Buried History

The Journal of the Australian Institute of Archaeology

2025 Volume 61

Buried History

Buried History is the annual journal of the Australian Institute of Archaeology. It is an open access journal that does not charge article processing fees and publishes papers, subject to double-blind peer review, short articles and reviews. The intended readership includes both academic researchers, teachers, as well as those with an informed interest in ancient history, archaeology and heritage. It publishes articles relating to the history of the Mediterranean, Western Asia, North Africa, involving archaeology, epigraphy and the biblical text. It also publishes papers about the history of archaeology more generally.

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Cover Image: An African wheat-ship under sail on the reverse of a coin of Emperor Commodus, now in the museum at Avignon (from Smith 1880: 201).

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Editorial

This edition of *Buried History* has proven to be rather sombre. It begins with tributes to four friends of the Institute, the first two of whom were members of this journal's Editorial Board. The papers deal with deception in archaeology and a shipwreck, while the reviews are of three books, one that discusses issues faced by Israeli archaeology, such as the *nakba,* another dealing with plague in antiquity, and a third about Cyprus and Ugarit.

Professor Ken Kitchen's memorial draws heavily on his autobiography, to which many people will not have ready access. It is often quite charming and displays, in retrospect at least, Ken's light-hearted approach to the many challenges that he faced. His capacity to fund his research by combining tour-guiding with the recording of Ramesside inscriptions onsite, illustrates his creative approach to life. Ken was one of the great Egyptologist of our time and leaves a significant legacy of published work for both scholars and a general readership.

The passing of Professor Thomas Davis has saddened his friends because it seemed so untimely; no-one was ready. The tribute was prepared in the light of the many memories that accumulated while excavating with him in Cyprus. I will miss the discussions of faith and archaeology over a frappe at the Chris Blue Beach Taverner, Episkopi, Cyprus. Tom's colleagues are now left with the responsibility of publishing the archaeological work that we all started together in 2012.

In Melbourne, there are many fond memories of Professor Takamitsu Muraoka. Like Ken Kitchen, he had an extraordinary capacity for languages, ancient and modern, and a work commitment that resulted in a prodigious bibliography. We are indebted to Dr Martin Baasten of Leiden University for writing the *memoriam* and to Ellie Muraoka for the feature photograph. In his retirement, Professor Muraoka devoted his attention to New Testament and Septuagint Greek, a language that he was never called upon to teach, and to spend five weeks per year with his wife, Keiko, teaching what he called 'Applied Biblical Philology' in Asian countries that had 'suffered under the Japanese imperialism and militarism in the first half of the twentieth century' (T. Muraoka, *My Via Dolorosa,* AuthorHouse, 2016, p. ix).

Sally Salter was another larger-than-life person who did not let the grass grow under her feet. She came to archaeology and ancient world studies later in life and enthusiastically engaged with it. The degree courses at the University of Melbourne in these subjects, often taken by mature age students such as Sally, have been a successful model for teaching the humanities.

The first paper by Associate Professor Phillip Edwards of La Trobe University is developed from his Petrie Oration of 2025. Phillip's primary research involves the origins of sedentism and village life, and his fieldwork is in the East Jordan Valley at the Natufian site of Wadi Hammeh 27 (12,000–12,500 BCE) and the Pre-Pottery Neolithic site of Zahrat adh-Dhra' 2 (9,200–8,300 BCE). This article of Phillip's addresses another research interest of his, the history of archaeology, and is part of an academic biographical project studying the career of James Mellaart.

My paper on St Paul's voyage to Rome and the shipwreck he experienced combines research into Roman merchant shipping and the narrative of the New Testament. The paper draws attention to several new aspects of the saga including: a few crucial technical terms normally mistranslated and misunderstood, the professional seamanship of the sailors, Luke's allusions to the *Odyssey*, and the pertinence of this story as the climax of the Book of the Acts. While many commentators have questioned the veracity of the narrative, it is in fact lucid and logical.

The changing circumstances in the Middle East and Israel are ever before us, but the implications for specific activities, such as archaeology, are rarely apparent. Steven Rosen reviews Hayah Katz's discussion of the recent transformations in Israeli archaeology, and the roles that the various socio-religious groups in Israel are fulfilling. This is much more nuanced than anything one may encounter in Western media reports. Steven is an archaeologist who studies the prehistory and protohistory of the Levant, with a specific focus on the Negev. He investigates the archaeology of mobile pastoral societies, examining how human populations adapted to harsh desert environments over millennia. Much of his professional life has therefore been associated with Israeli archaeology. We are grateful for his extended review.

The volume on *Plague in Antiquity* that I review is interesting. The awareness of the subject has flourished recently with scientific analyses using ancient DNA to identify the bacteria present at the time of death. Our knowledge of plague will be transformed over the next decade with such techniques. *Plague in Antiquity* provides a good starting point for the subject.

We are pleased that Professor Caroline Sauvage has interrupted her busy schedule to review Bernard Knapp's book *Cyprus and Ugarit.* She is professor of archaeology in the Bellarmine College of Liberal Arts, NEH chair of Mediterranean Studies, and the Director of the LMU Archaeology Center. She has an MA and PhD from the Université Lumière Lyon 2 in France and is an expert on Ras Shamra.

As always, we acknowledge the referees and reviewers who have been generous with their time and advice.

Christopher J. Davey

https://doi.org/10.62614/vfk7ha63

Kenneth Anderson Kitchen (1932 – 2025)

Ken Kitchen was the Brunner Professor Emeritus of Egyptology at the School of Archaeology, Classics and Egyptology, University of Liverpool, England. He was one of the most significant Egyptologists of our time and a pre-eminent Ancient Near Eastern scholar. Until 2021, he was a member of the Editorial Board of this journal. He was a friend of the Institute and a personal friend of some of its members. It is an honour to give recognition to his passing on 6 February 2025, and to remember a great scholar and an authentic personality. In preparing this tribute, I acknowledge assistance from Dr Boyo Ockinga, Honorary Associate Professor, Macquarie University, Dr Bruce Routledge, University of Liverpool, Dr Paul Lawrence, and Dr Peter Williams, Principal of Tyndale House, Cambridge (https://tyndalehouse.com/updates/news/kenneth-kitchen/, accessed 8/3/25).

A significant source for Ken's life and perspectives is his autobiography, *In Sunshine & Shadow* (Liverpool: Abercromby Press, 2016). The preface begins, 'This modest essay … may help people who have (eventually) to compose obituaries when I am gone' (p. ix). The book illustrates his personal organisation, with dates and times for events and details of travel that derive partly from his diaries, which he had kept from his high school years. It offers his reflections on life and work and has a thirty-one-page bibliography.

Ken was proud to have been born in Aberdeen in the summer of 1932. His parents, Hannah Sheen and Leslie Kitchen, met when they were both playing with the Benton Orchestral Society. Ken's grandfather was a master-tailor and Leslie followed in the trade. Two years after Ken's birth the family moved to Hawick, where Leslie managed a drapery store in the high street. They were still there when World War II began. In 1940, Ken missed a year of schooling because of anxiety and accompanying ailments; he always remembered the noise of the Junker diesel engines of the German planes passing overhead to bomb the docks at Leith. Leslie joined the Airforce and served as aircrew, but because he was a family man he was not allowed to be a rear-gunner. When he was demobbed in 1945, he decided not to return to tailoring, but to become a professional musician, playing the cornet in brass-bands. While this was being arranged, Ken and younger brother Don were billeted by a Hawick couple, where he pored over their copy of J.A. Hammerton's *Wonders of the Past* (New York & London: Putnam 1924). Ken had already read *Harmsworth's Universal History of the World*, also edited by Hammerton, and found most of it boring, except for the sections on ancient Egypt and early Mesopotamia. So, at the age of thirteen, Ken's future was emergent.

The family moved to Kettering, where Ken attended Kettering Grammar School. Gone was the relaxed learning of Hawick High School: he had to catch up in Latin and French and comprehend algebra and trigonometry. He survived sport by running about energetically, well away from the ball. On a school trip to Bedford, he purchased a mint copy of E.A. Budge's *The Mummy: Chapters in Egyptian Funereal Archaeology* (2nd ed, Cambridge: University Press, 1925) from which he started to learn hieroglyphs. The buying of books and the study of the Egyptian language became lifelong passions.

In 1947, the family moved to Newark-on-Trent and Ken enrolled at Newark Magnus Grammar School, where the pace of learning was less driven than it had been at Kettering. It became apparent during Ken's adolescence that he was clever, with a photographic mind and a remarkable capacity for work, and he was besotted with Egypt. He read Amelia B. Edwards' *A Thousand Miles up the Nile* (London: George Routledge and Sons Ltd, 1877) many times, reproduced her sketches in water colour and oils, and took every opportunity to indulge in learning about ancient Egypt. For Newark's 400th birthday celebration, he entered a '4000 year birthday' model of the Mentuhotep II temple at Thebes. As the end of his schooling drew nigh, Ken held to his intention to become an Egyptologist: his parents were dismayed, his teachers bewildered, and even Herbert Fairman, Professor of Egyptology at the University of Liverpool, was discouraging because employment opportunities for Egyptologists were so limited. Unrelentingly, Ken joined the Egypt Exploration Society (EES) and continued independently to learn Latin, which was required for university, and German for studying Egyptology. He described the decision he made on 5 September 1950:

> *… by the end of the day, I found within me no other real feeling for any other path to follow, other than to attempt to proceed in and with Egyptology, and run the risks of no obvious 'proper' employment, after a degree-course, that very few outsiders would value out there, in a hard everyday world. So, on that day, I opted for the risk; (p. 67).*

***Figure 1:** University of Liverpool, 8-14 Abercromby Square, where the School of Histories, Languages & Cultures and the Garstang Museum is located. When Ken enrolled there in 1951, the department was still in its World War II basement accommodation. Image: courtesy of the University of Liverpool.*

Many people in ancient world studies have also been faced with this situation and have chosen to take the risk; Ken was one who would go on to contribute significantly to the study of the ancient world.

At the University of Liverpool, Ken resided in Derby Hall, where he developed a circle of friends. He felt like an oddity; not only was he studying Egyptology, but as Coptic was not offered, he also learnt Hebrew with Semitic scholar, W.J. Martin (Figure 1). He participated in most student activities, often with an ancient Egyptian focus. On 'Panto Day', when students dressed-up and raised money for charity, Ken was decked out in a tunic with the double crown to be the Pharaoh of Liverpool for the day; and when he was appointed the chess secretary of the college, of course he created an Egyptian form of chess, based on the game of *senet*. While Ken never won a game of chess, he had better fortune with the 'Egyptian' form, for which he had written the rules. A more significant association was his contact with the *Evangelical Christian Union*. Over time, his 'conversion to the age-old faith came through a quiet, carefully "thinking it through" trial period to its clear conclusion' (p. 75).

University life was frenetic; there was never a dull moment. Visiting speakers included Walter Emery, Michael Ventris, John Chadwick, Jaroslav Černý, and Sir Leonard Woolley, who assured Ken that Abraham did exist, 'Look at all the wife-trouble he had!' (p. 84). Meanwhile, news of the Dead Sea scrolls discovery often filtered through. Away from Liverpool, Ken dug at an archaeological site in Anglesey with Glyn Daniel (later Disney Professor of Archaeology at the University of Cambridge), participated in the Tyndale Fellowship Old Testament Study Group at Cambridge where he met G.T. Manely and Donald Wiseman, attended EES functions in London with people such as Dr Margaret Murray and Lady Hilda Petrie, and went on excursions with the Newark Archaeological Society. The pace took its toll. In September 1954, Ken was admitted to Newark General Hospital with pleurisy and double pneumonia, and spent a year recuperating. During this time the Army Recruiting Board interviewed him concluding that he was 'just a bag of bones' and that he would not be called-up.

The final year of studies in 1955–6 was completed successfully, and he graduated with First-class honours. He was interviewed for an Egyptology position at the British Museum, which he came to realise was not suitable for him, so he informed the interview panel that he also had interests in the Ancient Near East and space travel! The plan worked and he was overlooked for the position. Ken enrolled in a PhD to research Semitic, Hittite and Hurrian loanwords in Ancient Egyptian and, whether the spellings of such words indicated the writing of foreign vowels; it was never completed, but he did enough work to answer the question in the affirmative. He also spent one month at Tyndale House assisting his Hebrew teacher, W.J. Martin, prepare a Hebrew Grammar, but that too never saw the light of day. In June 1957, Ken gave the Tyndale Fellowship Biblical Archaeology lecture in Cambridge entitled, *The Egyptian Background to the Joseph-Narrative in Genesis*. The monograph of the lecture was never published. Ken concludes this story in his autobiography by offering 'grovelling apologies' and hoping that 'someday, something might happen' (p.102). A scan of Ken's bibliography reveals that, from about 1960 many things did happen: he published prodigiously in English and German, including scholarly and popular books, papers and reviews, for the next sixty years.

In June 1957, Ken was appointed as an Assistant Lecturer in Egyptian and Coptic at the University of Liverpool, to commence for the 1957–8 academic year. He gave his first lecture on 2 October of that year and would continue to do so for the next thirty-nine years! A year later in July, Ken's parents purchased a house at Woolton, near Liverpool, and Ken moved in with them; all three spent the rest of their lives there (Figure 2).

***Figure 2:** 50 Rosefield Road, Woolton, where Ken lived with his parents from July 1958. It was a secure home base from which Ken was able to travel widely to research and lecture in Egyptology. Ken's mother died here in 1981, and his father in 1994. Image: courtesy of Google Earth, accessed 2/10/2025.*

While Ken's employment and domestic arrangements were settled, his intellectual journey always sought new horizons. In 1959, after submitting his first academic paper on four Egyptian stelae in the Leicester Museum to *Orientalia* (1960, 75–97), he learnt Russian to help him with Russian Egyptological works; the language later proved useful for Old-South-Arabian studies. Then in 1960, he moved on to Hittite hieroglyphs.

In July 1961, Ken joined his fellow Liverpool University staff member, Dr W.J. Martin, Martin's son John, and David Winch on a car journey to the Middle East. The intention was to leave Martin's Rover saloon at Mersin, Türkiye, and to take a boat to Haifa to attend a conference in Jerusalem. In the event, they found that the Turkish authorities would not allow the car to be left in Türkiye, so they sent copies of their papers on to Jerusalem to be read in their absence and instead, travelled through Syria, Lebanon and Jordan, visiting sites as far south as Petra. They did get to East Jerusalem, where they found Kathleen Kenyon and Père De Vaux excavating adjacent trenches next to the city walls. For the rest of his life, Ken travelled regularly and extensively.

Research on the foreign loanwords in ancient Egyptian continued but, by the end of 1961, it was clear to Ken that a large number of relevant New Kingdom inscriptions were not available in any collection. So, he began the *Ramesside Inscriptions* project, arguably the most significant work of his academic career. He accumulated all available texts and prepared to journey to Egypt to copy texts on-site. Finance was a major concern and necessitated prudence at the bookshop.

November 1962 saw Ken on his first visit to Egypt. Work in Cairo began by consulting catalogues and records at the Cairo Museum and at the Centre of Documentation, and continued later at Luxor, where he stayed at Chicago House and worked on site at Karnak. Friends that he met sometimes travelled with him to sites further afield. In January, he joined a tour group for a fortnight as a Guest Lecturer. The program took him to many of the sites between Luxor and Abu Simbel and, as his duties involved only morning briefings and evening lectures, he was free to spend most of the day recording the texts he discovered onsite, wherever that happened to be. He arrived home early on the Monday morning of 11 February, and was lecturing to students on the following Wednesday.

In the following weeks, Ken catalogued the hundreds of slides and monochrome negatives he had taken. These records, and those from the eleven subsequent expeditions to Egypt, were the basis of the *Ramesside Inscriptions* project. Many of his visits to Egypt to collect data

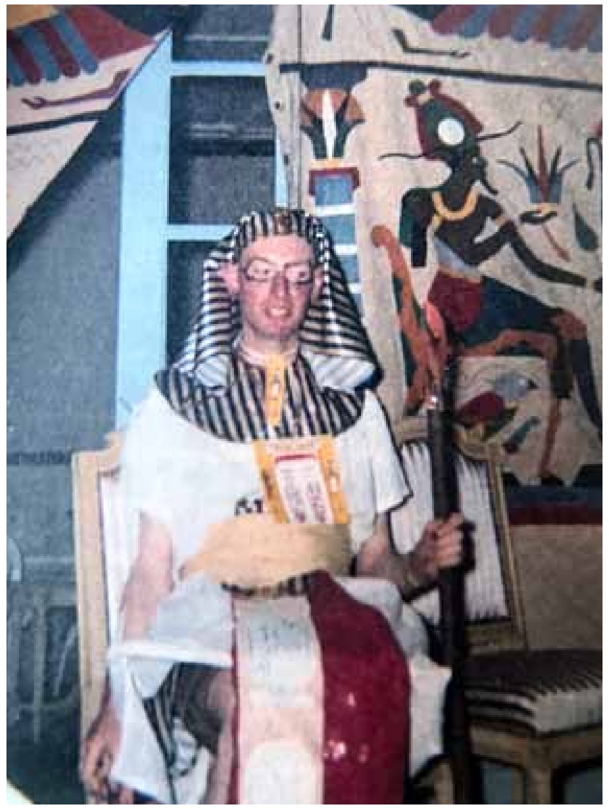

Figure 3: *Guest lecturing could be demanding. Ken not only spoke about Ramesses II, but at one tour's closing celebrations, he had to become Ramesses II. Image: K.A. Kitchen* In Sunshine & Shadow, *fig. 39.*

included guest lecturing on tours, which partially funded the trip (Figure 3). Some of the guest lecturing positions were at the behest of Sir Mortimer Wheeler.

Within a month of returning from his first visit to Egypt, Ken received the proofs for *Alter Orient und Altes Testament*, which was later published in English as *Ancient Orient and Old Testament,* (London: Tyndale Press 1966) (Figure 4). The cover blurb of the English version explained that ancient Near Eastern research and the study of the Old Testament had developed independently, and that if the principles valid for the study of ancient literature were applied to the structure of the Old Testament, it would be found to stand as it is, and not as it was being reconstructed by nineteenth-century scholars and those who came after them. Ken would return to this subject many times.

