## Digging up Jericho

Past, Present and Future

## Edited by

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## Contents

Preface: Digging Up Jerichoii Bill Finlayson
Part I - Past
The Jericho Excavations in Historical Context
Jericho in the Collections of the Palestine Exploration Fund Felicity Cobbing
Jericho in the Media2 Rachael Thyrza Sparks
The Photographic Methodology of Kenyon's Jericho
Jericho Syndromes: 'Digging Up Jericho' as Ritual Dramas of Possession4 Beverley Butler
Square Pegs in Round Holes
The Impact of Kenyon's Excavations at Tell es-Sultan on Dutch Archaeology in the Near East
Reconsidering Results from Past Excavations
Finding and Losing the Person Within: A Neolithic Plastered Skull from Jericho9  Alexandra Fletcher
Kenyon, Jericho and the Amorites
Metal Weapons and Social Differentiation at Bronze Age Tell es-Sultan11 Daria Montanari
Jericho Tomb P23 in the Dutch National Museum of Antiquities
A New Umayyad Mosque at Khirbet el-Mafjar, and Other Discoveries: A New Understanding through Architectural Stratigraphy and Landscape Archaeology
Part II – Present Current Fieldwork
The Italian-Palestinian Expedition to Tell es-Sultan, Ancient Jericho (1997–2015): Archaeology and Valorisation of Material and Immaterial Heritage
Mudbricks and Modular Architecture at Tell es-Sultan from the Neolithic to the Bronze Age21 Gaia Ripepi

Protecting the People: The Fortification Systems of Middle Bronze Age Jericho in Light of the Italian-Palestinian Excavations	231
The Jericho Mafjar Project: Palestine-University of Chicago Research at Khirbet el-Mafjar  Donald Whitcomb	247
Cities and Palaces: Khirbet el-Mafjar and the Evolution of Settlements on the Jericho Plain Michael Jennings	255
Two Decades of Archaeology in Jericho, 1994–2015  Hamdan Taha	269
Part III – Future Preserving the Archaeological Past for the Future	
Neolithic Heritage, Jericho and the West Bank Bill Finlayson and Paul Burtenshaw	289
The Hisham's Palace Site and Museum Project	
List of Contributors	311
Index	316

## Preface: Digging Up Jericho

#### Bill Finlayson

When Bart Wagemakers initially proposed a conference about the archaeology of Tell es-Sultan/Jericho and its landscape to Rachael Sparks and myself in 2014, it was immediately obvious that the suggestion was timely. There has been a resurgence of interest in Jericho and the surrounding area, with multiple new fieldwork projects, new research on old collections, and an increasing concern for the management of its archaeological heritage. In 2012 the fruits of this renewed interest, and the active engagement of the Department of Antiquities and Cultural Heritage, were made even more evident when Tell es-Sultan, the ancient city of Jericho, was placed on the UNESCO World Heritage Tentative List by the Permanent Delegation of Palestine to UNESCO. The conference that came out of our discussions was held at the Institute of Archaeology in UCL on the 29th and 30th of June 2015 as a collaboration between the Non-Professional Archaeological Photographs project (NPAPH), the Council for British Research in the Levant (CBRL), and the hosts in UCL, with additional sponsorship from the British Association for Near Eastern Archaeology (BANEA), London Centre for the Ancient Near East (LCANE) and the University of Applied Sciences Utrecht (HU). The smooth running of the conference was kindly assisted by Josef Briffa of UCL, and Japp Patist and students Emma Boogaard, Sjoukje Voeten, Tom Assenberg, Raymond Hoogeveen and Peeter Haaksman from HU. Each day was opened with a keynote lecture, the first by Lorenzo Nigro representing the work of the Italian-Palestinian Project. This was followed by papers on historical perspectives on Jericho, a session when attendees had the opportunity to see the Jericho material held in the Institute of Archaeology or the Near Eastern galleries at the British Museum, then further papers on tightly focused research themes. The second day was opened by a keynote lecture by Hamdan Taha, the former Director-General of the Palestinian Department of Antiquities and Cultural Heritage, reporting on archaeological work undertaken in and around Jericho since 1994. His keynote was followed by papers on cultural heritage, and then sessions on current work at Tell es-Sultan and Khirbet el-Mafjar.

The multiple individual, but complementary and cumulative, strands that comprise this new interest are reflected in the papers derived from the conference that are presented here. The papers not only focus

on the past, present and future of the Jericho area, but cover a wide range of themes, including past and present fieldwork, excavation and survey, and studies on material culture, as well as on cultural heritage and public archaeology. While Tell es-Sultan provides one major focus, the papers also report more widely on the archaeology of the Jericho plain, with an additional area of focus around Khirbet el-Mafjar. The conference was in part a celebration of the history of archaeology, and benefitted from the participation of both speakers and attendees who had been present at Kenyon's excavations. The conference also provided a point of reference for current and future 'state-of-the-art' archaeology and cultural resource management.

Jericho is an especially complex site where, in addition to the usual archaeological technical and taphonomic complications of any large tell site, there are additional dimensions beyond the archaeological narrative. Currently located within the Occupied Palestinian Territories and representing the ancient location for the biblical account of the Israelites invasion of the promised land, Jericho combines a challenging contemporary political landscape with an ancient mythological presence. Felicity Cobbing's paper reminds us that the history of archaeological exploration at Jericho has taken place under different political regimes, and, as Hamdan Taha goes on to explain, the Palestinian Department of Antiquities and Cultural Heritage has only been the body responsible for the archaeological heritage of Jericho since 1994. In parallel to the political, the mythological role of Jericho is complex, not just as the site of an important biblical narrative but, in Beverly Butler's analysis, in continuing to play an important role in modern mythologies. Since the 1950s, the mythological has been presented as separate from the scientific, perhaps not always entirely successfully.

The story of fieldwork at Jericho represents an archetypal account of the wider history of Near Eastern archaeology. The papers here reflect that history — from the initial identification of Tell es-Sultan as Jericho, and the obvious biblical archaeological interests — to the introduction of stratigraphic archaeological excavation methods to a tell site — and even the foundation of Pre-Pottery Neolithic archaeology. The history of research at Jericho is part of the history of modern archaeology,

all the way to the present. At Jericho excavation is combined with public archaeology, Jericho projects are always being embedded in evolving forms of landscape archaeology, and there is a constant application of new technologies, right up to the MRI scanning of one of the plastered skulls reported by Sally Fletcher.

Long-term projects have become more and more unusual in modern archaeology, the result of changing funding sources, changes in career models, and the uncertainties of politics and security throughout the region. The recent and unusually long-standing work of the Italian-Palestinian Expedition reported by Lorenzo Nigro is an exception to this trend. What is more, the papers in this volume reveal that although work at Jericho and its landscape has been composed of many different projects, the long history of archaeological projects at Jericho can be taken as a whole to provide a long perspective on fieldwork. New work, such as that conducted by Ignacio Arce sometimes dramatically challenges and changes past interpretations, but in general the process has been incremental, with the addition of new fieldwork and analyses of material and archives. Jericho has been particularly lucky with the latest wave of projects, especially here the work of Jennings and Hawari, which have worked to place the tell within a rich landscape context.

