic damages to the archaeological sites: for instance, a large part of the Middle Bronze II Lower Town of the ancient Canaanite city of Tell es-Sultan was cleared off south of the tell by bulldozing activities for the realization of a parking area. Especially the necropolis of Tell es-Sultan suffered severe looting.

#### Bibliography of Tell es-Sultan (Jericho)

- Bliss, F. J. 1894. "Notes on the Plain of Jericho." *Palestine Exploration Fund Quarterly. Quarterly Statements* 26:175–83.
- Bliss, F. J. 1906. *The Development of Palestine Exploration*. London: Hodder and Stoughton.
- Bocquentin, F. 2013. "Après la Mort, avant l'Oubli : le Statut des Crânes dans la Mémoire Collective au Néolithique Précéramique du Levant Sud." In *Une Archéologie des Temps Funéraires? Hommage à Jean Leclerc*, edited by G. Pereira. Special Issue of Les Nouvelles de l'Archéologie 132:54-59. Paris.
- Bonogofsky, M. 2006. "Complexity in Context: Plain, Painted and Modeled Skulls from the Neolithic Middle East." In Skull Collection, Modification, and Decoration, edited by M. Bonogofsky, 15–28. Oxford: Archeopress.
- Bouchain, J. 1999. Endangered Cultural Heritage in the West Bank Governorates. Ramallah: MOPIC.
- Boulestin, B. and Duday, H. 2006. "Ethnology and Archaeology of Death: from the Illusion of References to the Use of a Terminology." *Archaeologia Polona* 44:149–69.
- Brothwell, D. R. 1963. Digging up Bones: the Excavation, Treatment and Study of Human Skeletal Remains. London: British Museum.
- Castex, D., Courtaud, P., Sellier, P., Duday, H. and Bruzek, J. (eds). 1996. Les Ensembles Funéraires. Actes du Colloque "Méthodes d'Étude des Sépultures", Gujan-Mestras, Girond, 27-29 Septembre 1995. Société d'Anthropologie de Paris, Bulletins et Mémoires de la Société d'Anthropologie de Paris, nouvelle série, tome 8, n° 3-4. Paris: Masson.
- Conder, C. C. and Kitchener, H. H. 1881–1883. *The Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology. Volume I–III.* London: Committee of the Palestine Exploration Fund.
- Cornwall, I. W. 1956a. "The Pre-Pottery Neolithic Burials, Jericho." *Palestine Exploration Quarterly* 88:110–24.
- Cornwall, I. W. 1956b. Bones for the Archaeologist. London: Phoenix House Ltd.
- Cornwall, I. W. 1981. "The Pre-Pottery Neolithic Burials." In Excavations at Jericho, Vol. III: The Architecture and Stratigraphy of the Tell. Text, edited by K. M. Kenyon, 395–406. London: The British School of Archaeology in Jerusalem.
- Dorrell, P. G. 1983. "Stone Vessels, Tools, and Objects." In Excavations at Jericho, Vol. V: The Pottery Phases of the Tell and Others Finds, edited by K. M. Kenyon and T. H. Holland, 487–575. London: British School of Archaeology in Jerusalem.
- Dorrell, P. G. 1993. "The Spring of Jericho from early photographs." *Palestine Exploration Quarterly* 125:95–114.
- Drinkard, J. F., Mattingly, G. L. and Maxwell Miller, J. (eds). 1988. Benchmarks in Time and Culture. An Introduction to Palestinian Archaeology Dedicated to Joseph A. Callaway. Atlanta: American Schools of Oriental Research.
- Duday, H. 2009. *The Archaeology of the Dead*. Lectures in Archaeothanatology. Oxford: Oxbow Books.
- Duday H. and Masset, C. (eds). 1987. Anthropologie Physique et Archéologie. Méthodes d'Étude des Sépultures. Paris: Éditions du CNRS.