For part of 1963 he turned his attention to Hittite king lists and in June, he attended the XIIth *Rencontre Assyriologique Internationale* in London. There Dr Martin introduced him to numerous Ancient Near Eastern scholars, such as Professors von Soden and Falkenstein. Ken's regular attendance at conferences and extensive travel, not just to Egypt, enabled him to develop a very wide circle of colleagues and friends.

By 1968, the first hieroglyphic texts of the *Ramesside Inscriptions* project began to be published by Blackwells of Oxford. Publishing continued until 1990, by which time there were seven volumes (5,220 pages). A supplemental series of translations (five of seven have been issued) and two of volumes of annotations have followed. This was a life-long work, which was not quite finished.

In July 1970, Ken travelled to Canada for the first time to participate in a summer school at Regent College, Vancouver, with W.J. Martin, who had moved to Regent from Liverpool. Ken did the Old Testament and its Ancient Near Eastern background, while Dr Martin taught a Hebrew course, and Professor F.F. Bruce taught the New Testament. This event was a little unusual for Ken at the time; his autobiography for this period describes him to be still hard at work recording Ramesside texts on visits to Egypt, and European museums and monuments. The obelisks in Rome, for example, had proved to be an important source of texts.

In 1972, *The Third Intermediate Period in Egypt (1100–650 BC)*, (Warminster: Aris & Phillips) was published. Ken's doctoral program had stalled in the face of overwhelming data, so this book was submitted as a work of equivalent doctoral standard. It was accepted, so on 7 July 1974, Ken was awarded a PhD in the presence of his parents at the University's Summer Degree Congregation. Later that year he was promoted to the position of Reader

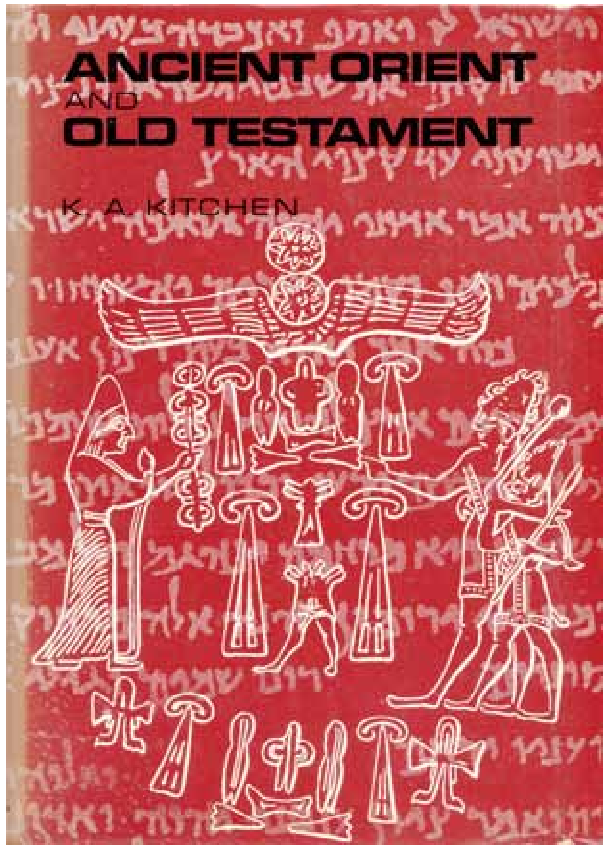

Figure 4: *The cover of the first edition of* Ancient Orient and Old Testament*, (London: Tyndale Press 1966). Hittite hieroglyphic signs and symbols are in front of Isaiah 49, from the Dead Sea Scrolls.*

Figure 5: *The 'Crossword' Stela of Peser from the time of Rameses VI. The 'crossword' is sixty-seven squares wide and eighty squares deep, but may originally have been eighty by eighty. It was found at Karnak by Giovanni Belzoni. Image: © The Trustees of the British Museum. Shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence.*

in Egyptology, which was recognition that meant more to him than the doctorate.

Ken described (p. 172) his work in the summer of 1982 on one text, which is on display in the British Museum (Figure 5). Sitting at a card table in the sunny backyard, he transcribed what is the world's oldest known crossword for *Ramesside Inscriptions* volume VI. The stele contains two hymns to the goddess Mut: one is read horizontally and the second is read vertically using the same symbols. Ken acknowledged the 'incredibly ingenious priest' who devised the text, and lamented that the stele is rarely noticed by visitors to the British Museum. The description demonstrates Ken's skill, concentration, and the manner in which he enjoyed his work.

A not so enjoyable event was the passing of his mother late in the previous year. Ken had been well supported by his mother and was gratified to find at her funeral many other people who had also known her to be 'a kindly counsellor and oft a practical and generous friend' (p. 171).

Ken first visited Australia in 1984. He was a guest of the Rundle Foundation, and was hosted in Brisbane by Professor Francis Andersen, in Sydney by Professor Naguib Kanawati and in Melbourne by Dr Colin Hope. Colin had been Ken's student. His second visit to Australia in 1989 was sponsored by the Institute, and he was hosted in Melbourne by another of his students, Piers Crocker. This trip included visits to Sydney and Armidale. His last tour to Australia was in 1999.

On holiday in Rio de Janeiro in 1985 Ken found an unpublished collection of Egyptian objects in the National Museum. He promptly abandoned the beach to get permission to publish the collection in Portuguese and English, *Catalogue of the Egyptian collection in the National Museum, Rio de Janeiro* (London: Aris & Phillips, 1990).

As the site work for the *Ramesside Inscriptions* eased off, Ken began studying Old-South-Arabian inscriptions. From 1990 he participated in the Society for Arabian studies and, in 1993, he had a comprehensive and adventurous overland tour of most of the important archaeological sites in Yemen. He later also toured Arabia and the Gulf States. Back in England, he offered help to an auction house trying to sell an Old-South-Arabian inscription that they had displayed upside-down. His interest became known, and he found himself deluged by people seeking information about Old-South-Arabian inscriptions in their possession. Rather than undertaking arduous expeditions to record monuments, as he had done for the *Ramesside Inscriptions* project, this time the texts came to him. One such stela fragment is in the Institute's collection, and was published by him in *Buried History* (46, 2010, 17–18).

Ken retired from teaching in 1996, and his dual professorial positions ended and were replaced by an emeritus title, which left him free to research and publish. His biblical studies perspectives were developed and finally bought together in *On the Reliability of the Old Testament* (Eerdmans, 2003), which he informed me with some amusement shortens to OROT. In any case, it is the the most comprehensive single resource for the historical background of the Old Testament.

Another substantial publishing project was the compilation of all ancient treaties and international agreements written in numerous languages, arranged in chronological order to demonstrate the development of treaty structures. This was published in a three-volume work, *Treaty, Law, and Covenant* (Harrassowitz, 2012), with the assistance of Dr Paul Lawrence. The book of Deuteronomy is included in the series, and is placed in the second millennium BC with other documents of similar form.

In 2008 Ken was admitted to the Royal Infirmary with chest-pains. He was diagnosed with angina and, although there was no formal advice, Ken took this as a sign that he should cease flying. Thereafter, he restricted himself to rail travel, mainly in the United Kingdom.

Ken was a compulsive teacher. When a student proposed to adapt their prize-winning honours thesis on Pharoah

Figure 6: *Ken with Professor Donald Wiseman (*BH *2009: 3-6) and Professor Alan Millard (*BH *2024: 3-6), at Tyndale House in about 1992-93. All three were leading Ancient Near Eastern scholars who also studied the Old Testament in the context of ancient literature and history, and saw no need to reconstruct it. In fact, their approach, which has been shared by the Institute, fosters a much more profound understanding of the Old Testament than would otherwise be the case. Image: used by permission of Tyndale House.*

Shoshenq and his expedition to Palestine for this journal, I naturally sent it to Ken for review; he was the appropriate Editorial Board member, and the world authority on the subject. I mentioned that this was a student we were encouraging. Five typewritten pages of detailed comments were soon received. Dr Colin Hope remembers that Ken's teaching was always 'focussed and thorough'.

His published Egytological record puts him into the pantheon of all-times great Egyptologists. He was also a skilled semitic scholar, for which he has received less recognition. Armed with a well-marked up first edition of *Ancient Orient and Old Testament*, I set off in 1972 to study at Cambridge University. The gulf between what Ken called (p. 23) the 'relatively objectively based disciplines' of ancient world studies and the 'idealistic theories' of biblical scholars was vast. My subsequent time in London with scholars such as Professor Donald Wiseman proved more helpful for Old Testament study.

For Ken, the Old Testament was based on ancient texts and had to be studied in the context of ancient literature and culture, whereas biblical scholars are inclined to consider it to be a community/religious text in a more modern sense. For many of them, it was primarily written in a Persian-Hellenistic environment. One critic, Philip Davies, did engage with OROT, saying that it did not:

> *add up to a coherent case for a certain degree of reliability because of the lack of any overall explanation of what the biblical narratives are, where they come from, how they work, how they have been transmitted, and what we mean by reliability* (*Memories of Ancient Israel*, Louisville, KY: John Knox Press, 2008, 168).

It is unrealistic to expect Ken to have put together a historically credible 'coherent case'. After 130 years Davies and his colleagues have not successfully done so. In time, scholars trained in ancient languages and history could organise the evidence cited in OROT into such a form. At the last Tyndale Fellowship Old Testament Study Group I attended, I sat with Ken in one session. As the speaker outlined some speculative theories, Ken became increasingly agitated, but his comments 'what about the evidence' were met with shushes. Although some audiences may not appreciate it, Ken leaves an important legacy for those who ground their research and interpretations of the Old Testament in historical evidence and ancient languages.

Ken's autobiography is well illustrated and every image of him, except one, depicts him with a broad smile. He was friendly and always eager to support activities that he espoused. There are, for example, six papers by him in *Buried History.* His friendliness and humour often shrouded his brilliance and vast knowledge of ancient history and literature. He will be missed by friends and ancient world scholars alike.

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Image: courtesy of the Lanier Center for Archaeology, Lipscomb University

Thomas William Davis (1956 – 2025)

The Institute is sad to lose another supporter and member of the *Buried History* Editorial Board. Dr Thomas William Davis was a Professor of Archaeology at Lipscomb University, Nashville, TN, and an Associate Director of the Lanier Center for Archaeology. He was the Director of the Kourion Urban Space Project (KUSP), which has excavated since 2012 at the site of Kourion, Cyprus. The Institute has been a member of the KUSP consortium. Tom was diagnosed with esophageal cancer in August 2024 and, after a period of remission, died on 28 September 2025.

Tom was born in Ridley Park, PA, the younger son of the Reverend Dr. E. Bradford Davis (1921–2014) and Edna Sayers Davis. Tom's family has a strong academic tradition. Bradford was educated at Yale Divinity School, and received a doctorate from Princeton Theological Seminary specialising in American church history. He was ordained in the Presbyterian Church, and served in pastorates in New Hampshire, Pennsylvania, and in New Jersey, where Tom spent his life up to the age of ten. Tom's older brother, Edward, who assisted me in preparing this tribute, is a professor emeritus of the history of science at Messiah University, PA, and a fellow of the International Society for Science & Religion. By contrast, Tom's grandfather, William, worked for the Pennsylvania Railroad Company after immigrating from Ireland. While Tom followed his family's academic tradition, he kept an interest in railways with O-gauge model trains.

He attended Lansdowne-Aldan High School, PA, and then went to Wheaton College, IL where he graduated with a BA in History and Archaeology. He then studied at the University of Arizona, where he completed an MA in Syro-Palestinian Archaeology and, in 1987, he was awarded a PhD for a dissertation on the history of biblical archaeology. The PhD was supervised by Professor Bill Dever. As Professor of Near Eastern Archaeology and Anthropology at the University of Arizona in Tucson, AZ, from 1975 to 2002, Dever supervised over twenty PhDs, consequently, Tom became a member of that community of scholars (Figure 1). While studying at the University of Arizona, Tom excavated in 1982 and 1983 at Tell el-Hayyat, Jordan, with Steve Falconer, and with

***Figure 1:** At Kourion in 2013, looking over the Earthquake House. From the left, Tom, as always on site wearing his Palestinian keffiyeh, with his teacher, Professor Bill Dever, and Dr Randall Younker, Director, Institute of Archaeology, Andrews University, who is another of Bill's students.*

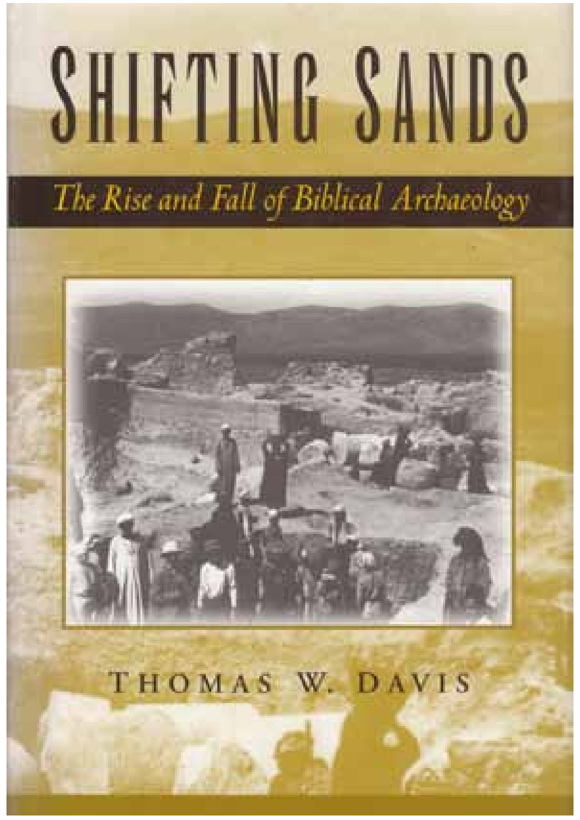

***Figure 2:** The dust jacket of* Shifting Sands *(Oxford: University Press, 2004).*

David Soren at Kourion, Cyprus, amongst other sites. Tom's PhD dissertation was later revised and published as *Shifting Sands: The Rise and Fall of Biblical Archaeology*, (Oxford: University Press, 2004) (Figure 2).

At the conclusion of his studies, Tom took a position in cultural resource management for Goodwin & Associates in Frederick, MD. In 1998, he participated in the excavation of Tell el-Borg in northwestern Sinai, which was led by Professor James Hoffmeier, then of Wheaton College. This encouraged him to re-engage with eastern Mediterranean history and archaeology. In 2003, Tom relocated to Nicosia, Cyprus, to serve as Director of the Cyprus American Archaeological Research Institute (CAARI), a post he held until 2011. After leaving CAARI, he became a trustee. He was a member of several boards of the American Society of Overseas Research and the American Center for Research (ACOR), Amman, Jordan, and he often recruited colleagues to serve with him.

In August 2010, Tom embarked on a lecture tour of Australia on behalf of the Australian Institute of Archaeology (Figures 5 & 6). He spoke at the Universities of Sydney, Melbourne, Macquarie, Monash, La Trobe and New England, and gave the 2010 Petrie Oration at the Australian Institute of Archaeology. He had seven well-illustrated lectures to give:

- Saint Paul on Cyprus: The Transformation of an Apostle, which was published in *Do Historical Matters Matter to Faith? A Critical Appraisal of Modern and Postmodern Approaches to Scripture*, edited by James K. Hoffmeier and Dennis R. Magary (Wheaton IL: Crossway, 405–426).
- Earthquakes and the Crises of Faith: Social Transformation in Late Antique Cyprus, *Buried History* 46: 2010, 5–16.
- The Sand Dwellers: New evidence from New Kingdom Sinai, later in *Ägypten und Levante/Egypt and the Levant* 26, 2016, 285–311, with James Hoffmeier and Rexine Hummel.
- Shaken and Stirred: Cyprus in the fourth century AD.
- An Amateur's Dream: George McFadden and the Excavation of Kourion, Cyprus.
- The Rise and Fall of Biblical Archaeology: towards a new paradigm; based on *Shifting Sands*.
- Current Cypriot Archaeology.

***Figure 3:** At Kantara Castle on the north coast of Cyprus, 2014. Tom on tour with members of the Kourion excavation team, many of whom were also his students at SWBTS. From the left: Stephen Humphreys, Ian Randall, Paul Martin †, Armour Patterson, Laura Swantek, Lucas Grimsley, Erin Beatty, Bill Weir, Tom, and Benjamin Ioset.*

His visit raised the profile of Cyprus in Australian universities, and his enthusiasm for the visit encouraged other significant American archaeologists to make the journey to Australia to lecture. Professor Bill Dever, for example, visited two years later.

Soon after returning to Cyprus from Australia, Tom was appointed Professor of Archaeology at Southwestern Baptist Theological Seminary (SWBTS), Fort Worth, TX. There he gathered a group of enthusiastic students who dug with him in Cyprus and elsewhere (Figure 3). He taught New Testament and Early Christian archaeology, while Professor Steve Ortiz, another Dever student, taught Old Testament archaeology. He directed the archaeological excavation of the Roman period site of Kourion, Cyprus, which began in 2012 and concluded in June 2024, a couple of months before his cancer diagnosis (Figure 4).

***Figure 4:** Tom at the CAARI Workshop in Nicosia on 16 June 2012. Image: Noël Siver.*

Figures 5 & 6: *In Australia September 2010. Left, Tom giving a seminar at The University of Sydney. and Right, Tom with the author at the Australian Institute of Archaeology when the wattle was in bloom.*

In 2019, SWBTS decided to discontinue the teaching of archaeology and the entire program, teaching and research, moved to Lipscomb University, Nashville, TN. While at Lipscomb University, Tom was also involved with excavations in Jordan, Egypt, Sudan, and Kazakhstan. He retired from teaching at Lipscomb University in May 2025.