In the volume, the papers are divided into three themes: the past, the present and the future of Jericho. However, one of the characteristics of Jericho is that the archaeology of the area has always been bound up not only with the past, but with the present, and inevitably, with the future. Public archaeology is a thread that runs throughout this volume and, as can be seen, research at Jericho has always been of public interest. Cobbing observes in her paper that Jericho was perceived as a priority for the early Palestine Exploration Fund (PEF). The fund was established in 1865 to apply scientific research to the region, and Cobbing provides a history of 19th century research at Jericho conducted by the PEF, largely based on the material held in the PEF archive in London. The earliest major archive collection held by the PEF, relating to Charles Warren's fieldwork, dates from the late 1860s, and the second major archive, Conder and Kitchener's Survey of Western Palestine, dates from the 1870s. Both projects include work in Jericho. Cobbing compares these early records, when the archaeological research was undertaken under Ottoman rule, with Garstang's research, conducted during the 1930s under the British Mandate. Warren was an archaeological pioneer, and his work helped establish the narrative of Jericho as a location of innovation in Near Eastern archaeology. He was one of the first to appreciate that tells were not natural landscape features, but artificial, and his work at Jericho contributed to the development of this understanding. The subsequent Survey of Western

Palestine contributed to the identification of Tell es-Sultan as biblical Jericho. The work at Jericho was a small part of a larger scale survey that led the way in establishing important new standards in survey. The project produced the most detailed and accurate mapping of Palestine in the 19th century, and had a long term impact in establishing the Palestine grid. Garstang, another well-known pioneer of scientific methods in archaeology, unfortunately never fully published the results of his substantial work at Jericho, but his records have been available for use by more recent excavations thanks to their donation to the PEF archive. Cobbing's paper reminds us that an archive is not a passive record, but an excellent source of material for research and new perspectives. The pioneering archaeological work that characterised research at Jericho continues to have an input on present-day research, in great part thanks to its curation in the PEF archive.

Rachael Sparks goes on to provide an account of Jericho in the media and presentation of the popular vision of Jericho. She uses this to great effect to discuss the contrast between archaeology as a discipline, and archaeology as public entertainment. Jericho clearly had an important place in public imagination from its biblical role, and the widely held popular expectation was that archaeology provided a means to demonstrate biblical significance. Sparks refers to the need that both archaeologists and the journalists covering Jericho stories felt in connecting Jericho to its biblical narrative. Archaeological research conducted at Jericho has generally played upon this both to provide context for the work and to provide an immediate route to public outreach. In a major publicity coup, Garstang went so far as to claim to have identified the historical destruction of Joshua's walls. Kenyon, moving forward her own agenda, was later to deny that anyone had ever identified the walls destroyed by Joshua, but had her own public relations programme. Kenyon shifted archaeological interpretation further away from the biblical narrative, a process that gave the conversation about Jericho a new dimension as the manifestation of the argument between biblical and more sceptical archaeologists — a point taken up in Bart Wagemakers' paper. As the importance of the literal biblical tale declined, a new theme emerged, with Jericho described as the oldest city in the world, developing a new status that appeared to be more scientifically demonstrable to changing academic and public audiences. Both Garstang and Kenyon helped to create a new audience through their development of public archaeology, interested in the narrative of the archaeologist at work, a theme that supported the emergence of the archaeologist as celebrity. The filming of Kenyon's work for television helped popularise both her story of Jericho, and supported the media star quality of the archaeologist that was developing on UK television with the Animal,

Vegetable, Mineral show made famous by her mentor, Mortimer Wheeler, a regular contributor to the show. While Kenyon kept the archaeology focussed on the academic and scientific, Margaret Wheeler provided a much more popular account, discussed in detail in Butler's paper. The professional archaeologist may easily see a gulf between educational TV and media blockbusters, such as the Indiana Jones films, but it is easy to see that in popular imagination there was a continuum to the adventurer searching for the buried treasures of the orient.

Film technology of course has a mundane and practical application. Archaeological photography has gone through more changes than we usually remember now. In an era where digital cameras have made site photography not only relatively cheap and easy, but an instant field tool, we tend to forget that the 35 mm SLR cameras that preceded digital photography only became acceptable for serious recording in the latter part of the 20th century, and the large number of built-in features of modern SLR cameras that help the photographer appear expert became standard features relatively slowly. When Kenyon was at Jericho, professional photographers using large format cameras were routinely employed on large projects. Peter Dorrell was the third professional photographer Kenyon employed at Jericho, and his role as lecturer in photography at the Institute of Archaeology confirms the importance and status of professional archaeological photography at the time. Stuart Laidlaw, who first joined the Institute as Dorrell's assistant, was in a unique position to discuss the work of these professional photographers and their forensic approach at a time when photography required far greater knowledge and skill, an expert approach. The skill, and the techniques available to these professional photographers not only in photography but also in developing, typically has been replaced by the technical capacity of modern digital cameras and the use of software such as Photoshop. Unfortunately, what is often forgotten today is that while the tools of the trade may have changed enormously over time, their use continues to be limited by the skills of the photographer.

John Carswell's presentation provides another example of how the skill set on an archaeological site has developed. It was no surprise in Kenyon's day for a big project to have a professional technical draughtsman present, something now seen as a luxury. Carswell's paper is a departure from the other papers in this volume in that it contains a more personal story of his experiences, but, although from a different perspective it is a fascinating account of the history of the development of Near Eastern archaeology. From his introduction to archaeology — "Good', she said 'be at the Grand Hotel in Marseilles at nine o'clock in the morning on December 19th and you will meet

the rest of the team'," to the day he left "When I was finally on my way, she invited me to a bibulous lunch in High Wycombe. The climax was dressing me up in a guardsman's uniform, replete with scarlet jacket and polished brass helmet" — his story reminds us what a different world archaeology occupied in the mid-20th century.

Bart Wagemakers' paper discusses the archaeological lineage from Kenyon to Franken, the methodological advances both made, and their impact on Near Eastern archaeology. What was revolutionary then (sections, stratigraphy, a focus on the archaeological evidence, rather than simply seeking support for biblical narratives) may seem outdated now — for example the use of 'Wheeler boxes' as a means to control and record excavation, replaced now by single context recording and the use of total stations. However, much of the discussion of Kenyon's practical experience remains very familiar to field archaeology today. Franken made no secret of his adoption of Kenyon's Jericho methodology, and the importance of the Jericho excavations in both providing his personal training and in establishing a new, more rigorous approach to Near Eastern archaeology is made clear by Wagemakers. The regional impact of Kenyon's work is emphasised by the fact that Awni Dajani, later Director General of the Jordanian Department of Antiquities, also learned his field archaeology working with Kenyon at Jericho. Others who worked with Kenyon went on to develop their individual careers and develop aspects of Near Eastern archaeology. Kirkbride, for example, continued to excavate in the Neolithic, but in her case the experience of excavating deep sections to establish stratigraphy and chronology at Jericho had led to the frustrations of interpreting limited horizontal exposures, leading her to develop an open area excavation approach at Neolithic Beidha, an approach now widely followed in prehistoric archaeology.

Research and fieldwork at Jericho, especially Kenyon's excavations, continues to cast a long shadow on modern Near Eastern archaeology beyond the introduction of new methods and approaches and its engagement with the public. One area of huge impact was on the Neolithic, where Jericho remains the most extraordinary site in the southern Levant, and where the concept of a Pre-Pottery Neolithic was established, moving definitions of Neolithic further away from a traditional material culture to the subsistence and social approaches that still characterise Neolithic archaeology today. Alexandra Fletcher's contribution illustrates this well, where the analysis of a plastered skull, using techniques not available to Kenyon, is combined with being able to place her results in a wider context, a context that was missing when Kenyon excavated at Jericho. As a symbol of social complexity, Kenyon's discovery of the plastered skulls was a key part of what changed

our understanding of early prehistoric archaeology in the Near East and to confirm the symbolic and social importance of the Neolithic. As iconic symbols of the Pre-Pottery Neolithic, the plastered skulls have attracted, and continue to attract considerable debate and discussion (Goring-Morris 2000; Kuiit 2001; 2008). However, amongst the anthropological perspectives and analogies, detailed scientific analysis of plastered skulls remains relatively rare (the study of the skull from Kfar HaHoresh being another good example (Hershkovitz et al. 1996), as of course is the work of Bonogofsky, 2001). Although Neolithic plastered skulls are now known from a number of sites, they remain rare and a finite resource. Fletcher's research is a testimony to the long-standing argument that we need to be careful to preserve what we find for study by future techniques, and not allow the archaeological process to be completely destructive. Fletcher's research is also evidence of the importance of good curation of archaeological finds and Erkelens and Petit present a paper that touches on some of the same issues. Again, their body of evidence is extremely small, a single tomb in their case. They discuss how the material was acquired, displayed, stored and displayed again — and yet was still able in recent years to reveal new information as it was finally studied in detail.