- Duday, H., Courtaud, P., Crubézy, E., Sellier, P. and Tillier, A-M. 1990. "L'Anthropologie de "Terrain": Reconnaissance et Interprétation des Gestes Funéraires." *Bulletins et Mémoires de la Société d'Anthropologie de Paris* 2:29–50.
- Garstang, J. 1927. "The Date of the Destruction of Jericho." Palestine Exploration Fund Quarterly Statement 59:96–100.
- Garstang, J. 1930. "Jericho, Sir. Charles Marston's Expedition of 1930." Palestine Exploration Fund Quarterly Statement 62:123-32.
- Garstang, J. 1931. "The Walls of Jericho: the Marston-Melchett Expedition of 1931." Palestine Exploration Fund Quarterly Statement 63:186–96.
- Garstang, J. 1932. "Jericho: City and Necropolis. 1. Late Stone Age. 2. Early Bronze Age. 3. Middle Bronze Age." *Liverpool Annals of Archaeology and Anthropology* 19:3–22, 35–54.
- Garstang, J. 1933. "Jericho: City and Necropolis. 4. Tombs of MBAii. 5. Tombs of MBAii and LBAi. 6. The Palace Area." *Liverpool Annals of Archaeology and Anthropology* 20:3-42.
- Garstang, J. 1934. "Jericho: City and Necropolis. 6. The Palace Area (cont.). Palace and Store Rooms, MBii Pottery and Houses LBi. Upper Stone Building, EBi." *Liverpool Annals of Archaeology and Anthropology* 21:99–136.
- Garstang, J. 1935. "The Fall of Bronze Age Jericho." Palestine Exploration Fund Quarterly Statement 67:61-68.
- Garstang, J. and Garstang, J. B. E. 1948. *The Story of Jericho*. London: Marshall, Morgan & Scott.
- Garstang, J., Droop, J. P. and Crowfoot, J. 1935. "Jericho: City and Necropolis (Fifth Report)." *Liverpool Annals of Archaeology and Anthropology* 22:143–84.
- Garstang, J., Ben-Dor, I. and Fitzgerald, G. M. 1936. "Jericho: City and Necropolis (Report for the Sixth and Concluding Season, 1936)." *Liverpool Annals of Archaeology and Anthropology* 23:67–100.
- Greenberg, R. and Keinan, A. 2009. Israeli Archaeological Activity in the West Bank 1967–2007. A Sourcebook. Jerusalem: Rahas Press.
- Harris, N. and Tayles, N. 2012. "Burial Containers A Hidden Aspect of Mortuary Practices: Archaeothanatology at Ban Non Wat, Thailand." *Journal of Anthropological Archaeology* 31.2:227–39.
- Hunt, E. D. (ed.). 1982. Holy Land Pilgrimage in the Later Roman Empire, AD 312-460. Oxford-New York: Oxford University Press.
- Kenyon, K. M. 1953. "Excavation at Jericho, 1953." Palestine Exploration Quarterly 85:81–95.
- Kenyon, K. M. 1954a. "Excavations at Jericho, 1954." *Palestine Exploration Quarterly* 86:45–63.
- Kenyon, K. M. 1954b. "Ancient Jericho." Scientific American 190:76–82.
- Kenyon, K. M. 1954c. "Excavations at Jericho." The Journal of the Royal Anthropological Institute of Great Britain and Ireland
- Kenyon, K. M. 1956a. "Excavation at Jericho, 1956." *Palestine Exploration Quarterly* 88:67–82.
- Kenyon, K. M. 1956b. "Review of *Photography for Archaeologists* by M. B. Cookson." *Antiquaries Journal* 36:135–36.