In many respects, Tom was a larger-than-life character. He had a clear sense of the theatrical and, when speaking, would sometimes stray from the text to make a point dramatically. He revelled in Shakespeare. One day, he directed the Kourion dig as Forrest Gump; when he tried a second day there was an outcry, so he desisted, for a time at least. Emeritus Professor Peter Machinist, now of Harvard University tells how, at the University of Arizona, Tom, his teaching assistant in a history of the ancient Near East class, dressed up as King David in a fake animal skin and sandals 'to anwer all manner of questions about his reign', and how the class willingly comported themselves before him because they became so engaged in the play acting (https://www.springhill-memorial.com/obituaries/thomas-davis, accessed 27-12-2025).

Tom enjoyed being a tour guide but he was a notoriously bad driver, so after a first experience in a car with him, people often sought to travel in other vehicles. His wife, Jenny, had rules about his driving, such as not to use roads without white lines, which he generally observed.

In 1980, Tom had married his high school sweetheart, Jennifer (Jenny) Little, also of Lansdowne. They recently celebrated 45 years of marriage. Lately, Jenny had ceased working on excavations with Tom, and instead enjoyed travelling with him in Europe and the Middle East.

Tom was an avid reader. While he was an aficionado of JRR Tolkien, Sherlock Holmes, and medieval history, he was also a willing and conscientious reader of academic manuscripts, upon which he was able to offer trustworthy assessments and helpful advice. In this capacity, he was an active and valuable member of the *Buried History* Editorial Board. One evening, I gave Tom the final draft of a paper for a festschrift with the comment that there was a sentence in it, which I did not identify, that should probably be omitted. Next morning at breakfast, he agreed, 'yes it should, your argument does not need it.'

Tom was a committed churchman. He served as a Presbyterian elder, adult education teacher, missions committee member, and choir member, among other contributions. Tom was a member of Covenant Presbyterian Church in Nashville, TN, and was an active home church participant. In Cyprus, he had sympathy for eastern Orthodox practices and often attended the Episkopi Greek Orthodox church. The dig season always commenced with an on-site service of blessing conducted by the local priest. Kourion site departmental workers sometimes joined in and appreciated Tom's respect for their local customs.

ACOR has inaugurated the Professor Thomas W. Davis Annual Lecture in his memory. The first speaker was the Director General of the Directorate-General of Antiquities and Museums of the Syrian Arab Republic. There will be other commemorations in due course.

A significant memorial to Tom will be the final publication of the Kourion excavation. The original intention was to explore part of the city-plan, but you publish what you find, which turned out to be a substantial building with a water sytem, marble socles and statues, mosaic floors and personal objects of wealth. It will be a fitting tribute.

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Image: courtesy of Ellie Muraoka

Takamitsu Muraoka (1938 – 2026)

On February 10, 2026, Professor Takamitsu Muraoka (Hiroshima 1938 – Leiden 2026) passed away, one day after having celebrated his 88th birthday. Early in December 2025, the death of his wife of sixty years, Keiko, came as a terrible blow, and on Christmas Day 2025 Muraoka himself suffered a stroke, from which he never fully recovered.

The Muraoka family lived in a rural village in the Kagoshima Prefecture, in the far South of Japan. Muraoka's father was a high-ranking officer in the Japanese military and had envisioned a career for his son as a diplomat. The young man, however, much preferred the humanities and chose to read English philology and then Biblical languages and literature (Hebrew, Aramaic, and Greek) under Professor Masao Sekine at the Tōkyō Kyōiku University (nowadays University of Tsukuba). As a student he would occasionally visit his parental home; traveling by train from Tokyo at the time took about thirteen hours – a trip that he found pleasant and interesting, even more so than when the trains gradually became faster. In 1964 he went to study at the Hebrew University of Jerusalem (Israel) under various renowned Hebraists and Semitists, including E.Y. Kutscher, C. Rabin, S. Talmon and M. Goshen-Gottstein; that is where he acquired complete fluency in Modern Hebrew.

In 1970 Muraoka defended his Ph.D. dissertation, which was eventually published in a revised expanded version as *Emphatic Words and Structures in Biblical Hebrew* (Jerusalem/Leiden 1985). His dissertation would mark the beginning of a long and remarkable career in Semitic and Biblical philology, lexicography, and linguistics (Biblical and Qumran Hebrew, various types of Aramaic, and Septuagint Greek), with a special focus on syntax. The impressive depth and variety of his knowledge, combined with an indomitable working ethic, would earn Muraoka international fame and recognition as one of the world's greatest scholars in the field.

Immediately after defending his dissertation in 1970, he was appointed as a Lecturer for Semitic Languages at Manchester University (UK). From 1980 to 1991 Muraoka was a full professor of Middle Eastern Studies at Melbourne University (Australia). In 1991 he came to Leiden University (The Netherlands) to take the chair of Hebrew Language and Literature, Israelite Antiquities, and Ugaritic, a post he would hold until his retirement in 2003. Upon arrival in Leiden, he amazed his students by teaching in Dutch from the very start. The present writer remembers a scene during one of the first classes on Hebrew epigraphy. As we were reading the Shiloam inscription, Muraoka asked us about the meaning in Dutch of the word *garzen*. Convinced of his ignorance, we informed the professor that it meant *bijl* ('axe'). The professor hesitated for a moment and said: 'Een *bijl*? Hm, weet u zeker dat het geen *pikhouweel* is?' ('An axe? Hm, are you quite sure it isn't a pick-axe?') Of course the professor was right and the students were amazed at the level of preparation of their newly-arrived teacher.

Muraoka was the editor of the journal *Abr-Nahrain* (1980–1992) and co-edited several volumes on various aspects of Hebrew, Aramaic, and Greek. In 2017, he was awarded the Burkitt medal by the British Academy for his 'outstanding contribution to the study of Hebrew grammar and syntax, and the Septuagint.' A complete bibliography for the period 1964–2001 was published in the Festschrift for his sixty-fifth birthday, *Hamlet on a Hill* (2003: 631–44). The *otium* he enjoyed after his retirement as a Leiden Professor in 2003 enabled Muraoka to keep working with unremitting zeal on further major publications. Among his more recent works the following should be mentioned: *A Greek-English Lexicon of the Septuagint* (2009), *A Grammar of Qumran Aramaic* (2011), *An Introduction to Egyptian Aramaic* (2012), *Classical Syriac for Hebraists* (2nd ed., 2015), *A Biblical Aramaic Reader with an Outline Grammar* (2015), *A Biblical Hebrew Reader with an Outline Grammar* (2017), *Jacob of Serugh's Hexaemeron* (2018), *A Syntax of Qumran Hebrew* (2020), *Wisdom of Ben Sira* (2023), *The Book of Judith* (2025). It is worth pointing out that several other bulky works are still under way and will hopefully be published posthumously.

In his private life, there was another major project to which he devoted much of his time. His viewing of the famous 1957 film *The Bridge over the River Kwai* in 1970 for the first time opened his eyes to the dark pages of his own national history and the atrocities committed by the Japanese military forces. The film tells the story of the Thai-Burma railway, when many prisoners of war were forced to do hard labour, which led to the loss of tens of thousands of lives. The experience had a profound influence on his view of Japanese militarism and led to a fateful decision. Muraoka himself was a devout Christian. After his retirement from Leiden University in 2003 he made it a point to give yearly lecture series on biblical languages and the Septuagint for at least a month at Christian seminaries in various Asian countries that had suffered under the Japanese occupation, including South Korea, Indonesia, Singapore, Hong Kong, Shanghai, and the Philippines. (As of 2021 he did the same online.) He also edited and translated into Japanese the personal memoirs of E. Willem Lindeijer, a Dutch science teacher and medical orderly from the Dutch East Indies, who was held as a prisoner of war in Kamaishi (Iwate, Japan) during World War II and was forced to work in the iron mines there. This autobiographical document deeply impressed Muraoka since, despite the hardships described, it contained not a single reproach towards the Japanese. The book was published in Japan as *Kisses to Nell and the Children. From a Japanese Prisoner of War Camp* (ネルと子供たちにキスを—日本の捕虜収容所から; Tōkyō: Misuzu Shobō, 2000). It was used as the basis for a musical staged by pupils of a high school in Kamaishi in 2004. In 2015, Muraoka attended the Wednesday Demonstration for Japanese military comfort women victims held in Korea, on which occasion he spoke the following words: 'The history of the Japanese

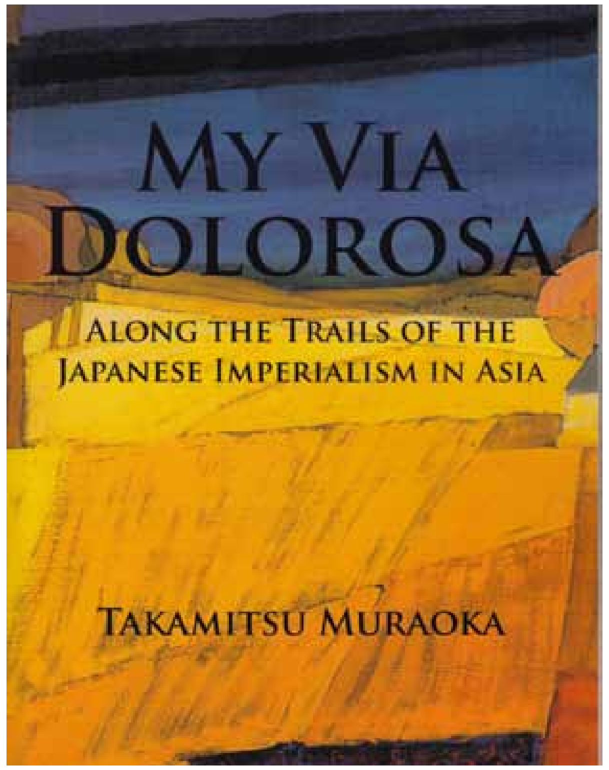

Figure 1: *The cover of* My Via Dolorosa: Along the Trails of the Japanese Imperialism in Asia, *AuthorHouse UK, 2016*.

military inflicting wounds on you and trampling your dignity as human beings is the history of my homeland, and I bear responsibility as a Japanese citizen. (…) As a Japanese citizen, I feel nothing but shame and intense anger at the current government's actions that worsen the wounds of the victims.'[1] In 2000, Muraoka was also a co-founder of the Foundation 'Dialogue Netherlands-Japan-Indonesia'. On his long-term endeavour towards international reconciliation Muraoka published a personal testimony, entitled *My Via Dolorosa. Along the Trails of the Japanese Imperialism in Asia* (Figure 1).

Takamitsu Muraoka will be remembered by his former colleagues and grateful students as a devoted teacher, a faithful mentor, a scholar of well-nigh unfathomable learning, and a remarkable human being.[2]

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Leiden University
17 February 2026

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1 *Seoul Economic Daily*, February 14, 2026 (https://en.sedaily.com/politics/2026/02/14/japanese-scholar-who-apologized-to-comfort-women-victims).

2 An interesting interview with Muraoka by William A. Ross is at https://williamaross.com/2018/02/08/12th-international-lxx-day-an-interview-with-t-muraoka/. A one-hour interview with him from 2024 for the Asian Biblical and Theological Network in Europe is at https://www.youtube.com/watch?v=5rNbIipxJeU.

Image: courtesy of Sarah Salter

Alison Glen (Sally) Salter (1933 – 2023)

Sally Salter died peacefully at Regis Aged Care in East Malvern on Friday, 29 December 2023, aged 90 years. During the last thirty-five years of her diverse life, she had developed an interest in archaeology and a passion for Cyprus. She was involved with archaeological excavation, collections management, publication and benefaction. After some initial frustration with the Australian Institute of Archaeology (the Institute) and its careless registration of Cypriot artefacts, she became a fellow traveller as we sorted through the many anomalies that had been created over the years. I am indebted to Sarah, Sally's daughter, for her Eulogy, and for checking this tribute.

Sally was born Alison Glen Stevenson in Melbourne on 17 December 1933 to parents with a Scottish heritage, James Glen Stevenson (1898–1957) and Irene Celia McCaw (1897–1978). James had taken over the management of a sheep station called *Benduck* from his father. It was located on the Murrumbidgee River near the Riverina town of Hay. His father, Alexander Glen Stevenson (1857–1932) was born at Kilbarchan, Renfrewshire, Scotland and arrived in Melbourne from Glasgow aboard the *Loch Ness* in December 1875. After gaining pastoral experience in southern NSW, he acquired the lease over *Benduck*, and in 1893 married Isabella Ayre (1867–1947) at the station. They had a family of eight children, many of whom went to live on other properties in the Riverina, as a result, Sally had many cousins nearby (in the Australian outback sense).

She grew up with her sister, Virginia, at *Benduck*. They were taught by a governess and survived the mischief that farm dwelling children are inclined to get up to. At sixteen she went to Clyde School, now Braemar College, Mount Macedon Campus, Victoria, where she and her sister matriculated, and then went to Janet Clarke Hall, a residential college of the University of Melbourne, for a short time. Interestingly, prior to World War II Melbourne archaeologist Veronica Seton-Williams also went to Clyde School, before going to Janet Clarke Hall with Nancy Champion de Crespigny from Adelaide. They both completed degrees at University of Melbourne and then left Australia to study archaeology in England, where they became Australia's first female archaeologists. Sally's archaeological interests and adventures were still well in the future.

Sally returned to *Benduck* and worked as a governess in the Hay district. In 1957 she married a Sydney man, Irvine Christopher Salter, in Melbourne and returned with him to live at Killara, a suburb of Sydney. Her

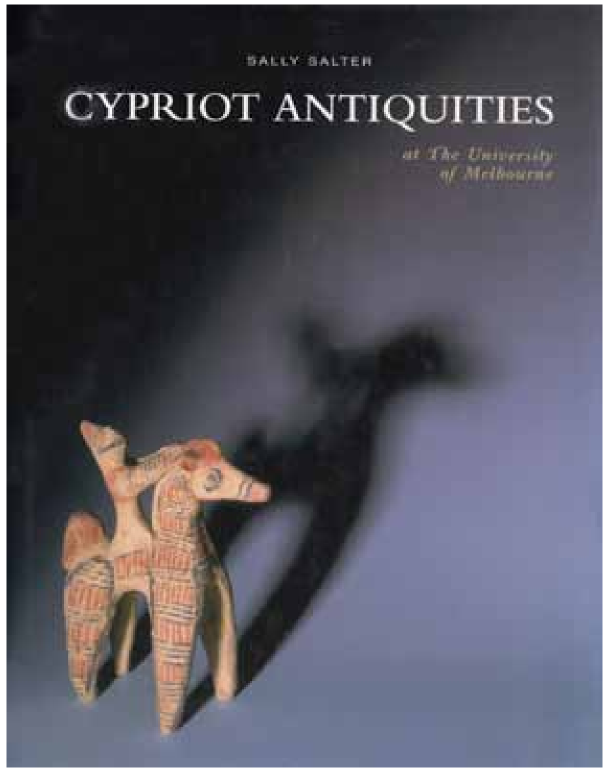

Figure 1: *The cover of Sally Salter's* A Catalogue of Cypriot Antiquities at the University of Melbourne and in the Ian Potter Museum of Art *(Melbourne: Macmillan Art Publishing, 2008). It has 271 pages, a size of 325x250mm, and colour throughout.*

daughter Sarah was born there. It was a short marriage, and mother and daughter returned to Melbourne to live in Mentone, and then in Glen Iris/East Malvern, where Sally lived for the rest of her life. Sally turned to teaching and soon after enrolled at Monash University, where she completed a degree in French, Anthropology, Sociology, and History, and a Dip. Ed. With these credentials she was able to work as a fully qualified teacher, mainly at private schools, including St Michael's Grammar School and the Methodist Ladies College.

In 1988, Sally retired from teaching and promptly set about a new venture by enrolling in a Bachelor of Letters at the University of Melbourne to study Classics, the Ancient Near East, and archaeology. She completed the bachelor degree, excavated at archaeological sites in Tasmania, Cyprus, Israel, Jordan, and Eastern Türkiye, and assisted with the curating of the University's archaeological museum collection, some of which had been acquired from the Institute. At the suggestion of Professor Tony Sagona, Sally focussed on the cataloguing of the University's Cypriot collection. This work developed into a publication, *A Catalogue of Cypriot Antiquities at the University of Melbourne and in the Ian Potter Museum of Art* (Melbourne: Macmillan Art Publishing, 2008). It is unlikely that Tony expected that it would be produced in such a lavish coffee-table style (Figure 1). Dr Robert Merrillees wrote the introduction to the book, which featured large studio images of the pots with detailed descriptions and commentaries. Some objects from Cyprus, held by the Institute, were included in the book to illustrate the discussion of the typologies.

Sally had a broad range of interests, and she was never a passive member of the associations to which she belonged. On several occasions she invited me to talk to a discussion group at the Lyceum Club that she helped organise. She regularly attended Janet Clarke Hall alumni events and was involved in documenting its history. She became a frequent international traveller, visiting many countries in Europe and the Middle East. Paris was a favourite because she could apply her French language skills there.

Sally retained a sharp intellect until the end. I saw her about a month before she died and we talked about Australian politics with some dissatisfaction, amongst many other matters; but I sensed that I was diverting her from Scrabble, which she played regularly with her friends. She could discuss most subjects with current information derived from newspapers and journals. She had a deep interest in education, especially religious instruction in schools, and a commitment to conservation and liberal politics in the true sense. Sarah remembers her mother trooping off to the Melbourne Town Hall in 1977 to attend Don Chipp's launch of the Australian Democrats. Her funeral service was held at St James Anglican Church, High Street, Glen Iris, where she had been an active member for many years. Sally gave sound advice and was generous, contributing to many archaeological activities at the University of Melbourne and the Institute. Unfortunately, well-educated and capable enthusiasts like Sally are becoming less common in archaeology.

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Khirokitia, an idiosyncratic Neolithic settlement in Cyprus, its putative foreign relations, and integrity in archaeological research

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Abstract: This study enquires into a groundstone artefact from the Cypriot Neolithic site of Khirokitia, claimed by James Mellaart to have been found in the northern Levant. In doing so, it pursues the broader issue of integrity in archaeological research. The method followed here is to scrutinise the archaeological record available to Mellaart in the 1960s and 1970s, when the claim was made, followed by an examination of recent archaeological research conducted over the past half-century. Since there is no citation or physical evidence of the claimed item, or evidence that other Cypriot Neolithic materials were transferred to the mainland, it is argued that the piece never existed. The case is integrated into a register of suspect claims made by Mellaart over sixty years and concludes that the harm done in fabricating ancient societies' material culture – a pastime sometimes taken too lightly – is a serious matter which deserves more attention from the academic community.