Arce brings the old research work at Khirbet el-Mafjar up to date with a highly detailed and technically rich architectural history with complex phasing, identifying a congregational mosque at the site. Although this paper has moved away from the focus on Tell es-Sultan, the themes it addresses are common to the volume — the return to previous work, re-assessment of the excavation with new data and approaches, and significant developments in the wider research context. In common with the other chapters, the pattern of architectural analysis (and some additional geophysical work) indicates a much more complicated history to the architecture, in particular a more dynamic development of the site within the Ummayad period.

Prag's paper develops the discussion of the development of archaeological knowledge since Kenyon's excavations at Jericho. As discussed by Wagemakers, in the 1950s there was still a close association between biblical interpretation and archaeology, and as Prag notes this link is made highly visible by Kenyon's use of a biblical quotation to open her 1966 report. Since Kenyon's expedition to Jericho there has been a process of turning away from biblical interpretations of the Levantine Early and Middle Bronze Ages — but no consensus on what replaces this. Prag reviews and updates the debate over the question of the Amorites, and in so doing discusses a more intricate and nuanced vision of population, with nomadic, mercenary, refugee, and economic migrants all playing a role in a more complex world than previously envisaged.

Reporting on current work was an important part of the conference and the Italian-Palestinian Expedition is the most recent project to work on Tell es-Sultan itself. Lorenzo Nigro's summary is therefore an important update in terms of the recent work undertaken. Within the framework of this volume his paper is also an account of the historical development of archaeological knowledge and interpretation of Jericho. The project was specifically established as a post-colonial project, an important aspect of their work as, whilst many international projects may believe they operate in a similar manner, in reality few treat their local partners as fully equal. Such attitudes have perhaps even been reinforced in recent years amongst British projects with new access to Official Development Assistance funds for their research and cultural heritage protection efforts. Such funding, because of the development agenda contained within them, reinforce an imbalance in any partnership from the outset. While the Italian-Palestinian Expedition comprises both research and conservation elements, the majority of the report here refers to research results. Nigro draws on the PEF archives of past projects and bases many of his interpretations within the framework of mid -20th century models with his results presented very much as building upon the previous work endeavours. This impacts most obviously on his discussion of the Neolithic, his views on Bronze Age chronology reliant on the most recent calibration curves, and his approach to the subject of urbanism in the southern Levant. Nigro argues that the latest calibration curves are problematic, as they stretch the Early Bronze beyond what he believes can be supported by historical reconstruction (Nigro et al. 2019).

Much of Nigro's interpretation of the Neolithic calls on the work of Kenyon, for example in arguing that the primary role of the wall and tower were for defence, an area of current debate as to whether there was violent interaction between people or communities in the Near Eastern Neolithic. He brings new evidence to this debate, arguing that the Italian-Palestinian Expedition located a wall segment on the south-east side of the tell, making it appear more likely the wall was a complete defensive circuit, and less likely to have been designed for flood protection. He allows for a symbolic role for the wall and tower, expressing the power of the settlement over the surrounding landscape, but does not entertain the more elaborate symbolic roles of magical boundaries, or astronomical relations, that have been published over the years (Barkai and Liran 2008; Bar-Yosef 1986; Ronen and Adler 2001). Nigro suggests that the PPN town extended to cover an area of six hectares, but it remains to be established whether this relates to the PPNA or PPNB settlement. Nigro discusses the Neolithic burials, especially the famous skull removal and plastering practices, in terms of ancestor cults, in a manner following how Kenyon first

introduced them. He associates this with arguments that the PPNA saw the rise of the family as the important social and economic unit, with significant individuals given special burial treatment. The role of mortuary practices in Neolithic society and the development and role of individuals, families, households, lineages and communities through the early Neolithic PPNA remain areas of persistent debate (Byrd 2000; 2005; Kuijt 1996; 2000; Makarewicz and Finlayson 2018).

Nigro's list of ten criteria that, when combined, indicate urbanism and a 3rd millennium BC city is again a traditional approach to urbanism. Chesson (2015) critiques the use of traditional models of urbanism, but also uses the absence of some similar criteria to evaluate Early Bronze Age urbanism in the southern Levant — although reaching very different conclusions. Chesson takes as her start point Cowgill's (2004) focus on the importance of the opposition between urban and rural, arguing that the development of an urban mentality and worldview is what creates a distinctly urban lifeway. Arguably, this is where the development from Neolithic centres of agricultural populations to true urban communities lies. While Nigro accepts that Jericho may have contained an opposition between agricultural and pastoral populations, he does not observe a distinction between urban and rural.

Three papers describing the results of very specific focussed work, provide accounts of the nature of the material they study. Gaia Ripepi, discussing mudbrick technology, unsurprisingly echoes some of Nigro's views. However, the problem of what is urban and what is not is enhanced. Ripepi argues that the development of the first town walls is seen in the Early Bronze Age, although walls were clearly present in the PPNA. In the same manner, the PPNB 'modular' mudbricks post-date the building of the PPNA walls. Monumental architecture didn't wait for the mudbrick — the tower at Jericho is a classic example of monumental stone architecture — and in Anatolia PPNA Gobekli Tepe is also of stone. The use of stretchers and headers is not exclusively a building style of modular mudbrick, dry stone walling has always depended on it. Chiara Fiaccavento and Elisabetta Gallo provide another very detailed study, this time on fortification — effectively an account of the 'arms race' in the Middle Bronze southern Levant. Daria Montanari discusses Bronze Age weapons, their symbolic and social roles, as well as their function as weapons, within both settlement and burial contexts.

Beyond the work of the Italian-Palestnian project and its focus on Tell es-Sultan, is new work at Tell el-Mafjar and the surrounding countryside. Jennings is mainly concerned with the Islamic settlement of the Jericho plain, but his chapter has wider significance as it represents an innovative approach to the archaeological record through an analysis of the landscape, rather than the monumental remains or the archaeology of the elite. While innovative, it also is a reminder of the earliest work, conducted by Warren as part of his landscape survey, and also of Nigro's oppositions between urban, agricultural and pastoral in the landscape. Jenning's innovation in the Jericho plain is to move his focus from the monumental elite sites of Tulul Abu el-'Alayiq and Khirbet el-Mafjar to the satellite sites and the infrastructure that supported the elite. In the absence of a historical record, Jennings provides a historical perspective on the evolution of settlement as his landscape analysis produces a historical narrative that explains the development of settlement across the plain.

Beverly Butler brings together the themes that emerged from this conference: the professionalism of archaeology, the science of archaeology, the relationship between archaeology and bible, and public archaeology and archaeology in the media. Butler introduces the idea of Jericho 'syndromes', a concept derived from the well-known Jerusalem syndrome. Much of Butler's paper draws on the writing of Margaret Wheeler and her popular and highly personal account of the excavation, and there is an irony here in the contrast to the references to scientific archaeology and the methods of her husband, Mortimer Wheeler, who played such a profound role in Kenyon's archaeological development. Margaret Wheeler, with her discussions of the ritual acts of archaeology, even if overtly written as part of an amusing anecdotal account, in many ways presages more recent archaeological interests in self-reflexivity, and Butler draws out these themes in discussion of archaeological prophets, ancestors and foundations. The gulf between the scientific and the post-modern is perhaps not so great; both Kenyon and Mortimer Wheeler were not only known for their scientific rigour, but also for their success in publicising their work and engaging with a public audience, skills that demanded considerable self-awareness.