- Kenyon, K. M. 1956c. "Jericho and its Setting in Near Eastern History." *Antiquity. A Quarterly Review of Archaeology* 30:184–95.
- Kenyon, K. M. 1957. *Digging Up Jericho*. London: Ernest Benn Limited.
- Kenyon, K. M. 1960a. Excavations at Jericho, Vol. I: The Tombs Excavated in 1952-1954. London: The British School of Archaeology in Jerusalem.
- Kenyon, K. M. 1960b. "Excavations at Jericho, 1957–58." *Palestine Exploration Quarterly* 92:88–108.
- Kenyon, K. M. 1965. Excavations at Jericho, Vol. II: The Tombs Excavated in 1955–1958. London: The British School of Archaeology in Jerusalem.
- Kenyon, K. M. 1971. "Burial Customs at Jericho." *Annual of the Department of the Antiquities of Jordan* 16:5–30.
- Kenyon, K. M. 1981. Excavations at Jericho, Vol. III: The Architecture and Stratigraphy of the Tell. 1. Text, 2. Plates. London: The British School of Archaeology in Jerusalem.
- Kenyon, K. M. 1993. "Tell es-Sultan." In *The New Encyclopedia of Archaeological Excavations in the Holy Land*, edited by Ephraim Stern, Ayelet Lewinson-Gilboa and Joseph Aviram, Vol. 2, 674–81. Jerusalem: The Israel Exploration Society and Carta.
- Kenyon, K. M. and Holland, Th. A. 1982. *Excavations at Jericho, Vol. IV: The Pottery Type Series and Others Finds.* London: The British School of Archaeology in Jerusalem.
- Kenyon, K. M. and Holland, Th. A. 1983. Excavations at Jericho, Vol. V: The Pottery Phases of the Tell and Others Finds. London: The British School of Archaeology in Jerusalem.
- King, P. J. 1983. American Archaeology in the Middle East. A History of the American Schools of Oriental Research. Winona Lake, In.: Eisenbrauns.
- Kurth, G. and Röhrer-Ertl, O. 1981. "On the Anthropology of the Mesolithic to Chalcolithic Human Remains from the Tell es-Sultan in Jericho, Jordan." In Excavations at Jericho, Vol. III: The Architecture and Stratigraphy of the Tell, Text, edited by K. M. Kenyon, 407–99. London: British School of Archaeology in Jerusalem.
- Leroi-Gourhan, A., Bailloud, G. and Brézillon, M. 1962. "L'hypogée II des Mounouards (Mesnil-sur-Oger, Marne)." Gallia Préhistoire 5:23–133.
- Marchetti, N. and Nigro, L. 1998. Scavi a Gerico, 1997. Relazione preliminare sulla prima campagna di scavi e prospezioni archeologiche a Tell es-Sultan, Palestina (Quaderni di Gerico 1). Roma: Università degli Studi di Roma "La Sapienza".
- Marchetti, N. and Nigro, L. 2000. Excavations at Jericho, 1998. Preliminary Report on the Second Season of Excavations and Surveys at Tell es-Sultan, Palestine (Quaderni di Gerico 2). Rome: Università degli Studi di Roma "La Sapienza".
- Moorey, P. R. S. 1991. A Century of Biblical Archaeology. Cambridge: Lutterworth.
- Nigro, L. 2003. "Tell es-Sultan in the Early Bronze Age IV (2300–2000 BC). Settlement vs Necropolis – A Stratigraphic Periodization." *Contributi e Materiali di Archeologia Orientale* IX:121–58
- Nigro, L. 2004. "In the Shadow of the Bible. Archaeological Investigations by the Deutsches Palästina Vereins before