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Introduction

This paper concerns a claim about the foreign relations of the Neolithic site of Khirokitia in Cyprus (ca. 7,000–6,000 cal BC) that centres on a single groundstone artefact. The existence of the object, ostensibly relating to excavations conducted in the northern Levant by Robert Braidwood in the 1930s, was asserted briefly by the archaeologist James Mellaart in two books published respectively in 1965 and 1975. The claim is suspect because the item cannot be found, and the likelihood is that it never existed. By itself this issue may seem to be a minor matter but it constitutes a new addition to a large body of dubious proposals that were advanced by Mellaart. They have been discussed and remained in the public arena over a period of eight decades, from the 1950s up to the published opinions of Woudhuizen (Zangger 2018) and Duru (2020). Overall, Mellaart's catalogue of claims may represent the most significant incident of academic misconduct in twentieth-century archaeology. Scholars had been searching for the origins of the idiosyncratic Khirokitia Culture on the Levantine or Antaolian mainland for decades, and if Mellaart's claim were true, it should have been heralded as something of a breakthrough. Apparently, however, the case provoked no comment in the literature at the time.

In his pioneering work on academic misconduct, Charles Babbage (1830: 175–181) differentiated 'forging' from 'hoaxing'. The latter term he applied to fabricated events that were later intended to be revealed to humiliate the gullible. He used the former term not to refer to the physical manufacture of artefacts or other items but to imaginary items or events. This is the situation that best applies to Mellaart's oeuvre because he never admitted that any of his suspect claims (none of which ever materialized) were other than true, even when he came under intense criticism about them. Occupying a secure academic position, and recognized as a leader in his field, Mellaart gained nothing by his suspect claims. On the contrary, they were instrumental in damaging his international reputation.

Yet, Mellaart's achievements in the real archaeological world were prodigious. During the 1950s, when leading archaeologists still insisted that there could not have been any occupation in Anatolia during the Neolithic period (Özdoğan 2020: 201), Mellaart undertook systematic archaeological surveys in the region and located key Neolithic and Chalcolithic sites. In so doing he became an archaeological prospector without peer. In 1954, Mellaart found the Early Bronze Age site of Beycesultan, and went on to co-direct the excavations there and publish the site with his subsequent manager at the British Institute of Archaeology at Ankara, Seton Lloyd (Lloyd and Mellaart 1965). In 1956, Mellaart discovered Chalcolithic Hacilar, directed excavations at the site, and subsequently published them (Mellaart 1970). In 1958, he discovered the unparalleled Neolithic settlement of Çatalhöyük, directed excavations there too, and published them in various places (e.g. Mellaart 1967). Mellaart virtually invented the genre of Anatolian prehistoric archaeology. As Ozdoğan (2020: 189) put it, 'James Mellaart became famous by discovering evidence so important that it was reason to re-evaluate the configuration of the history of civilization.' By the close of the 1950s, Mellaart had taken up the role of assistant director at the British Institute of Archaeology at Ankara (Burney 2012) and was already considered as one of Near Eastern Archaeology's brightest stars. He had made numerous discoveries that most young archaeologists could only dream of. The shadowy, alternative career he developed that stalked his genuine achievements becomes then all the more poignant, and represents a significant and probably unparallelled case in the history of twentieth-century archaeology.

Unravelling invented finds is more difficult than the investigation of physical counterfeits. The latter type can be inspected, analysed and considered by groups of experts but in the former case there is nothing tangible to evaluate. Freckelton (2016: 61) sums up the issue:

> *Outright fabrication, known as forging in the Babbage taxonomy of fraud, has proven to be the most successful form of misconduct for researchers because it provides a carte blanche of opportunities for complete faking of outcomes. This avoids the risk that others might detect research flaws such as inappropriate sampling, problematic methodologies or unjustifiable misinterpretation of data.*

The method used here is to review the archaeological record of the region from which Mellaart claimed his find, utilising prevailing knowledge available in the mid-1970s.

The search is necessarily long and painstaking. To seek out parallels in the literature to a distinctive artefact type is to have a clear target in mind. But the contrary process, the search for an artefact type that may have never existed in the first place, could become a limitless quest. If Mellaart's object was an adventitious find, then one might expect further Cypriot examples to have turned up on the mainland in the past half-century when systematic archaeological research has been undertaken by professional archaeologists on hundreds of archaeological sites. Hence, these more recent projects are also examined below.

A putative Neolithic groundstone artefact from Cyprus, claimed from the northern Levant

In single sentences, Mellaart detailed the groundstone object in question in two books published a decade apart. The first one was his 1965 work, *Earliest Civilizations of the Near East*, and the second his 1975 textbook, *The Neolithic of The Near East*.

The 1965 mention ran:

> *It also points to Ras Shamra, another early maritime site in north Syria and to the Amuq (plain of Antioch) where a stone vessel of Khirokitia type was found in levels of the Amuq A period* (Mellaart 1965: 53).

The second reference was somewhat different and its wording carries significant implications for the interpretation of Mellaart's claim:

> *This deficiency (of pottery at Khirokitia) was offset by some of the most elegant and striking stoneware produced anywhere in the Near East, and the discovery of a fragment of such a stone vessel in Amuq A shows that these products were occasionally exported (Mellaart 1975: 130).*

In both cases, Mellaart provided no description of the alleged groundstone item and gave no citation for it in the

Figure 1: *Selected northeast Mediterranean Neolithic sites cited in the text.*

text. It was subtly but vaguely attributed to a provenance in the northern Levant. Yet, the assertion that it is 'in Amuq A' significantly limits the possibilities of its origins. Before following this line of evidence further, it is worth introducing the site of Khirokitia to explain its context and importance in Mediterranean prehistory.

Khirokitia, an idiosyncratic Neolithic settlement in Cyprus

Khirokitia (Khirokitia *Vouni*; also Choirokitia) is a Late Aceramic Neolithic village site located near Larnaca in southern Cyprus (Figure 1). Dating 7,200 –5,800 cal BC, the settlement is large, at six hectares in area (Knapp 2013: 120–158; Le Brun 2021). The architectural pattern is marked by thick-walled round stone houses delimited by a series of stone perimeter walls that are unparalleled for this period in the eastern Mediterranean. Currently, the well-preserved site is considered noteworthy enough to be listed on UNESCO's World Heritage list (UNESCO World Heritage Centre 2024), but from the period of its discovery in the 1930s until the 1980s, when earlier village settlements in Cyprus were discovered, Khirokitia held an even more significant status as the earliest evidence for village life on the island. Its unusual buildings and other built features found no parallel in contemporaneous Neolithic settlements in Cyprus, or on the mainland, leaving Khirokitia as something of an enigma.

Khirokitia was discovered by Porphyrios Dikaios in 1934 (Dikaios 1936a; 1953:1) and excavated by him from 1936 to 1946. Subsequently, Dikaios published his final report on the site in 1953. Cultural sediments were immediately accessible below the surface, a circumstance which assisted Dikaios in clearing broad areas and revealing a substantial portion of the village layout. Chronologically there were two aceramic phases

Figure 2: *. View of the excavations at Neolithic Khirokitia, indicating its robust curvilinear architecture (photograph by author).*

followed by a long break, before the site was re-occupied by occupants who introduced ceramics (the so-called Sotira culture). The aceramic period is the one of interest for this study, and the one which Mellaart refers to in his textbook. Three concordant radiocarbon dates of 7570 ± 125 BP, 7710 ± 160 BP and 7500 ± 160 BP for early layers of the site were subsequently obtained in 1960 (Östlund & Engstrand 1960: 194), which Dikaios (1962: 193) averaged to present an estimate of 5,630 ± 150 BCE. This was before the dendrochronological calibration of radiocarbon dates became established in the 1970s (unless otherwise stated, all further dates discussed below cited as 'cal BC' are dendrochronologically calibrated). These, then, were the main results known to Mellaart when he produced his textbook in the mid-1970s. It is useful to now provide further detail about the site and consider how it was regarded by scholars at that time.

Khirokitia, as known in the mid-1970s

The houses of Khirokitia were stoutly built with thick, lower walls of stone, sometimes doubled, which supported upper stages of pisé and perishable materials (Figure 2). They were understood to form beehive-shaped domes. Some of the circular buildings were arranged as multicellular units, associated with courtyards and covered passages (Dikaios 1953). The most unusual feature of the settlement plan was a broad, well-paved road which wended its way through the village. Indirect evidence in the form of flint sickle blades and numerous stone food-processing implements indicated the cultivation of crops. Sheep, goats and pigs were probably herded, although the means to demonstrate their domestication had not been established at the time of publication (King 1953). Evidence of fallow deer and other wild prey animals was also present, indicating the continuance of hunting.

The site's artefactual assemblages proved to be as distinctive as its architectural form and equally unlike anything found on the mainland. The flint industry lacked the bidirectional core reduction and fine finish of projectile points from the Levant. Conversely, the groundstone industry was sophisticated, comprising a variety of spouted bowls, dishes, and mortars, worked up from a variety of mafic stones, including andesite. The most elaborate pieces were embellished with relief decoration, which included raised dots and bands grouped into various motifs. Some of the vessels are unusually rectangular, whereas groundstone vessels of this period from Southwest Asia are invariably circular in form (Wright 1992). Most striking was the 'remarkable spouted bowl 813' (Dikaios 1953: 248), of which a photograph was included by Mellaart (1975: 132) in his book to illustrate Khirokitia's groundstone industry (Figures 3 and 4).

Dikaios' field methods and reporting standards were exemplary for the period he worked in. He was one of the first archaeologists in the eastern Mediterranean and the Near East to excavate the cultural deposits of large settlements stratigraphically, according to the slope and disposition of strata. He provided detailed plans and section drawings and conducted comprehensive analyses of all artefact categories and subsistence data. In reviewing the work, Weinberg (1957: 98) declared, 'No finer report of a prehistoric excavation exists, and the Department of Antiquities of Cyprus can be as proud of this first volume of its Monograph series as of its first departmental excavation at Khirokitia.'

In an attempt to find antecedents to the distinctive groundstone tradition of Khirokitia, Dikaios also undertook a literature survey of mainland Neolithic and

Figure 3: *Shallow andesite bowl (No. 813) from Khirokitia, Phase 1A (after Dikaios 1953, pl. 56).*

later sites, commencing with the Nile Delta, working up the Levantine coast, and turning west along the Cilician coast of Türkiye. Notably, Dikaios found no similarities in the Amuq Valley, and in fact did not mention the work of the Oriental Institute of Chicago in the region. He could find no parallels anywhere at all and he concluded (Dikaios 1953: 334) that: 'It is clear from this survey that in the countries adjoining Cyprus no cultural stage with an exclusive production of stone vessels comparable with that of Khirokitia has so far been discovered.'

Braidwood's research in the Plain of Antioch and the 'Amuq A' phase

Mellaart referred to his claimed stoneware piece from Khirokitia as belonging to the 'Amuq A' phase in Syria. It is critical to understand that 'Amuq A', from the Amuq Valley of the northern Levant (equivalent to the 'Plain of Antioch', or Amik Ovasi in Turkish) was an archaeological phase constructed by Braidwood, rather than a place (Braidwood & Braidwood 1960; Yener 2005:5). Culturally and geographically a seaboard extension of ancient Syria, the Amuq Valley is located within the multi-ethnic Hatay Province, or Hatay *vilayet*. The region has a complex political history. During the period when the Braidwoods from the Oriental Institute (now the Institute for the Study of Ancient Cultures, West Asia & North Africa, Chicago) were working and issuing their initial publications, the region was either part of

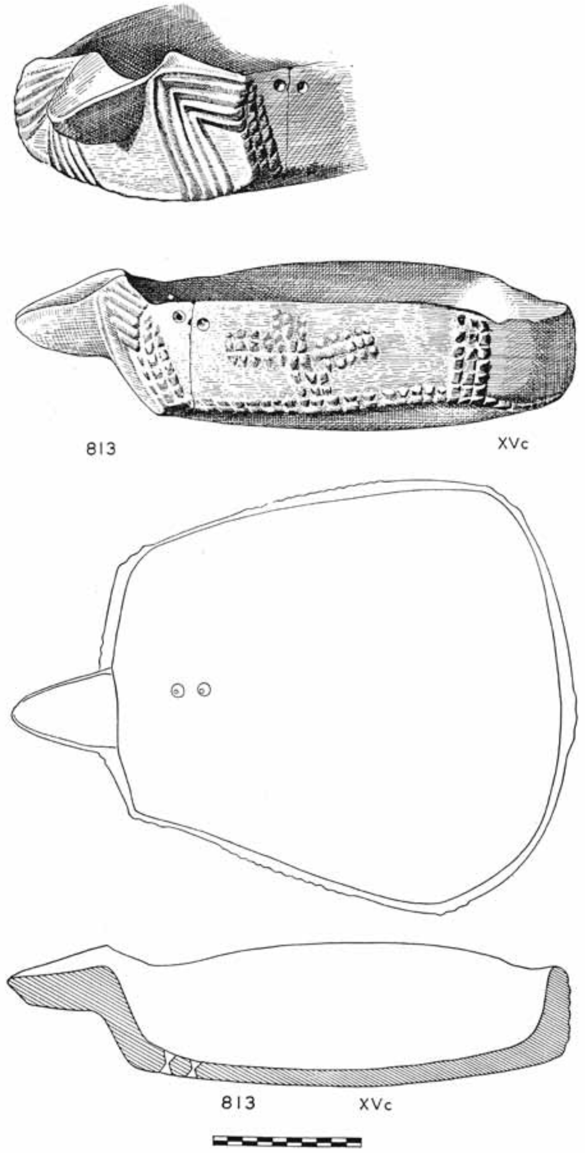

Figure 4: *Shallow andesite bowl (No. 813) from Khirokitia, Phase 1A (after Dikaios 1953, pl. 122).*

the French-mandated State of Syria or the independent Sanjak of Alexandretta. It has politically been part of Türkiye since 1939 (Sanjian 1956). Notably, Türkiye is the country in which James Mellaart conducted his principal archaeological fieldwork, and in which he travelled widely.

The Amuq prehistoric sequence of ten prehistoric phases (Amuq A–J, was devised by Robert Braidwood after his survey of 178 settlement mounds and excavation projects in the Amuq Valley (Braidwood 1937; Braidwood & Braidwood 1960). The Amuq phases were specifically based on stratified evidence from his excavation of eight *tells* in the plain during the 1930s. The earliest one, the Neolithic Amuq A phase, was recovered only from the lower reaches of the great 30-metre-deep pit dug into Tell al-Judaidah (Braidwood & Braidwood 1960: 46–47; McEwen 1937). Amuq A at Tell al-Judaidah was not then (and is still not) dated radiometrically. Few other survey finds were attributed to Amuq A, save for some items from O'Brien's (1933) excavations in a cave located about 500 metres away from Tell al-Judaidah. O'Brien describes and illustrates the finds clearly, and there is no groundstone item among them. Later phases of the Amuq sequence excavated in the 1930s were published somewhat later (Haines 1971). Following the work by the University of Chicago, Arik's team (1944) undertook a wide-ranging inspection tour, extending from central Anatolia to the Hatay. Arik visited some of the American sites and collected some pottery, but his team did not survey systematically or further excavate any of the Amuq Valley sites; neither he did he illustrate or mention any groundstone artefacts. To the south in Syria's middle Orontes valley, Courtois (1973) collected potsherds and lithics stylistically dated to the Chalcolithic and Late Neolithic periods.

It is critical to note that, when either of Mellaart's books had appeared, these parties had been the only archaeological teams who had worked in the region. The Chicago researchers detailed all of the groundstone objects from the Amuq A assemblage. According to the Braidwoods (Braidwood & Braidwood 1960: 55) they included 21 artefacts of limestone and one of marble, but none of volcanic stone, and none were referred to as Cypriot types. Eight pieces belonging to Braidwood's Amuq A collection were deposited in the Institute for the Study of Ancient Cultures Museum in Chicago, all of which were excavated from Tell Judaidah (University of Chicago 2024). A review of the raw materials involved has revealed that one piece (A125173) is limestone; one item (A125170) is not limestone as originally identified but calcite; five pieces (A125221 – A125223, A125258 – A125259) are greenstone, and a spouted vessel (A125224) is soapstone. Volcanic rock materials are absent.

It is now worth examining the later work done in the half-century after Mellaart's claim to ascertain whether Cypriot groundstone has since turned up on the mainland. To place the search in context, a review of later work undertaken at Khirokitia (and on the early settlement of Cyprus in general) is also provided to gauge how our understanding of Khirokitia has changed in the interim.

Research in adjacent regions: Cilicia and the northern Levantine coast

As the closest landfall to Cyprus, the Cilician coast of Türkiye in the northeastern corner of the Mediterranean is of special interest for investigating cultural antecedents to the early occupation of Cyprus Yümüktepe (ancient Mersin) is one of the nearest ceramic Neolithic sites to the Amuq Valley, and it is also the nearest mainland Neolithic settlement to Khirokitia. Garstang's (1953) excavations of the site revealed no Cypriot Neolithic materials. The site was later dated from 7,000 to 6,100 cal BC (Brami 2014), contemporary with aceramic Neolithic Khirokitia. Goldman's (1956) excavations at Gözlükule (ancient Tarsus) located some 20km inland returned the same negative result for the Neolithic layers. Soon afterwards, Seton-Williams (1954) made a comprehensive survey of 149 sites on the Cilician Plain, which revealed only three new Neolithic sites: Tarmil Höyük, Tatarli Hüyügu, and Şamşin Hüyügu. They were all identified by flint or obsidian artefacts. Further south, ss Dikaios had found in his literature survey, no parallels to, or examples of, Cypriot groundstone could be found at the two major coastal Levantine sites excavated at that time, Byblos (Dunand 1939, 1950) and Ras Shamra (Schaeffer 1935, 1936, 1937, 1938, 1939, 1954).