Whitcomb's presentation of new work at Khirbet el-Mafjar is a reminder that the unifying factor in all recent work at Jericho has been Hamdan Taha. Whitcomb also moves us forward into the future, as in addition to his research on Islamic Jericho, the Chicago project provided training, a long-term process that Whitcomb sees as important in that it will outlive his project (notably also an outcome of Kenyon's excavations). Whitcomb refers to the study of the 'psychological antecedents' of modern research — Whitcomb's work explicitly looks at the total history of the site, not just its Umayyad phase. Jack Green goes on to introduce the palace museum project and how it developed with an account of the process and plans, bringing forward again the Jericho theme of public archaeology, a theme further developed by myself and Paul Burtenshaw. We

discuss ambitions for what might be achieved at Jericho, building on our experience in the public archaeology of the Neolithic of southern Jordan. This goes beyond the simple presentation of archaeological information to tourist and community audiences, but seeks how to turn an archaeological site into a community asset—both cultural and economic.

Hamdan Taha, in addition to providing the context of modern archaeological work in and around Jericho since the Department of Antiquities and Cultural Heritage of the Palestinian Authority, re-established in 1994, took over responsibility for the area in 1995, provides an account of recent work conducted by the Department. Giving continuity to past work at Jericho, the Department is considered as a revival of the Department of Antiquities that had been in abeyance since 1948, when Israel took over most of Palestine, while Iordan took control of the West Bank until 1967. Unfortunately, the Palestinian Department does not yet have control over the entire area, despite agreements made by the Israelis to hand over control. This continues to make it difficult to manage the extensive resource as a whole. Importantly, the theme of public outreach identified from the earliest days of archaeological research on Jericho continues, now recast as the significance of tourism, the main potential economic resource for the area. Since 1995 the number of archaeological, restoration and rehabilitation projects conducted in the Jericho area has been substantial, with the Department working with Palestinian universities, and with Palestinian teams working with international teams. This dynamic archaeological environment has been underpinned by the establishment of an inventory of sites, a regional development plan, discussion by the World Heritage Committee, and an international conference on cultural heritage management.

The conference, and this volume, have provided an unusual opportunity to bring together a huge and diverse body of work on the past, present and future of Jericho and the Jericho plain. There is clearly much new information that is still coming out of ongoing research and which is adding to a remarkable archive of work and achievement. The Department of Antiquities and Cultural Heritage (DACH) have done much, often working with international partners, to research and manage this cultural heritage. Much needs to be done here, both to protect this heritage from developing threats from modern development, and also to protect the remains that have been exposed to the elements by past archaeological research. While the large trenches of former projects have become features within the heritage landscape and important monuments to the development of Near Eastern archaeology, solutions have to be found regarding how to protect them and the archaeological remains they have left exposed. The ongoing process of submitting Tell es-Sultan as a prospective World Heritage Site by DACH provides great opportunities to protect and present this site, and the archaeological landscape around it.

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## Part I - Past

# The Jericho Excavations in Historical Context



Dorothy Marshall (right) and Maggie Tushingham processing archaeological finds in the Jericho dighouse during the 1952 field season. Copyright UCL Institute of Archaeology (Kenyon Archive: Jericho 1952.J17).

## Jericho in the Collections of the Palestine Exploration Fund

### Felicity Cobbing

Palestine Exploration Fund

**Abstract:** This paper assesses the contribution the Palestine Exploration Fund (PEF) has made to the study of the Jericho Oasis since it foundation in 1865, and the archaeological objects, maps, reports, drawings, and photographs housed in its collections as a result.

Numerous PEF scholars have been interested in ancient Jericho, both at Tell es-Sultan itself, and in the wider landscape as described by Josephus. This paper will look at how studies by Canon Henry Tristram, Charles Warren, Charles Clermont-Ganneau, the Survey of Western Palestine teams, and Frederick Jones Bliss have all contributed to the body of knowledge we possess about the Jericho region. These researchers found the documentation of ancient road and aqueduct networks of particular interest, along with the identification of other important sites in the region, notably the monastic establishments, the Hasmonean and Herodian palaces in the Wadi Qelt, and the ruins at Khirbet el-Mafjar. This paper will conclude by comparing this material to that from John Garstang's 1930s excavations at Tell es-Sultan, and show how together, these archives provide a research resource of real significance to the study of the Jericho region, particularly given the rapid urban expansion the area is seeing today.

**Keywords**: Jericho, Khirbet el-Mafjar, Tell es-Sultan, Wadi Qelt, Frederick Bliss, Charles Clermont-Ganneau, John Garstang, Palestine Exploration Fund, Survey of Western Palestine, Henry Tristram, Charles Warren, archives, aqueducts, road networks.

#### Introduction

The collections of the Palestine Exploration Fund (hereafter PEF) represent a considerable resource for scholars and researchers covering numerous subjects relating to the physical characteristics and material culture of the Levant. The site of Tell es-Sultan and the wider Jericho region around it are represented in three main collections. The first of these contains the archives and finds connected to Charles Warren's field work in the late 1860s (Warren 1865-1869, 1876; archival reference PEF-DA-JER-WAR for written records, plans, maps, and drawings). The second relates to the research conducted by the Survey of Western Palestine team in the 1870s (Conder and Kitchener 1883; archival records PEF-M-WS for manuscript maps, PEF-DA-WS and WS-CON/KIT/DRA for written records, and plans and drawings of specific remains, and PEF-PI for Claude Conder's watercolours). The final collection comprises the records, photographs, plans and drawings connected to the excavations conducted by Professor John Garstang in the 1930s (Garstang 1932a; 1932b; 1933; 1934; 1935; 1936; archival reference PEF-P-JER-GAR for photographs and PEF-DA-JER-GAR for documentary material). Both Warren's work and the Survey of Western Palestine were conducted directly on behalf of the PEF. However John Garstang, the former Director of the Department of Antiquities of Palestine, excavated independently and was funded by several individuals and organisations, including the prominent industrialist and evangelical Christian, Sir Charles Marston. The PEF acquired John Garstang's

Palestine archives, including his Jericho excavation records, when he donated them in full in 1947.

Collectively these archives and collections are a valuable source of information about not only the site and region of Jericho itself, but also of the skills, assumptions and observations of those who conducted research there. This article will give a survey of the material in the PEF's collections, putting the work of those involved into a context through which the material and its contribution to our current understanding of the area can be understood.

After Jerusalem, the Jericho region was one of the most enticing subjects for the early members and explorers of the PEF. The site's appearance in the Hebrew Bible, especially in those passages relating to Joshua's conquest of Canaan (Joshua 2:1–6:26), was enough to mark out the region as a priority to explore. The region's famed fecundity and economic importance in antiquity, frequently referenced in the Bible (Deuteronomy 34:3, Judges 1:16; 3:12, 2 Chronicles 28:15) and in other ancient texts (Josephus 1927, 4.369, 4.455, 468; Strabo 1854, XVI) was well known to the founders of the PEF. It is therefore no surprise that the PEF invested substantial resources from its meagre pot of funds towards its exploration.

#### The PEF Expeditions

The two main PEF expeditions to visit the area were those of Charles Warren in 1867 and 1868, and the

Survey of Western Palestine, which made several visits in the winter of 1873–1874 and during the autumn and the winter of 1874–1875.

Their results were comprehensively published. Charles Warren published a series of letters covering his entire expedition to Jerusalem and beyond in the Proceedings and Notes of the PEF (Warren 1865-1869), and in the subsequent Quarterly Statement. Some of his material was also integrated in the later Survey of Western Palestine Memoirs (Conder and Kitchener 1883, Sheet 18, 166-229). He also published a more entertaining account in his bestseller Underground Jerusalem (Warren 1876). The results of the work of the Survey of Western Palestine team were also published in regular reports in the Quarterly Statement from 1871 to 1878, and then in full in the Survey Memoirs (Conder and Kitchener 1883). However, the significance of some of the observations made by Warren and the survey team have often been overlooked, perhaps because of the early date of this work, back at the beginnings of serious scientific study in the region. This article aims to illuminate this research in the context of the knowledge base of the time.

The archives and collections of the PEF contain the material connected with these projects. These include Warren's original maps, drawings and excavated artefacts from the tells around Jericho, and surface finds collected by the Survey of Western Palestine team. The material specifically relevant to Jericho forms a small portion of their overall archives.