- the First World War: Taannek, Megiddo, Jericho, Shechem." In Archéologie dans l'Empire Ottoman Autour de 1900: Entre Politique, Économie et Science, edited by V. Krings and I. Tassignon, 215–29. Bruxelles-Rome: Institut Historique Belge de Rome.
- Nigro, L. 2009. "The Built Tombs on the Spring Hill and The Palace of the Lords of Jericho ('dmr Rha) in the Middle Bronze Age." In *Exploring the Longue Durée. Essays in Honor of Lawrence E. Stager*, edited by J. D. Schloen, 361–76. Winona Lake, In.: Eisenbrauns.
- Nigro, L. and Taha, H. 2009. "Renewed Excavations and Restorations at Tell es-Sultan/Ancient Jericho. Fifth Season – March-April 2009." Scienze dell'Antichità 15:731–44.
- Nigro, L., Sala, M., Taha, H. and Yassine, J. 2011. "The Early Bronze Age Palace and Fortifications at Tell es-Sultan/ Jericho. The 6th–7th seasons (2010–2011) by Rome "La Sapienza" University and the Palestinian MOTA-DACH." *Scienze dell'Antichità* 17:185–211.
- Nigro, L. and Taha, H. (eds). 2006. Tell es-Sultan/Jericho in the Context of the Jordan Valley: Site Management, Conservation and Sustainable Development. Proceedings of the International Workshop Held in Ariha 7th–11th February 2005 by the Palestinian Department of Antiquities and Cultural Heritage Ministry of Tourism and Antiquities, UNESCO Office Ramallah, Rome "La Sapienza" University. Rome "La Sapienza" Studies on the Archaeology of Palestine & Transjordan, 2. Rome: "La Sapienza" Expedition to Palestine and Jordan.
- Nigro, L., Sala, M. and Taha, H. (eds.). 2011. Archaeological Heritage in the Jericho Oasis. A systematic catalogue of archaeological sites for the sake of their protection and cultural valorization. Rome "La Sapienza" Studies on the Archaeology of Palestine & Transjordan, 7. Rome: "La Sapienza" Expedition to Palestine and Jordan.
- Pereira, G. (eds). 2013. Une Archéologie des Temps Funéraires? Hommage à Jean Leclerc. Special Issue of Les Nouvelles de l'Archéologie 132. Paris.
- Riklin, S. 1996. "Jericho 1992." Excavations and Surveys in Israel 5:68–70.
- Robinson, E. 1841. Biblical Researches in Palestine, Mount Sinai, and Arabia Petraea. London: John Murray.
- Robinson, E. and Smith, E. 1856. Biblical Researches in Palestine, Mount Sinai, and Arabia Petraea. London: John Murray.
- Roksandic, M. 2002. "Position of Skeletal Remains as a Key to Understanding Mortuary Behaviour." In Advances in Forensic Taphonomy: Method, Theory and Archaeological Perspectives, edited by W. D. Haglung and M. Sorg, 99–117. Boca Raton: CRC Press.
- Sellier, P. and Masset, C. 1990. "La Paléoanthropologie Funéraire." Les nouvelles de l'Archéologie 40:5-48.
- Sellin, E. and Watzinger, C. 1913. *Jericho. Die Ergebnisse der Ausgrabungen*. Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft 22. Leipzig: Hinrichs.
- Sellin, E., Watzinger, C. and Langenegger, F. 1908. "Vorläufiger Nachrichten über die Ausgrabung in Jericho im Frühjahr 1908." Mitteilungen des Deutschen Orient-Gesellschaft zu Berlin 39:1–41.

- Sellin, E., Watzinger, C. and Nöldecke, A. 1909. "Vorläufige Nachrichten über die Ausgrabung in Jericho im Frühjahr 1909." Mitteilungen des Deutschen Orient-Gesellschaft zu Berlin 41:1–36.
- Stordeur, D. and Khawam, R. 2007. "Les Crânes Surmodelés de Tell Aswad (PPNB, Syrie). Premier Regard Sur l'Ensemble, Premières Réflexions." *Syria* 84:5–32.
- Stutz, L. N. 2003. Embodied Rituals and Ritualized Bodies. Tracing Ritual Practices in Late Mesolithic Burials. Acta Archaeologica Lundensia Series altera: 46. Stockholm:Almqvist & Wiksell Intl.
- Taha, H. 1999. "Le Département des Antiquités de Palestine." Dossier d'Archéologie 240:14–17.
- Taha, H. 2010. "Tell es-Sultan (Jericho), the Oldest City in the World." *This Week in Palestine* 144:36–39.
- Taha, H. and Qleibo, A. 2010. *Jericho, A Living History, Ten Thousand Years of Civilization*. Ramallah: The Palestinian Ministry of Tourism and Antiquities.

- Testart, A. 2008. "Des Cranes et des Vautours ou la Guerre Oubliée." *Paléorient* 34.1:33–58.
- Warren, C. 1869a. "Notes on the mounds of Jericho." *Palestine Exploration Fund Quarterly Statement* 2:209–10.
- Warren, C. 1869b. Notes on the Valley of the Jordan and Excavations at 'Ain es-Sultan. London.
- Watzinger, C. 1926. "Zur Chronologie der Schichten von Jericho." Zeitschrift der Deutschen Morgenländischen Gesellschaft 80:131–36.
- Weippert, H. and Weippert, M. 1976. "Jericho in der Eisenzeit." Zeitschrift des Deutschen Palästina-Vereins 92:105–48.
- Willis, A. and Tayles, N. 2009. "Field Anthropology: Application to Burial Context in Prehistoric Southeast Asia." *Journal of Archaeological Science* 36:547–54.