Later work on Khirokitia and earlier Cypriot settlements

Soon after Mellaart released his textbook in 1975, a series of new excavations at Khirokitia was initiated, first by Stanley Price (1977) and then by Le Brun and colleagues from 1977 to 1981 (Le Brun 1984), from 1983 to 1986 (Le Brun 1989), from 1988 to 1991 (Le Brun 1994a) and from 1993 until 2009 (Le Brun 2021). They confirmed that the settlement was based largely on food production. Domesticated einkorn, emmer, barley, pea and lentils were raised (Steel 2004: 60; Waines & Stanley Price 1977), and domesticated sheep, goat and pig were herded (Davis 1984: 151; Davis 1989: 189–210), while hunting of Fallow Deer and other game remained important. The supposed road was reevaluated as a town wall bordering the western side of the settlement, beyond which built occupation had later expanded. A second perimeter wall had then been built in an attempt to contain the burgeoning settlement (Le Brun 1994: 33–42). The thick-walled houses were revealed as flat-roofed, rather than as beehive-shaped domes (Le Brun 1984a: 26–27; 1984b). Further radiocarbon dates adjusted the dating of the Khirokitia Culture to 6,800–5,200 cal BC (Le Brun 1989: 17–20; Le Brun 1994a: 27–29; Manning 2013: 504–507), and the site was reassigned to the Late Aceramic Neolithic phase. Perhaps the major change in understanding Khirokitia was the discovery that the site was not an exemplar of initial colonisation but the outcome of a long chain of prior settlement of the island, beginning around 11,000 cal BC (Knapp 2013: 48–119).

Isolation, contact and culturogenesis

The singular characteristics of Khirokitia have long prompted discussion about the isolation of Neolithic Cyprus from the mainland. Steel (2004: 45) encapsulates this view by noting that 'present interpretations emphasise the internal development of this culture, hermetically sealed from outside influence thereby losing many of the cultural and economic attributes of its early aceramic Neolithic antecedents and failing to acquire or assimilate innovations, most notably pottery production.'

This view has receded, not only because of the long history of prior settlement on the island that led to the formation of the Khirokitia culture, but because of the paradox that exotic materials such as Anatolian obsidian, carnelian from Afghanistan, and even the ostensible stocking of mainland animals, had periodically arrived in Cyprus from the beginning of the Initial Ceramic Culture around 9,000 BCE, up until, and including, the occupation of Khirokitia (Dikaios 1953: 303–306; 316; Knapp 2013: 87, 90). Throughout this entire period, the maritime route from the Levantine mainland never exceeded a day's journey using simple boats or rafts (Bar-Yosef et al. 2015). Evidently, the mainland was always in reach of Cypriot Neolithic communities. Indeed, some scholars have considered the early Neolithic villagers in Cyprus as representing an expansion of the network of interlinked Levantine mainland communities, connected by sea lanes rather than separated by them (Broodbank 2006; Finlayson 2004).

The recent recognition of the creative agency that societies employ to structure their cultural repertoires makes more sense of the distinctiveness of the Khirokitia culture in its island setting. Social groups may apply strong selective evaluations when deciding which cultural practices they absorb, repudiating certain productions that are often deemed useful, such as pottery. In developing the concept of 'creative transformation', 'cultural hybridity', or 'culturogenesis', Thomas (1991) explained how indigenous Pacific islanders in the eighteenth century carefully selected which items offered by technologically advanced European visitors were integrated into their culture. A striking example is the reconfiguration muskets by the Solomon Islands and Marquesan communities (Thomas 1991:104–106). Guns were modified by engraving and inlaying their stocks with nacreous shell, thereby converting them into high-status clubs. These kinds of rapid configurations may occur virtually instantly with respect to long-term archaeological timeframes. Because cultural systems bifurcate continually as a result of intersocietal contact, such cases are numerous and vary widely in time. The process has been documented for the engagements of Archaic Greeks with native South Italians (Papadopoulos 2002), and new cultural forms which resulted from the encounters of ancient Romans with indigenous European tribes (Dietler 1998; Hedeager 2000).

Culturogenesis may also occur when an émigré faction settles unoccupied territories, a process which may be termed 'diasporic identity' (Palumbo-Liu 1999). The phenomenon may explain the spread of the Lapita cultural complex into Near and Remote Oceania. The Lapita 'peoples' were the first Polynesian colonists of the uninhabited islands of the Pacific, spreading rapidly after 3,000 years ago, and yet the distinctively incised Lapita ceramics found on newly settled islands of the Pacific show few antecedent parallels in Melanesia and mainland Southeast Asia (Spriggs 2003). These considerations provide a frame of reference in which to view émigré or diffused archaeological cultures of the neolithic Levant into Cyprus. Not only Khirokitia but earlier Initial Aceramic Neolithic Cypriot settlements appear to be significantly different from their Levantine antecedents in many ways. While Parekklishia *Shillourokambos* (ca. 8,400–6,900 cal BC) shares lithic traditions with antecedent Levantine Pre-Pottery Neolithic B cultures, its architectural form is quite different from them (Guilaine, Briois and Vigne 2011; Knapp 2013: 88–89). One of the reasons why émigré groups may depart rapidly from their antecedents in social form is that they are composed of individuals deriving from different families, tribes or polities, unified only by their mission of exploration. The new settlers then coalesce into new social alliances that produce novel cultural traits and fashions, ultimately signalling reconstituted identities as a means to maintain solidarity. Lydon (1999) describes such a case among the early Chinese community in Sydney, Australia, which welcomed immigrants from diverse parts of mainland China into networks of mutual dependence, producing new social and cultural forms.

Further work in the Plain of Antioch and neighbouring regions

If Khirokitia groundstone was exported to the mainland, as Mellaart claimed, one might expect the modern research carried out over ensuing decades to have turned up further examples of it. This review of more recent projects in the Plain of Antioch and surrounding regions investigates this possibility. After an interval or over half of a century, the Oriental institute of Chicago brought the 'Amuq Valley Regional Projects' to the region, conducting excavations and intensive surveys from 1995 to 2002 (Yener 2005). Tell al-Judaidah was re-excavated, and Amuq A flaked stone and ceramic artefacts were collected in a survey of the sites Tell Kizilkaya, Hasanuşaği, Tell Kurdu, Dutlu Höyük and site AS 290 (Yener 2005: 212–255). No groundstone artefacts were reported. Yener (2005: 5) placed the ten-phase Amuq sequence chronologically between 6,000 and 2,000 cal BC. Amuq A was accorded a 6,800–6,500 cal BC age range by Akkermans and Schwartz (2005: 102–108). A comprehensive survey of cave sites in the Hatay fleshed out the region's rich Palaeolithic heritage (Yalçinkaya et al. 1999) but did not encounter Neolithic sites or groundstone artefacts.

New Neolithic sites in nearby regions were excavated by other teams without Cypriot groundstone being retrieved. They include the University of Tsukuba mission which investigated 22 tell sites of the Pre-Pottery Neolithic B (PPNB) and Pottery Neolithic periods in the Rouj Basin, located 40 km to the south of the Amuq Plain (Tsuneki 2012). The Pottery Neolithic period in this area is dated to 7,000–5,800 cal BC, overlapping the timespans of Khirokitia and the Amuq A phase. Further west on the Lebanese coast, Tabarja Wata Slam spans PPNB and Pottery Neolithic phases (Yazbeck 2020). There have been no vestiges of Cypriot Neolithic groundstone found in these sites. Caneva and colleagues (Caneva and Jean 2016) re-excavated the Neolithic layers of Yümüktepe in the twenty-first century without any Cypriot materials coming to light. Research on the Cilician plain has also been conducted more broadly by members of the Cilician Chronology Group (2017), with several occupation

mounds excavated. This work has included investigations of Neolithic deposits at Tarsus-Gözlükule and Tatarlı Höyük, with the same negative result. To sum up, present evidence indicates that not only were Cypriot Neolithic groundstone items not transferred to Southwest Asia, but that no Neolithic cultural materials at all were ever transported from the island to the mainland.

Alternative possibilities

Mellaart's descriptions of the Khirokitia-style groundstone item appeared ten years apart, with crucially different details involved in each case. Both narratives are examined in turn here, beginning with the more restricted 1975 version. It described a small fragment that might have been more easily lost or more difficult to notice than an entire vessel.

Regarding the 1975 version, the absence of any likely Cypriot groundstone fragments from Braidwood's Amuq A assemblage or elsewhere in the Amuq Valley or adjacent regions, leaves us with three possibilities:

1. Mellaart mistook a fragment in Braidwood's collection for a piece from Khirokitia,

2. Mellaart became aware of a fragment obtained from a non-permitted survey or excavation, or

3. Mellaart fabricated the existence of the piece.

In considering these possibilities in turn:

1. It is unlikely that Mellaart would make the elementary error of mistaking a small fragment of Levantine groundstone for the distinctive products of Khirokitia. Already by the end of the 1950s, Mellaart was established as a leading practitioner of Near Eastern prehistoric archaeology. During the 1950s, he had spent time excavating Pre-Pottery Neolithic deposits at Jericho (Kenyon and Holland 1981: ix; Mellaart 2020: 59). He also conducted his own surveys and excavations of Late Neolithic sites in the Jordan Valley (Kafafi 2011; Mellaart, 1956), and had participated in excavations in Cyprus (Davey 2021; Merrillees 2013). Mellaart knew the Neolithic material culture from Türkiye and Western Asia as well as any other practitioner. If we survey Mellaart's several books, articles and reviews on Middle Eastern material ranging in age from the Neolithic to the Bronze Age (e.g., Mellaart 1956, 1962, 1965, 1966, 1975) we note that he rigorously cited the genuine sites and artefacts that he utilised as evidence.

It is the suspect additions that are passed over in a few words, without reference. For example, the 'Ortakaraviran Höyük II Hittite unbaked clay seal' (Mellaart 1954) received no mention in-text, but just a brief description in a caption, located in an appendix. When the 'Dorak Treasure' was first announced (Mellaart 1959), it was said to contain the cartouche of Sahure, second king of the Egyptian Fifth Dynasty. This was a key inclusion because it provided an absolute date estimate for the assemblage and the inscription is well known. Perhaps less well-

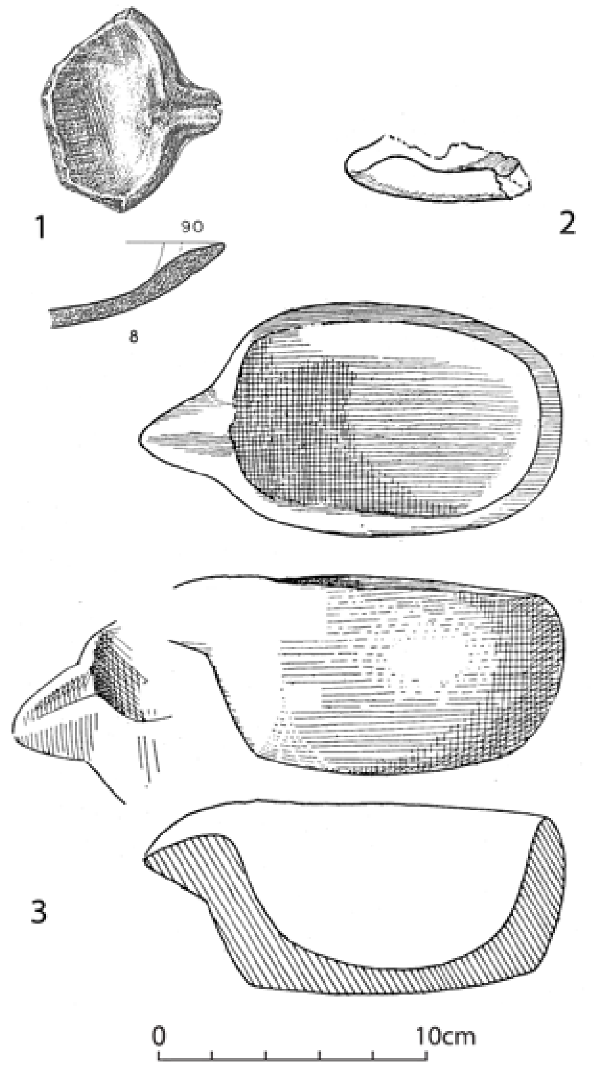

Figure 5: *1. Small soapstone vessel, Tell al-Judaidah, Amuq Phase A (after Braidwood & Braidwood 1960, 57; pl. 67.2); 2. Small spouted vessel, Yümüktepe, Neolithic phase (after Garstang 1953, 17; Fig. 9); 3. Spouted andesite bowl, Khirokitia, Phase 1A (after Dikaios 1953, pl. 115).*

known is that Mellaart (1962: 405) subsequently added a second Egyptian king into the mix, claiming with just three words in his contribution to the *Cambridge Ancient History* that the name of Sahure's successor, Neferirkare, had also been found amongst the Dorak burials.

If we set aside for a moment Mellaart's mastery of Middle Eastern Neolithic material, it might hypothetically be objected that he was referring to a specific stone vessel in the Tell al-Judaidah assemblage (Figure 5:1) when he made his claim (Braidwood & Braidwood 1960: 57, Fig. 32. 8, pl. 67.2). Viewed in plan, this small item does have a roughly oblong shape like No. 813 (Figure 3) and some of the Cypriot vessels, and like them, it does have a spout but it would have made an unconvincing parallel. The Tell al-Judaidah example is a tiny, shallow vessel only 6.6 cm across, much smaller than the deep-walled Cypriot types (e.g. Figure 5:3). It is also made from soapstone rather than igneous stone like the Cypriot ones. It is held in the University of Chicago under the registration number A125224 (University of Chicago, 2024; https://isac-idb.uchicago.edu/id/8f828256-05b9-4582-ae1c-b9b2c4ce0a9f), listed as a shallow, semi-hemispherical soapstone vessel fragment with flattened lip & short, open spout. Braidwood & Braidwood (1960: 57) originally ventured that the vessel functioned as an oil lamp. Tellingly, this type of lamp is absent from the Khirokitia range. On the other hand, it is known from the mainland Neolithic, for example at Yümüktepe. Here, Garstang (1953: 17) described a small, spouted, stone 'oil lamp' (Figure 5:2) of almost identical size to the Tell al-Judaidah example. The piece from Yümüktepe was found in the lowest Neolithic layers of the site. Mellaart, as one of the leading specialists of the Anatolian Neolithic, was well-versed in Garstang's work completed in the 1950s (e.g. Mellaart 1975: 125–129). He had also conducted an intensive examination of the Amuq sequence by the mid-1950s, including some unpublished material from it, when reviewing the external connections of the Neolithic site of Ghrubba that he had excavated in Jordan (Mellaart 1956).

2. If Mellaart's groundstone vessel existed, it would only be feasible that it was collected by a non-permitted project, or found by a local person, or noticed somewhere in a local museum. Mellaart did not survey in Syria or the Hatay region himself and had declined an offer from the Syrian antiquities authority to survey in the Aleppo region (Mellaart 2020: 85). Mellaart gave no details about who discovered the piece and when, and where the object resides. A reference to the whereabouts of the item would have simply clarified the case. It would enable us to decide whether the item is indeed a characteristic piece of the Khirokitia culture or just one of many vessel body sherds that would be indistinguishable from any normal worked piece of volcanic stone sourced from the mainland. We are not even told whether it was made of limestone, in which case it would be even less obviously Cypriot.

Although he gives no detail in the text, Mellaart does allude to the decorated groundstone types from Khirokitia by illustrating the rectangular bowl, No. 813, on the next page. He could have only stylistically attributed a groundstone item to Khirokitia if it were one of the minority of pieces which feature raised knobs and bands organised into various motifs. Only 24 of 275 stone bowls illustrated by Dikaios (1953: Pls xli – lxviii), or less than 10% of the output at Khirokitia resemble # 813 in shape, and only 12 per cent of vessels and fragments are embellished with raised decoration in relief. Even fewer examples of decorated groundstone vessels were unearthed in Le Brun's subsequent excavation campaigns, and none of the elaborate nature of No. 813 were found. Of the 485 examples figured in Le Brun's reports (Mouton 1984; Saliou 1989; Le Brun 1994b), only one deep bowl is decorated (Le Brun 1994b: 200, Fig. 84).

Had the piece been available, it would also have been available for geochemical analysis, which could have determined whether it was reduced from a Syrian volcanic rock (Trifonov et al. 2011) or a fragment from the complex array of Cypriot volcanic rocks (Portyagin 2005a, 2005b; Silantyev 2005).

The 1965 passage constricts the possibilities for the veracity of the groundstone object even further and renders it even less likely to have existed. Mellaart claimed that the groundstone piece was specifically excavated from Amuq A levels, and in those days, that was something that only Braidwood had done. The fact that an entire vessel is claimed also makes it harder to explain how it was overlooked by everybody but Mellaart, and deepens the mystery as to its whereabouts.

The publication venues for Mellaart's groundstone item are also curious, given the object's potential for establishing contacts between Khirokitia and mainland society. One might have thought that such a discovery merited a separate, high-profile paper. However, that choice, assuming the piece did not exist, would have left Mellaart in a quandary, because he would have had no details to discuss. On the contrary, the claim could not be more low-profile. It is made obscurely in one sentence in either book, sandwiched between other considerations.

In Mellaart's encyclopaedic 1975 textbook, the piece's short mention is left for the observant reader to find amidst a long volume crammed with data. It is not even placed within the section (Mellaart 1975:132) where the Khirokitia groundstone industry is described.

We also need to ask how Mellaart could feasibly link the tiny vessel from Tell al-Judaidah with Khirokitia when all of the experts (des Places 1963; Dyson 1961; Hanfmann 1961; Mellink 1962; Schaeffer & Courtois 1963; Tadmor 1964; Wright 1963) who scrutinized the Braidwoods' *Excavations in the Plain of Antioch* missed such a connection? Schaeffer & Courtois (1963) focussed on the groundstone artefacts from the Amuq A phase and noted several resemblances to Tell Soukas and Ras Shamra on the Syrian coast, but made no mention of Cyprus. Schaeffer (1952) was familiar with the archaeology of Cyprus, having excavated there for several years. Mellink (1962) noted strong similarities between Amuq A and the archaeological record of Cilicia (as also noted in this article), but not to Cyprus.