All the descriptive and written material in the archives from the Warren and Survey of Western Palestine expeditions was compiled by the leaders of the field work, such as Charles Warren, Claude Conder, Charles F. Tyrwhitt-Drake and Horatio Kitchener. We know about the others involved in this work primarily from references in expedition letters and reports. These include people such as Henry Phillips, Sergeant Black and Corporal Armstrong, whose names appear regularly on the photographs, field tracings and other drawings in the archives. These documents provide valuable insights into the opinion of the writers, their working conditions and practical matters which all the expedition members faced, including illness, relations with local populations, and problems with equipment, food and other provisions. For example, in a letter written from 'Ain es-Sultan to Walter Besant, the PEF's Secretary in London, on 5 December 1873, Conder described the very trying circumstances under which he and the rest of the team were working:

Drake is very ill with fever, Corporal A [Armstrong] has a touch and 5 servants are ill. I hope we shall escape — God only knows. Don't write 'officials' if you can help I am miserable enough as it is. In Haste,

Very Sincerely yours, Claude R Conder. (Conder 1873).

This is the first mention of the illness which would eventually kill Tyrwhitt-Drake the following June.

#### **Charles Warren**

The Warren material consists of one letter, two sheets of section drawings from his excavations of the Jericho tells, two sheets of pottery drawings, and a very small quantity of ceramic material from his excavations. The written information gathered by Warren is all published in *Underground Jerusalem* (1876) and in the later Survey of Western Palestine *Memoirs* (Conder and Kitchener 1883), as well as in his report in the *Proceedings and Notes* of the PEF (Warren 1865–1869). There are also several photographs of the region taken by Henry Phillips R. E.

The Warren Expedition visited the Jericho region for a few days in April 1867, and more extensively the following spring. The expedition was intended to continue the reconnaissance survey which Charles Wilson had begun in 1865 and 1866 in the Galilee. As well as visiting Jericho and the Jordan Valley, Warren and his team surveyed the Mount Hermon region, Samaria, Philistia and Transjordan. Warren's work outside of Jerusalem was never intended to be a definitive study, but rather the first stage in a planned comprehensive survey of the whole country, which was conducted just a few years later as the Survey of Western Palestine. It is important to appreciate this, as it had an effect on the amount of time and money available to Warren and his men. They travelled extensively, making notes of the environment, recording details of standing remains and the topography. There were two main branches of their work: firstly, a survey of the whole region of Jericho, and secondly, the first excavation of some of the numerous 'tells' which peppered the Jordan Valley, with a view to determining their nature.

Looking first at their survey work, the Warren team covered the area around Tell es-Sultan itself, to the shores of the Jordan River, and the region directly to the south. Their primary focus was the network of ancient aqueducts and roads (Figure 1): the isolation and poverty of the region in their own era seemed at odds to the enthusiastic descriptions by ancient authors as to the area's productivity and economic importance. In this respect they were very successful, identifying numerous aqueducts from the Roman period onwards in the Wadi Qelt and closer to Tell es-Sultan. Whilst they were not able to trace this network of aqueducts completely, they made a significant contribution to the beginnings of what would evolve into the archaeological study of the hinterland of the Jericho region — effectively practicing an early form of landscape archaeology.





Figure 1. Two photographs taken by Corporal Henry Phillips R. E. in 1867 of aqueduct bridges over the Wadi Nueima, north of Jericho. Courtesy of the PEF archives (top: PEF-P-827, bottom: PEF-P-824).

This brings us to Warren's excavation of the tells. The question was whether these curious mounds were natural or artificial features. This may seem strange to us today in an archaeological landscape dominated by the tell, but in Warren's time, the common view, shared by the great scholar Edward Robinson, was that they were natural features (Warren 1876, 190). However, Warren, among others, suspected that they were artificial. He decided to excavate at several tells in the Jericho area, and his findings were published in his report in the Proceedings and Notes of the PEF (Warren 1865–1869, 1, 14-16, reprinted in part in Conder and Kitchener 1883, 224–226), and in more colourful language in Underground Jerusalem (Warren 1876, 190-197). His excavations can be considered the first serious investigation of the tell archaeology of Palestine, and the imposing mound at Tell es-Sultan was one of the places he chose to place a trench (see Figure 2). It is quite clear from his account in Underground Jerusalem that Warren was not at home with mudbrick. He describes it as disintegrating as soon as it was exposed, with much the same happening to the pottery they found, making his dreams of uncovering the next Nineveh also crumble into dust (Warren 1876, 169–170, 193). Poor Warren! He much preferred working with the easily defined stone of Jerusalem. As such, his opinion as to the archaeological worth of the site seems somewhat prejudiced. In fact, he had uncovered a part of what Kenyon would define as the Early Bronze Age city wall. He was not to know this, but he did speculate as to the nature of the site, and what it and others like it might represent.

Because of the quantity of pottery he found in his trenches (see Figures 3 and 4), Warren decided the tells were not brick factories, as some had suggested, but most likely castles (Warren 1876, 193 and 196). He did not pretend to have any method of dating them. In addition, he did not specifically identify Tell es-Sultan as Ancient Jericho. Whilst this seems a rather bland conclusion, it would in reality be unreasonable to expect much more from him, given the time available and lack of contemporary knowledge about the material. Warren knew how little he knew, and did not indulge in idle speculation. However, we should recognise him as the 'discoverer' of the ancient tell landscape of Palestine.

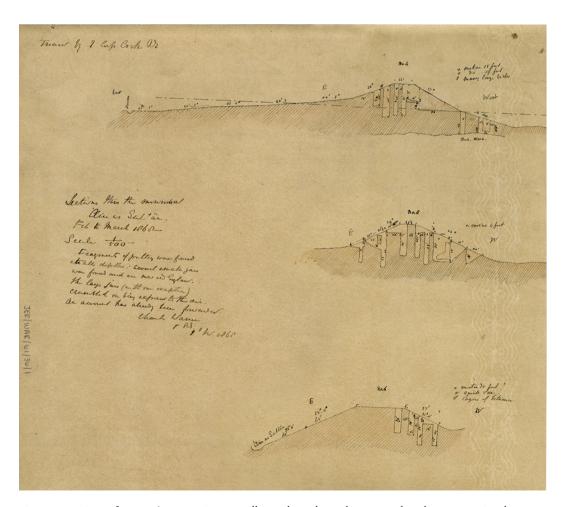


Figure 2. Sections of Warren's excavations at Tell es-Sultan, drawn by Corporal Cock R.E. sometime between February and March 1868. Courtesy of the PEF archives (PEF-DA-WAR-31-61.1).

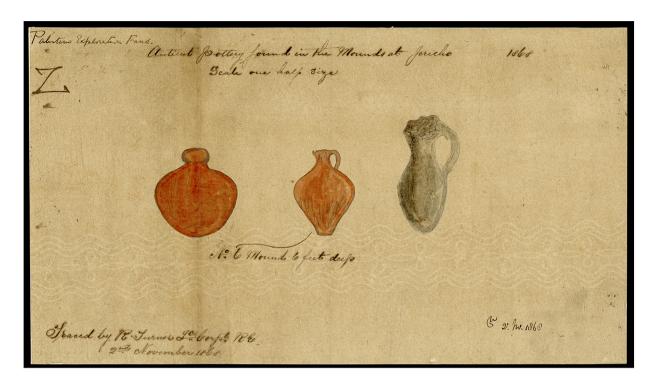




Figure 3. Drawings of pottery from Jericho from the 1867 Warren Expedition. Courtesy of the PEF archives (top: PEF-DA-JER-WAR-61-36.2, bottom: PEF-DA-JER-WAR-62.27).





Figure 4. Some of the Middle Bronze Age and Islamic period artefacts from the Warren Expedition illustrated in Figure 3. Courtesy of the PEF archives (top: artefact numbers PEF-AO-2718 and PEF-AO-2717, bottom: PEF-AO-3309 and PEF-AO-3277).

#### Conder, Tyrwhitt-Drake and Kitchener

One of the other sites investigated by the Warren party was Khirbet el-Mafjar, which he describes as being identified locally as Jiljil or es-Sumrah (Warren 1865–1869, 16). The team undertook some excavations which uncovered what they described as the apse of a small south-facing chapel, some houses, and a chamber with frescoes.