Robert Braidwood demonstrated his intimate knowledge of regional links in his discussion of the Neolithic of the Near East (Braidwood 1957). In this study, he also marked his familiarity with Khirokitia. If his excavations in the Amuq Valley had yielded any reasonable connections to explain the origin of the Khirokitia culture, then he would surely have wanted to remark upon them before anybody else. Although the greater part of *Excavations in the Plain of Antioch* was completed by 1947 (Braidwood and Braidwood 1960: vii), before the final report by Dikaios on Khirokitia in 1953, abundant details about the site and its groundstone industry had been available for many years. From the commencement of excavations until their completion Dikaios kept up a steady stream of articles about the site (Dikaios 1936a, 1936b, 1936c, 1940a, 1940b, 1946a, 1946b) and contributions to digests of recent work (Cook 1946; Megaw 1936; Payne 1934; Robertson 1939, Young 1937, 1938).

3. It is most likely that Mellaart fabricated the existence of the exported groundstone piece from Khirokitia. His method of explaining the item fits a pattern of similar unsubstantiated claims he forwarded, spanning some seven decades, from the 1950s to his death in 2012. The most notable of them was the so called 'Dorak Affair', for which Mellaart is best known (Pearson & Connor 1967; Schürr 2025). In brief, in the 1950s while visiting the house of a young woman in Izmir, who he had just met on a train, Mellaart claimed to have drawn and recorded a rich and varied assemblage of Early Bronze Age grave goods. The objects were said to come from elite burials originally found at the village of Dorak in northwestern Türkiye . Mellaart (1959) subsequently published the collection in the *Illustrated London News* (*cf.* Davey 2021, 38–39). Investigations could find no trace of the woman or her house (Pearson and Connor 1967) and further investigations in the village found no traces of Early Bronze Age tombs or materials (Özdoğan 2020: 218; TAY 2018;). The 'Dorak Treasure' never emerged into the light, whether on the antiquities market, or by other means.

Many of Mellaart's other unsubstantiated claims have not been as well emphasized, and there may be some, like the one reported here, that still lie unrecognised. Some of the unsubstantiated claims were published directly by Mellaart. Others were noted by various authors, and some such as the Beyköy text were handed on to colleagues in the hope that they would publish them. Besides Dorak, they include the Ortakaraviran Höyük II Hittite unbaked clay seal, reported by Mellaart as having been discovered by him in 1951 (Hawkins 2024; Mellaart 1954). Others were a series of up to 70 wall paintings said to have been discovered during the excavations of the Neolithic site of Çatalhöyük in the 1960s, but first announced by Mellaart much later in the 1980s (Collon 1990; Czeszewska 2014; Lamberg-Karlovsky 1992; Mallett 1990; Mallett 1993; Mazur 2005; Mellaart 1989, 1991), advanced weaving techniques at Çatalhöyük, claimed as the remains of Turkish rugs (Mallett 1990, 1993), a corpus of inscribed Neolithic plaques in unbaked clay, claimed as excavated from the Deep Sounding at Çatalhöyük in 1963 (Collon 1990), 150 alleged engraved prehistoric beach pebbles from south-western Türkiye, near the Palaeolithic to Neolithic cave site of Beldibi (Muscarella 2000: 143; Mazur 2005), and the 29-metre-long stone 'Beyköy Inscription', supposedly commissioned 'by the Great King of Mira, Kupanta-Kurunta, ca.1180 BC', written in Luwian Hieroglyphic. This piece Mellaart baselessly claimed to have been found in 1878 by the French antiquary, Georges Perrot (Hawkins 2024; Zangger 2018). Further supposed texts included 'Assurbanipal's Letter to Ardu' and the 'Hattusili III Annals', both discredited by Zanger (2018) and Hawkins (2024).

To this catalogue can be added anthropomorphic ceramic vessels and figurines attributed to the Chalcolithic site of Hacilar, which Mellaart excavated from 1956 (Mellaart 1970). This is a significant case because some of the ceramic output from Hacilar was undoubtedly genuine and dated to the fifth millennium BCE but a second series of artefacts (48 out of 66 examples) was dated as recent by thermoluminescence and so the objects were established as fakes. Initially, Mellaart was suspected to have had a hand in the production of these pieces but, ultimately, he was exonerated and found not to have had anything to do with their production. However, there is one Hacilar figurine that is startlingly different from the others. The purported object is a ceramic figurine representing a human couple intertwined in coitus, described by Mellaart as 'mating' (Mellaart et al 1989 Vol. II: 52, pl. 14; Muscarella 2000: 140). It is known only from the publication, *The Goddess from Anatolia* and, as fits Mellaart's invariant approach when issuing these dubious objects, it lacks a photograph, is known only from a drawing, and has no provenance. It is not a piece that made an appearance in the publication of the Hacilar excavations (Mellaart 1970). Even during the awkward period when he was suspected of forging Hacilar ceramics that had found their way onto the market, it seems that Mellaart could not quell his long-term habit of creating fabrications, and so he drew imaginary Hacilar figurines. The Khirokitia vessel completes Mellaart's charge sheet. Its presence infills the period between his other claims of the 1950s and the 1980s, and creates a persistent series of fabrications that continued for seven decades. Together, these examples indicate a pattern of behaviour that did not cease throughout Mellaart's entire career.

Reactions to Mellaart's claims

Upon its publication, Mellaart's groundstone artefact should have generated significant interest by shining new light on mainland connections to the enigmatic Khirokitia culture, which had remained a mystery for several decades. One might have expected it to have prompted some comment in the academic literature, but this did not happen at all. Specialist books on the island's archaeology, such as those by Karageorghis (1982) through to Steel (2004) do not mention the find. Knapp (2013:152–53), in his comprehensive survey of the Cypriot Neolithic eventually did cite the occurrence, albeit without any sense of endorsement.

Scholars' avoidance of Mellaart's Khirokitia claim recapitulates the reception of the Dorak Treasure in publications on the Anatolian Early Bronze Age. Very few scholars ever included Dorak in reviews of the period, other than Lloyd (1967), Mellaart's doctoral student, Turhan Kiamil (1980: 133), and David Stronach, who wrote an unpublished metallurgical review of the purported finds. Even as he describes the Dorak collection Lloyd (1967: 19) betrays some apprehension about it, noting that some 'mystery' surrounds its circumstances and that it is dated 'almost miraculously' (Lloyd 1967: 32) by the inclusion of an Egyptian Fifth Dynasty cartouche. His doubts were remarkably pre-empted by the General Editor of the series in his preface to the book, who more or less warns the reader off the objects by remarking that 'some of us would prefer to suspend judgment on them' (Piggot 1967: 7), and these views are echoed by a reviewer of the volume, objecting to 'much that is questionable' in it (Mitten 1969: 328). Notably, both Lloyd (1986: 164) and Stronach (2020) later regretted their initial endorsement of Dorak. Most surprisingly, Mellaart failed to include Dorak in his own book on the Anatolian Early Bronze Age (Mellaart 1978), despite billing the site as the most important find in Middle Eastern archaeology since the discovery of the Royal Graves at Ur (Mellaart 1959). Most researchers have clearly not been prepared to take Mellaart's unsubstantiated claims about Dorak seriously.

Research fabrications and codes of conduct

Freckelton (2016) notes several motives for indulging in academic hoaxes. They may be forwarded simply as an outlet for pranksterism or trickery, for financial advantage, as forms of swindlery or extortion, or performed out of malice in attempts to make other scholars look foolish. An obvious reason is also to obtain advanced academic recognition, or promotion for financial gain. Such a case usually involves the actual production of counterfeit artefacts. Shinichi Fujimura, for example, attempted to establish a Lower to Upper Palaeolithic sequence in Japan by planting fake stone artefacts (Normile 2001).

These alternatives do not capture the essence of Mellaart's motivation. Although he was occasionally accused of creating forgeries such as the Beldibi pebbles (Mazur 2005) and was found to have prepared Neolithic images carved on schist pieces after his death (Jarus 2018), Mellaart was mainly preoccupied with inventing non-existent finds and publishing them. He rarely extended himself to making objects, and he did not benefit by trafficking in forged artefacts. Far from profiting from these efforts, Mellaart was criticised for them and consequently he incurred a loss of reputation. The interrogations undermined his status as one of the greats of Near Eastern archaeology, and so his motives remain unclear. It is notable that causes such as obsession or mental illness are not considered by Freckleton (2016) but they may have underlain Mellaart's behaviour. He appears to have been unable to cease the practice of invention throughout his long career. Ian Hodder was a student of Mellaart's at the Institute of Archaeology in London and succeeded him in excavating the matchless Neolithic site of Çatalhöyük (Hodder 2011). Hodder (2015: 4019) displays his affection for Mellaart: 'As a person he was engaging, generous and kind, a charming sparkling companion especially when downing his Scotch whisky and handling a Dutch cigar.' He is also frank about his shortcomings: 'In later years it became clear that Mellaart had a habit of imagining evidence' (Hodder 2015: 415) and that he was possessed of 'an ambitious drive to make spectacular and sensational discoveries that led him into a series of undocumented imaginings' (Hodder 2015: 419).

Currently, most institutions, national governments, and even supra-national organisations require specific codes of research conduct for compliance. For example, the European Code of Conduct for Research Integrity (ALLEA 2023, Section 3.1) states that:

> *Research misconduct is traditionally defined as fabrication, falsification, or plagiarism (the so-called FFP categorisation) in proposing, performing, or reviewing research, or in reporting research results…Fabrication is making up data or results and recording them as if they were real.*

No codes of research conduct were in place during the years that Mellaart worked at institutions such as the British Institute of Archaeology at Ankara and University College London, so he did not officially transgress any regulations. To put Mellaart's actions into context, it would be unthinkable in the current day that the director of an institute, when faced with claims from a staff member to have discovered unknown artefacts or even entire sites, would ignore the conflict of credibility that such a claim represented, or even permit their publication to occur (such as Seton Lloyd did with Mellaart's proposal about the Dorak treasure). rather than disciplining or dismissing the employee. Another positive course of action that could have arisen if such codes and policies had then existed (and one which is rarely considered among the polarized opinions of Mellaart), is that he might have been sympathetically counselled and treated by health professionals.

Mellaart's *modus operandi* is perhaps unparalleled in the annals of archaeology, but counterparts do exist in the social sciences. Diederik Stapel was a successful professor of social psychology, and the Dean of Tilburg University's School of Social and Behavioural Sciences in the Netherlands. Popular, charismatic and influential, Stapel had a large corpus of genuine, influential scientific publications to his name. During his career, he simply began to fabricate evidence in scientific papers. As a result, Stapel was sacked from his job, had his doctoral degree revoked, and was prosecuted in court in 2013. A plea deal led to him serving 120 hours' community service and forfeiting 18 months' wages (Callaway 2011; Freckleton 2016: 75–80). When asked why he strayed into this kind of behaviour, Stapel explained: 'I wanted too much, too fast' (Kelland 2011).

Apart from the loss of prestige for an institution, economically this kind of behaviour constitutes a waste of valuable public funding, when practitioners utilise

salaried positions and research funds to fabricate data. Apologists for Mellaart have often employed understated expressions to mitigate the criticisms against him, such as that 'he had gone too far at times' (Milmo 2018), that he was 'creative' in order to 'build a story' (Alan Mellaart, in Ramirez 2020), or that 'He might at times have been guilty of wishful thinking, but he was incapable of deliberate invention' (Burney 2012: iii). These terms are euphemisms. The objective phraseology is that Mellaart fabricated scientific evidence. Commentators have sometimes countered that writing prehistory involves a certain amount of latitude and imagination. Admittedly, to engage in such speculations may not be as serious as a fraudulent medical scientist forwarding bogus cures for cancer (Oransky 2016). Yet, if it is countered that this is not a practical problem in reality, one can respond that ancient peoples, like modern societies, deserve to have their heritages recorded accurately. After all, the only thing at stake is the history of the world.

Conclusions

This study has contended that the archaeologist James Mellaart fabricated the existence of a groundstone artefact from the Cypriot Neolithic site of Khirokitia, supposedly found in the northern Levant. The claim for the find included neither a citation nor an illustration, nor any information about the finder or the whereabouts of the piece. The example forms an addition to many other cases of fabrication of archaeological evidence made up by Mellaart through his long career, beginning in the 1950s and continuing until his death in 2012. A genuine groundstone object from Khirokitia on the mainland would have constituted a significant discovery in its day, because of the obscurity surrounding the Levantine origins of the enigmatic Neolithic settlement. Nevertheless, Mellaart's claim attracted no comment in the literature from specialist researchers on Cypriot archaeology, a consequence that can be attributed to a general, unstated scepticism among researchers about Mellaart's unsubstantiated claims.

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Bibliography

Akkermans, P.M.G., & G.M. Schwartz, 2003 *The Archaeology of Syria: From Complex Hunter-Gatherers to Early Urban /societies (ca.16,000–300 BC)*, Cambridge: Cambridge University Press.

ALLEA, 2023 *The European Code of Conduct for Research Integrity – Revised Edition,* Berlin: All European Academies. https://doi.org/10.26356/ECOC.

Arik, R. O., 1944 1942 de Türk Tarih Kurumu Adına Yapılan: Bitik Kazısı ve Hatay Tetikikleri Hakkinda Kisa Rapor, *Belleten* 8, 341–384.

Babbage, C., 1830 *Reflections on the Decline of Science in England: and on Some of Its Causes*, London: B. Fellowes.

Bar-Yosef, D., Y. Kahanov, J. Ruskin & H. Gildor, 2015 Neolithic Voyages to Cyprus: Wind Patterns, Routes, and Mechanisms, *The Journal of Island and Coastal Archaeology* 10 (3),1–24.

Braidwood R.J., 1937 *Mounds in the Plain of Antioch. An archaeological* survey, Chicago: The University of Chicago Press.

Braidwood R.J., 1957 Jericho and its setting in Near Eastern history, *Antiquity* 31, 73–81.

Braidwood R.J., and L.S, Braidwood, 1960. *Excavations in the Plain of Antioch. 1, The Earlier Assemblages, Phases A–J*, Chicago: The University of Chicago Press.

Brami, M.N., 2014 A graphical simulation of the 2,000-year lag in Neolithic occupation between Central Anatolia and the Aegean Basin, *Archaeological and Anthropological Sciences* 7(3), https://doi.org/10.1007/s12520-014-0193-4.

Broodbank, C., 2006 The origins and early development of Mediterranean maritime activity, *Journal of Mediterranean Archaeology* 19, 199–230.

Burney, C., 2012 James Mellaart. *Anatolian Studies* 62, iii–iv.

Callaway, E., 2011 Report finds massive fraud at Dutch universities, *Nature* 479 (7371), 15. https://doi.org/10.1038/479015a.

Caneva, I., & E. Jean, 2016 Mersin-Yumuktepe: Une mise au point sur les derniers travaux, *Anatolia Antiqua*, 34: 13–34. http://journals.openedition.org/anatoliaantiqua/368.

Cilician Chronology Group, 2017 A Comparative Stratigraphy of Cilicia: Results of the first three Cilician Chronology Workshops, *Altorientalische Forschungen* 44 (2), 150–186.

Collon, D., 1990 Subjective reconstruction? The Çatal Hüyük Wall-Paintings, *Hali* 53, 1–123.

Contenson, H. de., J.-C. Courtois, E. Lagarce, J. Lagarce, & R. Stucky, 1973 La XXXIIIe Campagne de Fouilles a Ras Shamra en 1972. Rapport Préliminaire, *Syria* 50, (3/4), 283–309.

Contenson, H. de., J.-C. Courtois, E. Lagarce, J. Lagarce, & R. Stucky, 1974 La XXXIVe Campagne de Fouilles a Ras Shamra en 1973. Rapport Préliminaire, *Syria* 51, (1/2), 1–30.

Cook, J.M., 1946 Archaeology in Greece, 1945–1947. *The Journal of Hellenic Studies* 66, 108–121.

Courtois, J.-C., 1973 Prospection archéologique dans la moyenne vallée de l'Oronte (El Ghab et Er Roudj -Syrie de nord-ouest), *Syria* 50, 53–99.

Czeszewska, A., 2014 Wall paintings at Çatalhöyük, in *Integrating Çatalhöyük: Themes from the 2000–2008 Seasons,* Monumental Archaeologica 32, 185–96, London: British Institute at Ankara/ Los Angeles: Cotsen Institute of Archaeology at UCLA.

Davey, C.J., 2021 James Mellaart: A review of a recent book, some personal memories, and archaeological deception, *Buried History* 57, 33–44. https://doi.org/10.62614/n0ay7179.

Davis, S.J., 1984 Khirokitia and its mammal remains: a neolithic Noah's Ark, in Alain Le Brun ed. *Fouilles récentes a Khirokitia (Chypre), 1977–1981, Tome 1: Texte,* Paris: Éditions Recherche sur les Civilisations, 147–162.

Davis, S.J., 1989 Some more animal remains from the Aceramic Neolithic of Cyprus, in Alain Le Brun ed. *Fouilles récentes a Khirokitia (Chypre), 1983–1986*, Paris: Éditions Recherche sur les Civilisations, 189–222.

des Places, É., 1963 Review of 'Excavations in the Plain of Antioch I: The Earlier Assemblages, Phases I–J by Robert J. Braidwood, Linda S. Braidwood, J.C. Payne, H. Helbaek and F.R. Matson', *Orientalia* 32, 467.

Dietler, M., 1998 Consumption, agency, and cultural entanglement: theoretical implications of a Mediterranean colonial encounter, in J. Cusick ed. *Studies in culture contact: interaction, culture change and archaeology*, Carbondale: Southern Illinois University, 288–315.

Dikaios P. 1936a Excavations at Khirokitia Khan, 1936 Preliminary Report, *Report of the Department of Antiquities, Cyprus*, 1936 (Part 1), 82–87.

Dikaios P., 1936b New Light on Prehistoric Cyprus more than 5000 years ago, *Illustrated London News* 189, 1174–1175.

Dikaios P., 1936c Neolithische Funde und das Problem der späten Steinzeiten Cypern, *Zeitschrift für Ethnologie* 68, 380–390.

Dikaios, P., 1940a Cypriote infant sacrifices to the Earth-Gods in the 4th Millennium, *Illustrated London News* 196, 128–129.

Dikaios, P., 1940b New light on Prehistoric Cyprus, *Iraq* 7, 69–83.

Dikaios, P., 1946a Khirokitia (Cyprus), *Fasti Archaeologici* I, 103–104.

Dikaios, P., 1946b Khirokitia (Cyprus), *Fasti Archaeologici* II, 156.

Dikaios, P., 1953 *Khirokitia: Final Report on the Excavation of a Neolithic Settlement in Cyprus on behalf of the Department of Antiquities*, London: Oxford University Press.

Dikaios, P., 1962 Foreign Contacts and Absolute Chronology, in Porphyrios Dikaios & James R. Stewart eds, *The Swedish Cyprus Expedition, Vol. IV, Part 1A. The Stone Age and Early Bronze Age in Cyprus,* Lund: The Swedish Cyprus Expedition, 192–203.

Dunand, M., 1939 *Fouilles de Byblos 1926–1932*, Tome I, Paris: Libraire Orientalist Paul Geuthner.

Dunand, M., 1950 *Fouilles de Byblos 1933–1938*, Tome II, Paris: Libraire d'Amerique et d'Orient Adrien Maisoneuve.

Duru, R., 2020 'Jimmy Bey of Hacilar' and memories from 50 years ago, in A. Mellaart ed. *James Mellaart: the Journey to Çatalhöyük*, Istanbul, 293–301.

Dyson, R.H. Jr, 1961 Review of 'Excavations in the Plain of Antioch I: The Earlier Assemblages, Phases I–J by Robert J. Braidwood and Linda S. Braidwood', *American Anthropologist* 63, 630–641.

Finlayson, B., 2004 Island colonization: insularity or mainstream?, in E. Peltenburg & A. Wasse eds, *Neolithic Revolution: New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus*, Levant Supplementary Series I, Oxford: Oxbow, 15–22.

Freckleton. I., 2016 *Scholarly Misconduct: Law, Regulation and Practice,* Oxford: Oxford University Press.

Garstang, J., 1953 *Prehistoric Mersin: Yümük Tepe in Southern Turkey*, Oxford: Clarendon Press.

Goldman, H. ed., 1956 *Excavations at Gözlü Kule, Tarsus, Vol. 2: From the Neolithic through the Bronze Age*, Princeton: University Press.

Guilaine, J., F. Briois & J.-D. Vigne, 2011 *Shillourokambos: Un établissement néolithique pré-céramique à Chypre*, Paris: Editions Errance.

Haines, R.C., 1971 *Excavations in the Plain of Antioch, Volume 2: the Structural Remains of the Later Phases: Chatal Hüyük, Tell al-Judaidah, and Tell Ta'yinat*, Oriental Institute Publications 95, Chicago: The University of Chicago Press.

Hanfmann, G.M.A., 1961 Review of 'Excavations in the Plain of Antioch I: The Earlier Assemblages, Phases A–J by Robert J. Braidwood and Linda S. Braidwood', *American Journal of Archaeology* 65, 196–198.

Hawkins, J.D., 2024 The Fantasies of James Mellaart: Fabrications of an Anatolian Archaeologist, *The IOS Annual* 24, 103–127. https://doi.org/10.1163/9789004687479_006.

Hedeager L., 2000 Migration period Europe: the formation of a political identity, in F. Theuws & J. Nelson eds, *Rituals of power: from Late Antiquity to the Early Middle Ages,* Leiden: Brill, 15–17.

Hodder, I., 2011 *Çatalhöyük: the Leopard's Tale*, London: Thames and Hudson.

Hodder, I., 2015 Mellaart, James, 1925–2012, *Biographical Memoirs of Fellows of the British Academy* 14, 411–420.

Jarus, O., 2018 Famed Archaeologist 'Discovered' His Own Fakes at 9,000-Year-Old Settlement, *Live Science*, March 12. https://www.livescience.com/61989-famed-archaeologist-created-fakes.html.

Kafafi Z., 2011 Ghrubba – ware or culture?, in Y.M. Rowan and J.L. Lovell eds, *Culture, Chronology, and the Chalcolithic: Theory and Transition*, Oxford: Council for British Research in the Levant/ Oxbow, 25–35.

Karageorghis, V., 1982 *Cyprus from the Stone Age to the Romans*, London: Thames and Hudson.

Kelland, K., 2011 Dutch Psychologist Admits He Made Up Research Data, *Reuters*, 2 November 2011, http://www.reuters.com/article/2011/11/02/us-dutch-scientist-fraud-idUSTRE7A12PL20111102.

Kenyon, K.M. & T.A. Holland, 1981 *Excavations at Jericho III: The Architecture and Stratigraphy of the Tell*, Jerusalem/London: British School of Archaeology/Harrison and Sons.

Kiamil, T., 1980 *The Yortan Culture within the Early Bronze Age of Western Anatolia*, vol. 1. Unpublished doctoral thesis, London: the Institute of Archaeology, University of London,

King, J.E., 1953 Mammal bones from Khirokitia and Erimi, in Porphyrios Dikaios ed., *Khirokitia: Final Report on the Excavation of a Neolithic Settlement in Cyprus on behalf of the Department of Antiquities,* London: Oxford University Press, 431–437.

Knapp, A.B., 2013 *The Archaeology of Cyprus: from Earliest Prehistory through the Bronze Age*, Cambridge: Cambridge University Press.

Lamberg-Karlovsky, C.C., 1992 Constructing the Past, *The Review of Archaeology* 13 (1), 37–39.

Le Brun, A. ed., 2021 Fouilles récentes à Khirokitia: (Chypre) 1993–2009, Nicosie: Département des Antiquités, Chypre.

Le Brun, A. ed., 1984a *Fouilles récentes a Khirokitia (Chypre) 1977–1981, Tome I: Texte*, Paris: Éditions Recherche sur les Civilisations.

Le Brun, A. ed., 1984b *Fouilles récentes a Khirokitia (Chypre) 1977–1981, Tome II: Illustration*, Paris: Éditions Recherche sur les Civilisations.

Le Brun, A. ed., 1989 *Fouilles récentes a Khirokitia (Chypre), 1983–1986*, Paris: Éditions Recherche sur les Civilisations.

Le Brun, A. ed., 1994a *Fouilles récentes a Khirokitia (Chypre), 1988–1991*, Paris: Éditions Recherche sur les Civilisations.

Le Brun, A. 1994b Les Vaisselle en Pierre dans les Sépultures, in Alain Le Brun ed., *Fouilles récentes a Khirokitia (Chypre), 1988–1991,* Paris: Éditions Recherche sur les Civilisations, 198–208.

Lloyd, S., 1967 *Early Highland Peoples of Anatolia,* London: Thames & Hudson.

Lloyd, S., 1986 *The Interval: a Life in Near Eastern Archaeology*, Woolstone Lodge: Lloyd Collon.

Lloyd, S., and J. Mellaart, 1965 *Beycesultan,* Vol. II, London: British Institute of Archaeology at Ankara.

Lydon, J., 1999 *Many inventions: the Chinese in the Rocks: 1890–1930*, Melbourne: Monash University.

Mallett, M., 1990 A Weaver's View of the Çatal Hüyük Controversy, *Oriental Rug Review* 10 (6), 32–43.

Mallett, M., 1993 The Goddess from Anatolia: an Updated View of the Çatal Hüyük Controversy, *Oriental Rug Review* 13 (2), 24–31.

Manglis, C.P., 1953 Notes on petrographic examination of the stone objects, in Porphyrios Dikaios ed., *Khirokitia: Final Report on the Excavation of a Neolithic Settlement in Cyprus on behalf of the Department of Antiquities,* London: Oxford University Press, 441.

Manning. S.W., 2013 A New Radiocarbon Chronology for Prehistoric and Protohistoric Cyprus, ca.

11,000–1050 cal BC, in A. Bernard Knapp ed., *The Archaeology of Cyprus: from Earliest Prehistory through the Bronze Age*, Cambridge: Cambridge University Press, 485–534.

Mazur, S., 2005 Dorak Diggers weigh in on Anna & Royal Treasure, *Scoop*, 4 October, https://www.scoop.co.nz/stories/HL0510/S00059/dorak-diggers-weigh-in-on-anna-royal-treasure.htm.

McEwan, C.W., 1937 The Syrian Expedition of the Oriental Institute of the University of Chicago, *American Journal of Archaeology* 41 (1), 8–16.

Megaw, H., 1936 Archaeology in Greece, 1935–1936, *The Journal of Hellenic Studies* 56, 135–158.

Mellaart, A., 2020 The Life of James Mellaart, in Alan Mellaart ed., *James Mellaart: the Journey to Çatalhöyük,* Istanbul: Nezih Başgelen, 33–120.

Mellaart, J., 1954 Preliminary Report on a Survey of Pre–Classical Remains in Southern Turkey, *Anatolian Studies* 4, 175–240.

Mellaart, J., 1956 The Neolithic site of Ghrubba, *Annual of the Department of Antiquities of Jordan* 3, 24–40.

Mellaart, J., 1959 The Royal Treasure of Dorak – a First and Exclusive Report of a Clandestine Excavation which Led to the Most Important Discovery since the Royal tombs of Ur, *The Illustrated London News* 28 November, 754–755.

Mellaart, J., 1962 Anatolia, 4000–2300 B.C., *Cambridge Ancient History*, Chapter XVIII, Vol, 1, Part 2, 363–416. New York: Cambridge University Press.

Mellaart, J., 1965 *Earliest Civilizations of the Near East*, London: Thames and Hudson.

Mellaart, J., 1966 *The Chalcolithic and Early Bronze Ages in the Near East and Anatolia*, Beirut: Khayats.

Mellaart, J., 1967 *Çatal Hüyük: a Neolithic Town in Anatolia,* London: Thames and Hudson.

Mellaart, J., 1970 *Excavations at Hacılar 1*, BIAA Occasional Monograph Series, Vol. 9,

Edinburgh: British Institute at Ankara/Edinburgh University Press.

Mellaart, J., 1975 *The Neolithic of the Near East*, London: Thames and Hudson.

Mellaart, J., 1978 *The Archaeology of Ancient Turkey*, Totowa, NJ: Rowman and Littlefield.

Mellaart, J., 1984 Some notes on the prehistory of Anatolian kilims, in Bertram Frauenknecht ed., *Early Turkish Tapestries*, Nürnberg: Bertram Frauenknecht, 25–41.

Mellaart, J., 1991 James Mellaart answers his critics, *Hali* 55, 86–87.

Mellaart, J., U. Hirsch & B. Balpinar, 1989 *The Goddess From Anatolia*, Vols 1–4. Milan: Eskenazi.

Mellink, M.J., 1962 Review of 'Excavations in the Plain of Antioch I: The Earlier Assemblages, Phases I–J by Robert J. Braidwood and Linda S. Braidwood', *Journal of the American Oriental Society* 82, 570–572.

Merrillees, R.S., 2013 Veronica Seton-Williams: A proud Australian archaeologist, *Buried History* 49, 17–22.

Milmo, C., 2018 Tales of the Past: Renowned British archaeologist accused of fabricating Bronze Age History, 30 March, *The I Paper.* https://inews.co.uk/news/long-reads/bronze-age-archaeologist-james-mellart-fakes-140419,

Mitten, D.G., 1969 Review of *Early Highland Peoples of Anatolia*, by S. Lloyd, *Archaeology* 22 (4), 328–329.

Mouton, M., 1984 Les Vaisselle en Pierre, in Alain Le Brun ed. *Fouilles récentes a Khirokitia (Chypre), 1977–1981*, Paris: Éditions Recherche sur les Civilisations, 97–124.

Muscarella, O.W., 2000 *The Lie became Great: the Forgery of Ancient Near Eastern Cultures*. Groningen: Styx Publications.

Normile, D. 2001 Japanese Fraud Highlights Media-Driven Research Ethic, *Science* 291 (5501), 34.

O'Brien, T.P. 1933 A Chalcolithic Cave Site in North Syria, *Man* 33, 173–178.

Oransky, I., 2016 Journal retracts 7 papers by M. D. Anderson cancer researcher long under investigation, *Retraction Watch*. https://retractionwatch.com/2016/02/22/journal-retracts-7-papers-by-md-anderson-researcher-long-under-investigation/.

Östlund, H.G., & L.G. Engstrand, 1960 Stockholm Natural Radiocarbon Measurements III, *American Journal Of Science. Radiocarbon Supplement*, *vol. 2*, 186–196.

Özdoğan, M., 2020 James Mellaart: a man addicted to archaeology, in Alan Mellaart ed., *James Mellaart: the Journey to Çatalhöyük,* Istanbul: Nezih Başgelen, 189–240.

Palumbo-Liu, D., 1999 *Asian/American: historical crossings of a racial frontier*, Stanford: Stanford University Press.

Papadopoulos J.K., 2002 Minting identity: coinage, ideology and the economics of colonization in Akhaian Magna Graecia, *Cambridge Archaeological Journal* 12 (1), 21–55.

Payne, H.G.G., 1934 Archaeology in Greece, 1933–34, *The Journal of Hellenic Studies* 54 (2), 185–200.

Pearson, K. & P. Connor, 1967 *The Dorak Affair*, London: Michael Joseph.

Piggot, S., 1967 General Editor's Preface, in Seton Lloyd, *Early Highland Peoples of Anatolia*, London: Thames and Hudson, 7.

Portyagin, M.V., 2005a B: The Lava Complex, in V.A. Krashenninikov, J.K. Hall, F. Hirsch, C. Benjamini & A. Flexer eds, *Geological Framework of the Levant, Volume 1: Cyprus and Syria,* Jerusalem: Historical Productions, 8–22.

Portyagin, M.V., 2005b C: The Dyke Complex, in V.A. Krashenninikov, J.K. Hall, F. Hirsch, C. Benjamini & A. Flexer eds, *Geological Framework of the Levant. Volume 1: Cyprus and Syria,* Jerusalem: Historical Productions, 22–25.

Ramirez, J., 2020 *Raiders of the Lost Treasures*, Video documentary, UK: Alley Cat Films.

Redfield R., R. Linton & M.J. Herskovits, 1936 Memorandum for the study of acculturation, *American Anthropologist* 38(1), 149–152.

Robertson, M., 1939 Archaeology in Greece, 1938–39, *The Journal of Hellenic Studies* 59, 189–209.

Saliou, C., 1989 La Vaisselle en Pierre, in Alain Le Brun ed. *Fouilles récentes a Khirokitia (Chypre), 1983–1986*, Paris: Éditions Recherche sur les Civilisations, 137–175.

Sanjian, A.K., 1956 The Sanjak of Alexandretta (Hatay): Its Impact on Turkish-Syrian Relations (1939–1956), *Middle East Journal* 10 (4), 379.

Schaeffer, C.F.-A., 1935 Les Fouilles de Ras Shamra-Ugarit, Sixième Campagne (Printemps 1934), Rapport Sommaire*, Syria* 16 (2), 141–76.

Schaeffer, C.F.-A., 1936 Les Fouilles de Ras Shamra-Ugarit, Septième Campagne (Printemps 1935), Rapport Sommaire*, Syria* 17 (2), 105–49.

Schaeffer, C.F.-A., 1937 Les Fouilles de Ras Shamra-Ugarit, Huitième Campagne (Printemps 1936), Rapport Sommaire*, Syria* 18 (2), 135–54.

Schaeffer, C.F.-A., 1938 Les Fouilles de Ras Shamra-Ugarit, Neuvième Campagne (Printemps 1937), Rapport Sommaire*, Syria* 19 (3), 193–255.

Schaeffer, C.F.-A., 1939 Les Fouilles de Ras Shamra-Ugarit, Dixième et Onzième Campagnes (Automne et Hiver 1938–39), Rapport Sommaire*, Syria* 20 (4), 277–95.

Schaeffer, C.F.-A., 1952 Enkomi-Alasia: *nouvelles missions en Chypre, 1946–1950.* Paris: C. Klincksieck.

Schaeffer, C.F.-A., 1954 Les Fouilles de Ras Shamra-Ugarit, Quinzième, Seizième et Dix-Septième Campagnes (1951, 1952 et 1953), Rapport Sommaire, *Syria* 31 (1/2), 14–67.

Schaeffer, C.F.-A. & Courtois, J.-C., 1963 Review of 'Excavations in the Plain of Antioch. I. The Earlier Assemblages, Phases I–J by Robert J. Braidwood and Linda S. Braidwood', *Syria* 40, 341–347.

Seton-Williams, M.V., 1954 Cilician Survey *Anatolian Studies,* 4, 121–174.

Schürr, D., 2025 Ein pathologischer Betrüger: James Mellaart, *Gephyra* 30, 195–216.

Silantyev, S.A., 2005 D: The Plutonic Complex, in V.A. Krashenninikov, J.K. Hall, F. Hirsch, C. Benjamini & A. Flexer eds, *Geological Framework of the Levant. Volume 1: Cyprus and Syria,* Jerusalem: Historical Productions, 25–34.

Spriggs, M., 2003 Post-Lapita evolutions in island Melanesia, in Christophe Sand ed. *Pacific archaeology: assessments and prospects*, Noumea: Le Cahiers de l'Archéologie en Nouvelle Calédonie, 205–212.

Stanley Price, N.P., 1977 Khirokitia and the initial settlement of Cyprus, *Levant* 7, 66–89.

Steel, L., 2004 *Cyprus before History: from the earliest settlers to the end of the Bronze Age*, London: Duckworth.

Stronach, D., 2020 A new look at the long-lived Dorak Puzzle, in Alan Mellaart ed. *James Mellaart: the Journey to Çatalhöyük,* Istanbul: Nezih Başgelen, 437–443.

Tadmor, M., 1964 Contacts Between the Amuq and Syria-Palestine, *Israel Exploration Journal* 4, 253–269.

TAY, 2024 The Archaeological Settlements of Turkey, Database entry on Dorak, Türkiye Arkeolojik Yerleşmeleri. http://www.tayproject.org/.

Thomas N., 1991 *Entangled objects: exchange, material culture, and colonialism in the Pacific*, Cambridge: Harvard University Press.