The Survey of Western Palestine took up where Warren had left off, with a clear programme of surveying the country region by region (Figure 5). Lieutenant Claude Conder led the team with the seasoned explorer Charles F. Tyrwhitt-Drake as his second in command. The team made several visits to the Jericho region — the first and most extensive in the winter of 1873–1874, during which Tyrwhitt-Drake fell ill, dying in Jerusalem in June.

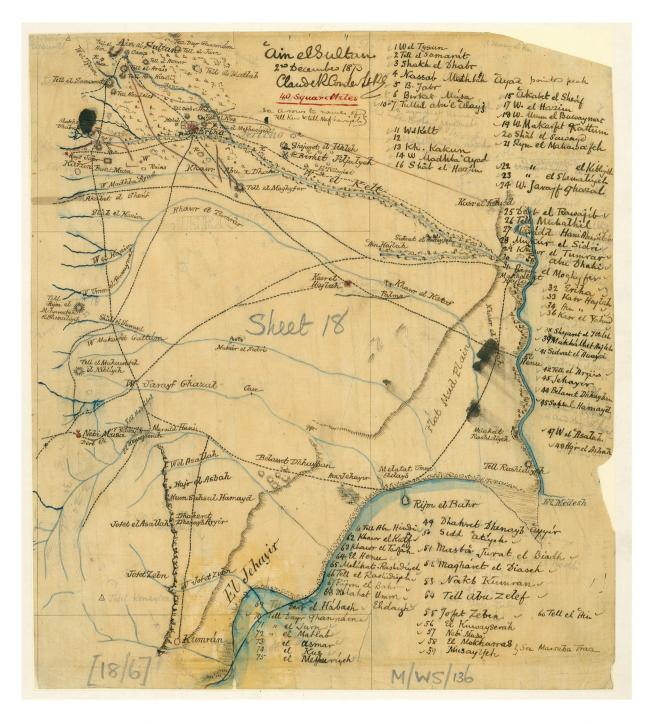


Figure 5. Original field tracing of the Jericho region from the Survey of Western Palestine. Drawn by Claude Conder on 2 December 1873. Courtesy of the PEF archives (PEF-M-WS-136).

They returned to Jericho for a brief visit in November, with Tyrwhitt-Drake's replacement, Horatio Herbert Kitchener, and then spent a few more days there over the Christmas and New Year of 1875. Their task was to document all apparent physical features of the landscape, including architectural and archaeological remains; to summarise existing scholarship on notable features; and to offer additional hypotheses where their observations suggested them. The account and the number of features described in the Survey of Western

Palestine is extensive; see Conder and Kitchener (1883, 166–232) and Sheet 18 of their 'Great Map' for the complete account.

It is worth noting that as well as the formalised account of the survey itself, the memoir for Jericho includes passages from other authors, including excerpts from Charles Clermont-Ganneau's reports in the PEF *Quarterly Statement* (Clermont-Ganneau 1874a; 1874b), extensive passages from Warren's letters published in

the *Proceedings* and *Notes* and Charles Tyrwhitt-Drake's final reports before his death, which were published in the *Quarterly Statement* for 1874.

From the Survey of Western Palestine, there is a more archival material than from the Warren Expedition, but still it forms a relatively small percentage of the overall archive. There are four field tracings for Sheet 18 of the survey map, the primary sheet for Jericho, and one for Sheet 15. Additionally, there are two plans of the aqueducts in the region, one being a proof of the other, and eight letters from Conder to the PEF office, either written from Jericho, or regarding the work being carried out there. There are two full field report manuscripts, one written by Charles F. Tyrwhitt-Drake, and the other by Conder, and also a few photographs, mainly taken by Kitchener.

As well as the overall survey conducted by Conder, Kitchener and others, it is important to remember the work of Canon Tristram who conducted a monumental study of the flora and fauna of the whole region as part of the Survey of Western Palestine. Prior to this, in 1858 and 1863, Tristram had spent some time exploring in this region and was quite the pioneer in visiting some hard-to-get-to ruins, including some rather inaccessible caves and shrines on Jebel Qarantal. Again, his work is referred to in the *Memoirs* of the Survey (Conder and Kitchener 1883, 202).

Following Warren's assessment that the tells in the Jordan Valley were artificial, the survey team examined them further. In his report, Tyrwhitt-Drake concluded that they were defensive forts, protecting routes up through the mountain passes on either side (Tyrwhitt-Drake 1875, 29). As with Warren, his conclusions did not entirely reflect reality, but this is hardly surprising given that the project was one of survey and not site-specific excavation, their work lying at the very beginning of the active study of these sorts of features.

The survey was also concerned with the identification of ancient Jericho, both in the Hebrew Bible and texts of later antiquity, and of other biblical and pilgrimage sites that might be located in the region, particularly Gilgal. By this time, the Jericho of Joshua and Elisha was firmly identified with Tell es-Sultan on account of its springs, its geographical position, and the evident ancient remains (Figure 6).

They confidently placed Roman Jericho at Tulul Abu el-Alayiq on the Wadi Qelt, and Crusader Jericho at Eriha. The identification of Gilgal posed more of a problem, as there were several candidates, including Tell Mogheifir, Birket Jiljulieh and Khirbet el-Mafjar. Based on the literary evidence from the Bible (Joshua 4:19), Josephus (1930, 5.1.4), Eusebius (2003 *s.v.* Galgala, written 4th century AD), Willibald (1895, written AD 724) and



Figure 6. Claude Conder at 'Ain es-Sultan. Photograph by H. H. Kitchener, 1874. Courtesy of the PEF archives (PEF-P-3574).

Adamnanus (1958, written AD 700), the survey team placed the site somewhere 'east of the ancient Jericho' though their final conclusion seemed to favour the site of Shejeret el-Ithleh.

In his report, Tyrwhitt-Drake discussed the remains of what he regarded as four monastic sites in the plain: Tell Mogheifir, Qasr el-Yehud, Qasr el-Hajlah, and Khirbet el-Mafjar, and three more in the surrounding mountains: the caves and shrines of Qarantal, Deir Wadi Qelt, and Deir el-Mukelik (Figures 7–8). All except Khirbet el-Yehud and Mafjar contained frescoes in various states of preservation. Dating was tentative, with occasional graffiti and inscriptions, and astute observation of architectural sequences offering some clues. Some structures were dated to the Byzantine period, such as the cistern at Qasr el-Yehud and the caves at Qarantal, whilst others were considered much later, or to have been in use for an extensive period of time.

Further to the south, Tyrwhitt-Drake visited Khirbet Qumran with Charles Clermont-Ganneau. The visible ruins are briefly described in his report, but no hypothesis as to their date or function is given

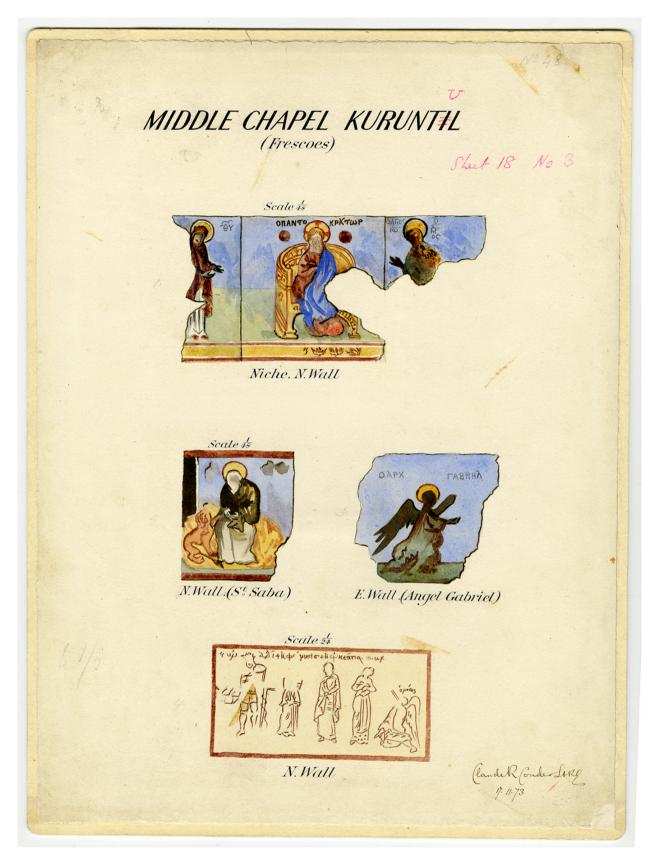


Figure 7. Watercolour and sketches by Claude Conder of frescoes, inscriptions and architecture at various monastic sites in the Jericho region. Courtesy of the PEF archives (PEF-DA-WS-572.9.1).

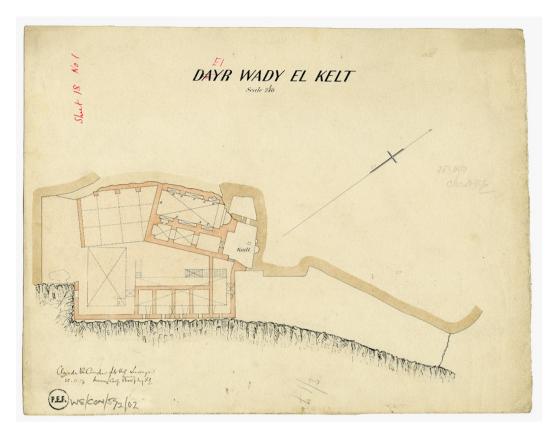


Figure 8. Original plans of monasteries in the Jericho region from the Survey of Western Palestine. Courtesy of the PEF archives (PEF-DA-WS-572.7.1, 572.3, and 572.2).

(Tyrwhitt-Drake 1874, 74). The numerous mudbrick graves in the vicinity were a puzzle, with no grave goods and their apparent dissimilarity from other known forms of burial. Only one copper coin was reported, presumably Jewish.

Possibly the greatest contribution of Survey of Western Palestine to the scholarship of the region was its work on aqueducts, bridges and roads (Figure 9). They described and characterise these features in an ordered way, taking into account any dating which could be reasonably ascertained. Two aqueduct systems were identified: the first under the site heading of 'Kanat Musa' being the aqueducts in the area north and west of Jericho, and the second under the site heading of 'Wady Kelt' being the systems originating in this vicinity.

In the Kanat Musa system, the survey identified four aqueducts, some with impressive standing remains of bridges where they crossed wadis. Two of these linked up to Khirbet el-Mafjar, and another with the sugar mills at Tawaheen es-Sukker. Because of the pointed arches and the small blocks of masonry employed in their construction, all of the aqueducts were dated in their origin to the Crusader period, with extensive use in later periods. They were thought to have been built to serve the numerous monasteries which populated

the region — including, in their opinion, Khirbet el-Mafjar (Conder and Kitchener 1883, 206-207). Five aqueducts were identified in the Wadi Qelt, two from 'Ain Farah and three from 'Ain Qelt. The three from 'Ain Qelt contained many notable features - impressive walls of masonry, bridges and elevated channels. They dated these aqueducts to the Roman or possibly Byzantine period on account of the masonry which they describe as being similar in type to the aqueducts from Solomon's Pools (Conder and Kitchener 1883, 227-229). The two aqueducts from 'Ain Farah follow a very circuitous route, with the two channels crossing and re-crossing each other. Sometimes the channels were tunnelled through the hills, and sometimes carried across valleys on huge bridges. At the time, there was little evidence for the dating of these two aqueducts, beyond the pointed arches in one of the bridges, and so they left this an open question (Conder and Kitchener 1883, 229).

The survey made a major effort in attempting to identify and describe the road networks of ancient and modern Palestine, and this was true for the Jericho region as it was for elsewhere. The survey identified three main categories of road networks, most of which were in use in some capacity at the time of the survey: the Roman road along the Jordan Valley and up to Jerusalem, the



Figure 9. Original field tracing showing ancient road network in the Jericho area by the Survey of Western Palestine. Courtesy of the PEF archives (PEF-M-WS-131).

hill roads, and the pilgrim roads (Conder and Kitchener 1883, 187–189). Other additional routes and tracks are also described. Of course, an understanding of the road networks, and what roads were in use when, is critical in understanding the nature of human activity at different periods, and the work of the survey was a first step in documenting these networks.

The survey included Warren's work at Khirbet el-Mafjar, and came to much the same conclusion as the earlier explorer (Conder and Kitchener 1883, 211–212). They did, however, recognise the connection between the site and one of the aqueducts in the vicinity, which they

describe as being constructed with slightly pointed arches. Other buildings they describe as being made of small stones, which they characterise as being typically Crusader in style.

What is quite clear from the survey records and publications is that at this time, no one could distinguish late Byzantine from early to mid-Islamic remains. The material culture of these periods was as little understood as that of the Pre-Classical periods. Often, Islamic remains are classed as 'Crusader' in particular, and this included parts of the system of aqueducts, and the ruins of Khirbet el-Mafjar.



Figure 10. View of 'M Building' excavations at Jericho from 'Spring Hill'. Photograph by John Garstang, 1933. Courtesy of the PEF archives (PEF-P-JER-GAR-Album J33 pl. 12.2).

#### Frederick Jones Bliss

Things had moved on a little in this regard by the 1890s, when Frederick Jones Bliss visited the Jericho plain twice in 1894, once with Canon Tristram, and wrote a short report in the *Quarterly Statement* of that year (1894, 175–183). At Mafjar, they wondered if the remains might be those of Herod's palace. Bliss went to some trouble to investigate the ruins more fully. He recovered fragments of the stone stucco decoration, and consulted the PEF's architectural expert, Professor Hayter-Lewis, who thought that they were of Byzantine workmanship, not earlier than AD 600 (Bliss 1894, 181).

Bliss also examined some of Warren's trenches in the tells, looking for early ceramic material which he might recognise from Hesi. He identified characteristic ledge handles from his 'Amorite' phase (our Early Bronze Age) at both Tell es-Sultan, and at Tellul Abu el-'Aleikh (Bliss 1894, 176). Impressed by the evident richness of archaeological remains of all periods, Bliss was keen to see the PEF investigate the whole region around Jericho more fully (Bliss 1894, 183). However, this was not to be,

and the next British expedition to the area did not take place until the 1930s, when John Garstang excavated Tell es-Sultan.

#### John Garstang

The 1930s Jericho excavations were not a PEF project, but Garstang generously donated his Jericho excavation records to the PEF in 1947, along with extensive archives from his other Palestinian excavations, and an exceptional collection of photographs of archaeological site from around the whole region of Palestine and Jordan. His Jericho records were organised by Piotr Bienkowski in 1991, and the written records have recently been added to the PEF Documentary Archive database.

As is well known, John Garstang did not fully publish his excavation results, with only preliminary reports in the *Liverpool Annals* (Garstang 1932a; 1932b; 1933; 1934; 1935; 1936), and a popular account of the excavations (Garstang and Garstang 1948). As such, the archives,



Figure 11. Technician at work on a pottery deposit in the 'Palace Store Rooms'. Photograph by John Garstang, 1933. Courtesy of the PEF archives (PEF-P-JER-GAR-J33 PSR 36.2).

which are extensive, are an invaluable record of the excavations, and I am gratified that the current excavators of Jericho have made very good use of them in recent years.

Being the records of an excavation in the 1930s, Garstang's archive is a very different thing from the material compiled by Warren, Conder and earlier surveyors. The discipline of archaeology was far more evolved and formalised, and scholars' understanding of the material culture had been transformed. However, many excavators from this period did not retain their own archives, deeming the final publication to be the only record required, so in this regard, Garstang can be said to have had some foresight. The archives consist of photographs, notebooks, registers and lists, drawings which include sections and plans, small finds, pottery and publication plates, many of which will be familiar from the *Liverpool Annals*.

The photographs are numerous and often of very fine quality (Figures 10–11). John Garstang was an excellent photographer, and we assume that most of the photographs are his, though others certainly

contributed. These photograph cover the excavations in progress as well as some shots of the immediate surroundings and individual finds. Many are arranged in photographic albums. Where they show an area of excavation, a corresponding sketch map is included, showing the exact location of the context photographed, making these albums a tremendously useful research tool (Figures 12–13).

The registers and notebooks are the result of the combined efforts of the whole excavation team. This is in itself a feature of interest. Not only do we see Garstang's work in progress, but also how other members of his team interpreted his excavation methodology.

The drawings can be divided into two groups: those which are purely archaeological (Figure 14), and those which have an artistic (Figure 15) or speculative 'reconstructive' element (Figure 16). The first category is of course useful for the information they provide on the archaeology or specific objects, and to show how artefacts were grouped together or analysed. The second group are illuminating as to the overall interpretation of the material, and how the cultural mind-set of the

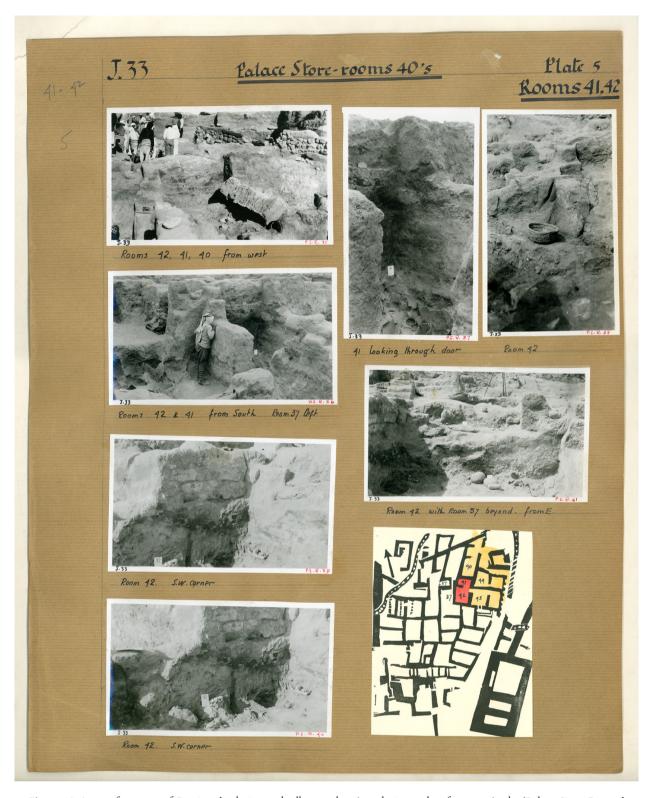


Figure 12. A page from one of Garstang's photograph albums, showing photographs of an area in the 'Palace Store Rooms' (Rooms 41 and 42) excavated in 1933, with an accompanying sketch map showing the location of each photograph.

Courtesy of the PEF archives (PEF-P-JER-GAR-Album J.33 'Palace Store Rooms 40', pl. 5).

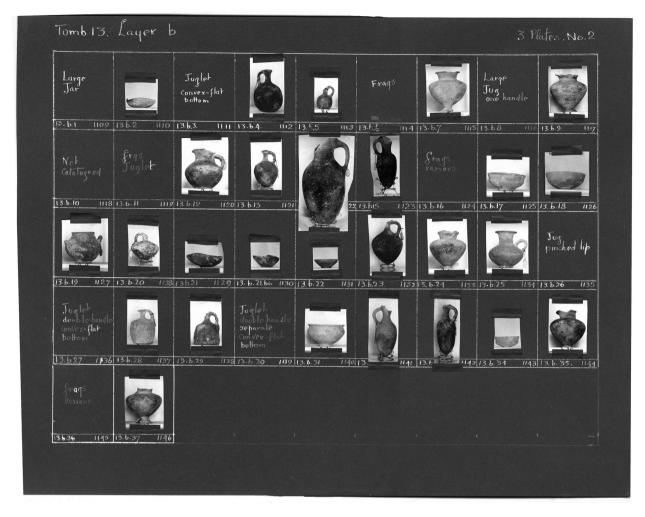


Figure 13. A page from one of Garstang's object record albums, showing artefacts excavated from Tomb 13 'Layer b'.

Courtesy of the PEF archives (PEF-P-JER-GAR-Object Album 'Tomb 13. Layer b, 3' pl. 2).

day was shaping archaeologists' reconstructions of the past.

What the Garstang archives show is a thorough and methodical recording process — while not up to today's standards, very professional by the standards of its time. There are of course gaps — you won't find an analysis on the skeletal remains from the excavated tombs. And of course, some of Garstang's conclusions have long been dismissed. But the archives give the modern researcher a chance to understand his working process, and to gain a wealth of information about the excavations and the finds which can be of great relevance to current research.

#### Conclusions

Taken together, the archives and collections of the PEF offer the modern researcher an insight into some of the discoveries and thought processes of past explorers and excavators, as well as preserving details which might well otherwise have been lost. They provide an opportunity to appreciate more fully the contribution of these researchers to our modern and evolving understanding of Jericho and the surrounding region, and inform the development of future research.

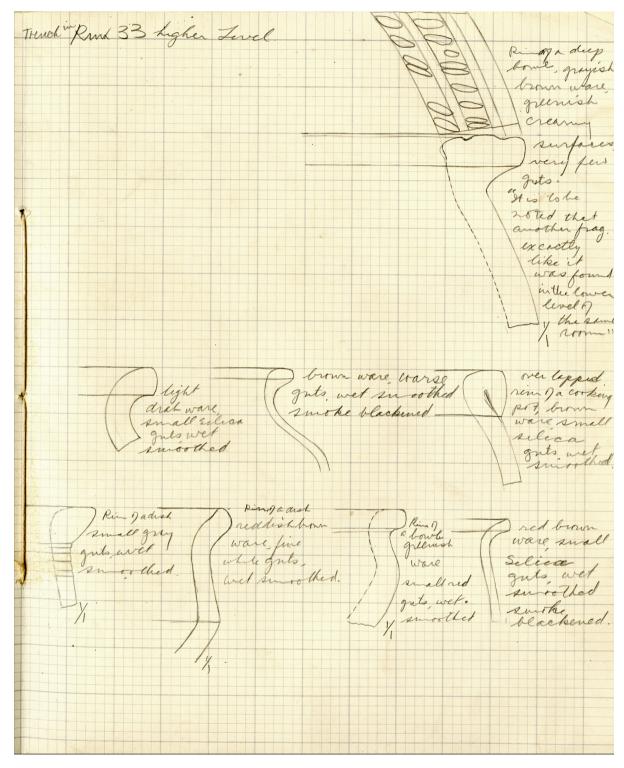


Figure 14. Drawings of rim sherds from Garstang's excavations. Courtesy of the PEF archives (PEF-DA-JER-GAR-691).

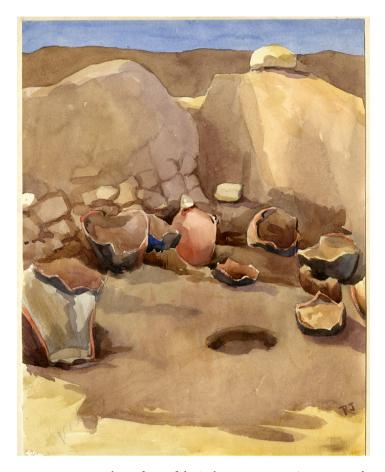


Figure 15. Watercolour of one of the 'Palace Store Rooms' as excavated.

Signed 'RJ'. Courtesy of the PEF archives

(PEF-DA-JER-GAR-417).



Figure 16. Reconstructive drawing of the fated walls of Jericho as envisaged by the excavators. Courtesy of the PEF archives (PEF-DA-JER-GAR-418).

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