Trifonov, V.G., A.E. Dodonov, E.V. Sharkov, D.I. Golovin, I.V. Chernyshev, V.A. Lebedev, T.P. Ivanova, D.M. Bac hmanov, M. Rukieh, O. Ammar, H. Minini, A.-M. Al Kafri & O. Ali, 2011 New data on the Late Cenozoic basaltic volcanism in Syria, applied to its origin, *Journal of Volcanology and Geothermal Research* 199 (3–4), 177–192.

Tsuneki, A., 2012 Tell el-Kerkh as a Neolithic Mega Site, *Orient* 47, 29–65.

UNESCO World Heritage Centre, 2024 World Heritage List, See: 848 bis Choirokitia, https://whc.unesco.org/en/list/848.

University of Chicago, 2024 Institute for the Study of Ancient Cultures, West Asia & North Africa Museum Catalogue, https://oi-idb.uchicago.edu/index.php.

Waines, J.G., & N.P. Stanley Price, 1977 Plant remains from Khirokitia in Cyprus, *Paléorient* 3, 281–284.

Weinberg, S.S., 1957 Review of ‘Khirokitia: Final Report on the Excavations of a Neolithic Settlement in Cyprus on Behalf of the Department of Antiquities, 1936–1946 by Porphyrios Dikaios’, *American Journal of Archaeology* 61, 96–98.

Wright, G.E., 1963 Review of ‘Excavations in the Plain of Antioch, I: The Earlier Assemblages, Phases A–J by Robert J. Braidwood and Linda J. Braidwood’. *Journal of Near Eastern Studies* 22, 282–284.

Wright, K.I., 1992 A classification system for ground stone tools from the prehistoric Levant, *Paléorient* 18 (2), 53–81.

Yalçinkaya, I., M.B. Kösem, A.L. Atıcı, K. Özçelik, C.M. Erek & M. Kartal, 1999 Yılı Yüzey Araştırmaları ve Hatay Paleolitiği, *Araştırma Sonuçlari Toplantısı* 17, 163–174.

Yazbeck, C., 2020 Tabarja Wata Slam 100 (TWS100): a Multi-Period Pre-Pottery and Pottery Neolithic Site on the Lebanese Coast, *Bulletin d’Archéologie et d’Architecture Libanaises* 20, 185–226.

Yener, K.A., 2005 *The Amuq Valley Regional Projects, Volume 1. Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995–2002,* Oriental Institute Publications No. 131, Chicago: The University of Chicago Press.

Young, G.M., 1936 Archaeology in Greece, 1936–1937, *The Journal of Hellenic Studies* 57, 119–146.

Young, G.M., 1938 Archaeology in Greece, 1937–1938, *The Journal of Hellenic Studies* 58, 217–239.

Zangger, E., 2018 James Mellaart’s fantasies, *Talanta* L, 125–182.

In the thick of it: The Apostle Paul’s voyage to Rome and shipwreck

Christopher J. Davey

Abstract: The maritime context of Paul’s journey to Rome, as described in the Book of the Acts, is considered in the light of recent studies. The discussion includes pertinent aspects of the Mediterranean environment, Roman-period maritime activity including ships and infrastructure, the voyage and shipwreck, and the journey from Caesarea to Puteoli. The nautical terms used are commented upon and solutions are proposed for the problems identified. In the context of the maritime technology and mercantile setting of the Roman Empire, as well as the beginnings of Christianity, the narrative is deemed to be a fitting climax to the Acts of the Apostles.

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Introduction

The Book of the Acts concludes with the Apostle Paul in Rome. While not very much is written about his time there, his journey to Rome is the subject of a comparatively long and detailed account describing how he fearlessly survived a shipwreck and influenced some crucial decisions to the benefit the entire ship’s complement (Acts 27:1–28:16). The narrative is in the often-called ‘we-passages’ of the Acts indicating that the writer, generally considered to be Luke, accompanied Paul. It is therefore an eyewitness account of the voyage and, as Colin Hemer (1985) observed, it has the immediacy of a description penned soon after the event. Frederick Fyvie Bruce deemed this ‘one of the most vivid pieces of descriptive narrative … in the whole New Testament’ (1952: 450). The geographic and technical details of the narrative have encouraged Maritime historians to study it, and to reconstruct the circumstances and probable path of the voyage (Figure 1).

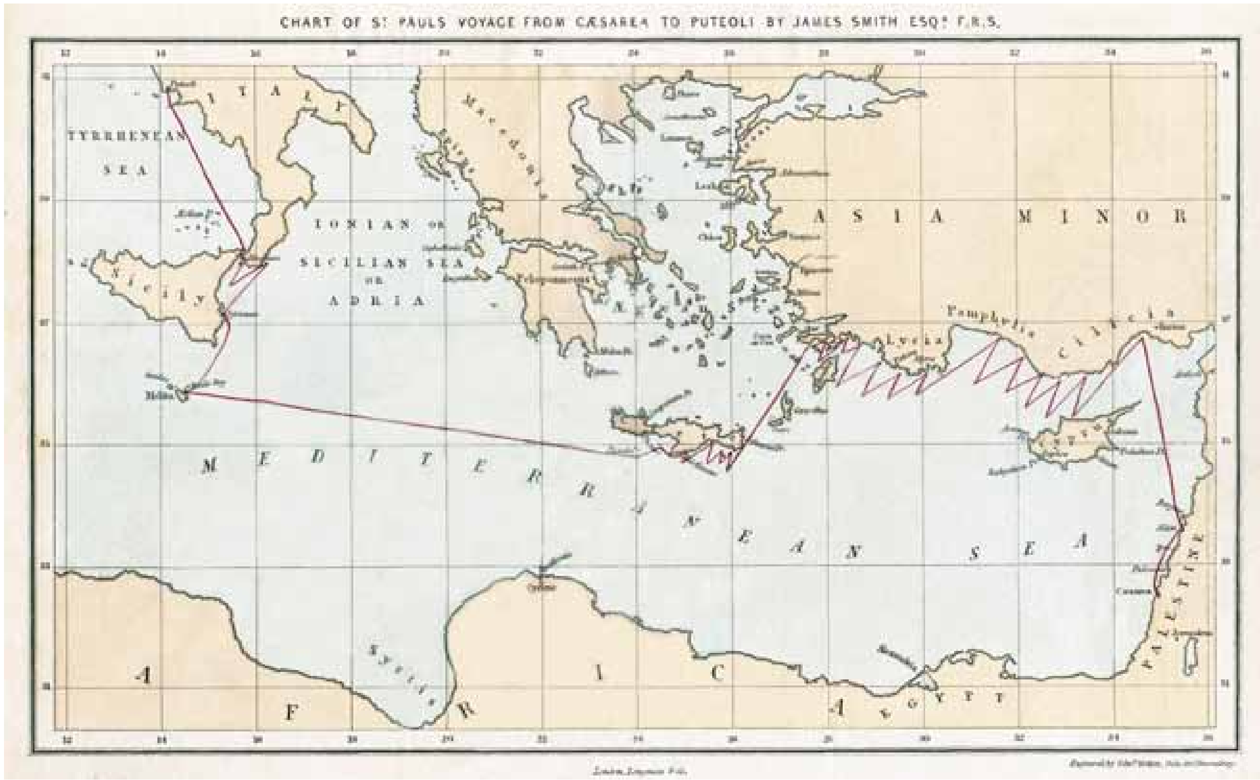

Figure 1: *James Smith’s chart of Paul’s journey. The path taken is shown in red. The zig-zags were constructed by Smith from the records of nineteenth century sailing voyages. The chart was constructed on Mercator’s projection to give true bearings. West of longitude 24°, it is taken from the English Admiralty chart by Admiral Smyth, and to the east of that longitude, it is taken from the French Admiralty chart. From Smith (1880: opp. 61) with some restoration.*

However, biblical commentators have often struggled to identify a reason for this comprehensive narrative forming the climax of the Book of the Acts. Many biblical scholars have been sceptical about the historicity of the story and the veracity of the description. However, historians and maritime archaeologists, such as Lionel Casson (1971), the professor emeritus at New York University and a classical scholar and archaeologist, who read contemporary ancient literature about seafaring and who are familiar with the maritime archaeological record, generally find the narrative authentic and treat it as an excellent source of information about Roman period seafaring. Heinrich Holtzmann, University of Strasbourg, considered this 'description of seafaring, one of the most instructive documents for knowledge of ancient shipping and seafaring' (1892: 421). Another archaeologist and classical scholar, William Ramsay, Regius Professor of Humanity, University of Aberdeen, studied the circumstances and geography of the account (1898) and established the location of many of the places mentioned in the narrative (Figure 2).

The first readers of this narrative would have had the interest level that we may now have in an air-crash investigation, where the passengers live to tell the tale. Today, it would inevitably be made into a film like *Sully*, which recounts how Captain Chesley Sullenberger landed US Airways Flight 1549 in the Hudson River on January 15, 2009, with 155 people on board, all of whom survived. To be interesting and authentic, such reports must contain accurate technical and topographic details. In fact, it is the details, often dismissed as incidental by commentators, that establish the veracity of the account and provide a certain poignancy.

Paul's voyage and shipwreck has been the subject of technical study for over two hundred years. The first investigators were not associated with the few universities of that time, but they were well versed in classical languages and literature and could draw upon the contemporary experiences of sailing square rigged ships in the Mediterranean as well as the information from Admiralty charts and naval documentation. One of the later books produced by this field of study was written by James Smith (1782–1867). He was the son of a wealthy merchant of Scotland and devoted his life to the pursuit of sailing and the study of geography, nautical matters, and the writings of Saint Luke. His book, *The Voyage and Shipwreck of St. Paul* was first published in 1848 and ran to a fourth edition in 1880, which was edited by his son, Walter Edward. The book was a *tour de force,* and has left biblical scholars with little choice, either to accept its discussion of the story's substantive details and focus on the literature (Bruce 1952: 451) or ignore it and treat the passage as a theological metaphor. Most commentators seem to adopt the former approach.

So, to Rome

The Acts decribes how Paul's return to Jerusalem in about AD 57 ended abruptly, when word of his impending assassination by the Jewish religious establishment reached the Roman authorities, who promptly arrested him, and escorted him from the city in the company of about 470 soldiers. He was taken to Caesarea, where he was held as a prisoner for two years on unstated charges. He was eventually examined by Porcius Festus, the Procurator of Judea, who suggested that he may be tried in Jerusalem. A trial in Jerusalem would have raised theological matters, which had the potential to be provocative and unhelpful, so Paul exercised his right as a Roman citizen to be tried by the emperor in Rome (Acts 23: 12–25: 12). It soon became clear that Paul had committed no offence under Roman law, but the Procurator did not acquit him, and Paul did not withdraw his appeal (Sherwin-White 1963: 53–70; Hemer 1990: 130). It seems that Festus wanted Paul to leave the province because of the unrest that his presence may continue to provoke and, for his part, Paul had always wanted to visit Rome (Rom 15: 22–29).

When the decision to send Paul to Rome was finalised, he and some other prisoners were assigned to a centurion named Julius. We are told nothing about the other prisoners, but the centurion belonged to the Augustan Cohort. A cohort was a company of about 600 soldiers, with six cohorts comprising a legion. Josephus mentions cohorts in Syria recruited from the area of Sebaste, but Julius is not a Palestinian name so he was unlikely to have been associated with such forces. Hemer considers *Σεβαστῆς/Augustus* to have been an honorary title (1990: 132), while Ramsay pointed out that cohorts were not normally named and that Julius probably belonged to an Imperial corps of officer-couriers, probably similar to officials known later in the second century as *frumentarii* (1898: 315; Bruce 1952: 452); thus the *New International Version* (NIV) deems him to belong to the 'Imperial Regiment'. As such, Julius would have attended to communications and certain logistical matters throughout the empire on behalf of the emperor. This may explain the rapport that he had with Paul, a fellow Roman citizen and experienced traveller, and how Paul was able to influence events that were to unfold during the journey.

Paul travelled with Luke, a physician, possibly from Troas, with an excellent command of the Greek language and Aristarchus, a long-standing colleague from Thessalonica who is mentioned three other times in the New Testament (Acts 19:29, Col. 4: 10; Philm 24). The ship they boarded at Caesarea was from Adramyttium, a city on the Aegean coast north of modern-day Izmir, near Edremit, Türkiye. It was likely to have been a medium-sized merchant ship, 18–22 m in length, that plied its trade along the coast of Asia taking advantage of sea and land breezes (on-shore and off-shore winds) and calling at most ports on its way home to Adramyttium. Julius would have been hoping to encounter another vessel that was sailing to Rome at one of those ports. The first port-of-call was Sidon, where there was a substantial harbour frequented by vessels bound for Rome, but none were in dock. However, at the second mentioned port, Myra, they boarded a ship sailing

Figure 2: *A map of the Eastern Mediterranean showing the locations mentioned in the text. Professor Sir William Ramsay was the main contributor to the map. Map modified from Hastings (1947: 384).*

from Alexandria to Rome with a cargo of grain (Acts 27: 6). It is this ship that is the focus of this study.

The Roman grain trade

Unlike many large ancient cities, Rome did not have a hinterland to supply it with sufficient food, especially wheat, which was vital to the ancient Mediterranean diet (Rickman 1980a: 262; Aly 2017: 12). As the population of Rome grew, the demand for grain increased and Rome's governing bodies had to identify grain sources, arrange mercantile infrastructure, engage shippers and merchants, and provide security and a practical legal framework for the grain supply (Rickman 1980b). Grain supply was a contentious issue in Republican Rome (Rushmer 2025). After the defeat of Mark Antony and Cleopatra in 30 BC, Augustus, the first Roman Emperor, made Egypt an imperial province and the principal source of grain (Rushmer 2025: 366).

For much of the Republican period, piracy was endemic in the Mediterranean and a major impediment to maritime commerce. After a pirate attack on the Roman port of Ostia a little before 67 BC, the tribune Gabinius defied the Senate and appointed the Roman general, Gnaeus Pompeius Magnus (Pompey) to have command over all the seas giving him substantial resources to tackle piracy comprehensively (Rickman 1980b: 51) In a well-co-ordinated process beginning in the west and moving eastward over a period of three months, he eradicated pirates in the Mediterranean so completely that they did not reappear for a few hundred years. One of the most intractable areas for pirates had been the rugged southern coast of Türkiye, known as Rough Cilicia, which Paul's ship was able to sail past without the threat of piracy (Rauh 1998; Rauh *et al.* 2000; Hoff & Townsend 2013).

Pompey's efforts were recognised in 57 BC when he was granted command over the Roman grain supply for five years (Rickman 1980b: 55, Vervaet 2020). With his previously demonstrated efficiency, he restructured the trading environment, securing Rome's grain supply and providing a basic commercial administration in a manner that later emperors, such as Augustus, would follow.

In the mid-first century there was a drop in the grain supply leading Claudius (AD 41–54) to build Portus, a port two kilometres north of Ostia, and to offer incentives for the building of ships capable of carrying at least 10,000 *modii* (70 tonnes) (Steinby 2020: 37; Graham 2024). The port was completed in AD 64 under Nero (AD 54–68), who issued coinage to celebrate the occasion. This was too late for Paul, whose ship had docked four years earlier at Puteoli in the Bay of Naples. Portus was later expanded by Trajan (AD 98–117) (Steinby 2020: 38).

Casson estimated that 150,000 tons of grain were shipped to Rome from Alexandria each year, and Paul Erdkamp estimates it to have been 135,000 tons (Casson 1971: 297; Erdkamp 2009: 237). This was a substantial undertaking, which required a fleet of at least 750 100-ton grain carriers, each making two voyages annually. In fact, much larger ships became common, but the aim of two voyages a year often proved to be challenging.

Using classical sources, Casson discussed the schedule of the ships plying the Rome-Alexandrian trade route. They could winter in Rome or Alexandria, and set sail in April, hoping to complete two voyages before the season closed in September (Casson 1971: 297–9). The frequency and reliability of this schedule meant that Roman officials, such as Julius, could use grain ships to travel between Rome and the eastern provinces. Indeed, after the capture of Jerusalem, Titus needed to return to Rome quickly and so boarded a grain ship in Alexandria on 25 April AD 71, and landed at Puteoli (Suetonius *Titus* 5; Casson 1971: 298).

The prevailing summer wind over the eastern Mediterranean Sea is from the north-west, which meant that ships sailing from Rome to Alexandria could expect a direct and rapid passage, but the return journey was slow and challenging. John Purdy sums up wind conditions in the Mediterranean:

> *Throughout the whole of the Mediterranean, but mostly in the eastern half, including the Adriatic and Archipelago, the N.W. winds prevail in the summer months. During winter the winds are variable, but the S.E. and S.W. blow frequently with great force near the solstices, or longest and shortest days* (Purdy 1841: 197).

Casson lists voyages quoted by Pliny the Elder[1], three of which travelled from Italy to Alexandria in six to nine days at VMG (velocity-made-good)[2] of 4.6–5.9 knots (1971: 283). He also lists from literature ten Roman-period voyages that were made with unfavourable winds, three of which included segments of the return journey to Rome from Alexandria (1971: 289). All achieved VMGs of less than 2 knots. Casson (1950), using information reported by Lucian, discusses one of these voyages, and the onward journey passed Crete.

Lucian of Samosata (AD 125–after 180) was a prolific writer, who lived in Athens. When a grain ship named *Isis* returning to Rome was blown off-course and docked at Piraeus, Lucian, some his friends, and many other Athenians made the five-kilometre trek to Piraeus to see the spectacle. Lucian spoke to the ship's master to get information about the huge ship and to find out where it had been and why it had arrived at Athens (Casson 1991: 208). The *Isis* had left Alexandria and sailed close-hauled in north-westerly winds toward Cyprus, taking six and a half days, which implies a VMG of 1.6 knots. However, the ship finished up in Sidon, leading Casson to suggest that it had encountered a storm with strong westerly winds that had driven it eastward to Sidon (1950: 46). It appears that Roman ships were unable to weather storms easily, so they often reduced sail and ran before the wind in an action called *scudding*. Ship hulls at the time had a shell construction with planks fastened to each other by mortice and tenon joints and therefore had limited capacity to withstand a pounding from breaking seas. Substantial frames were incorporated into ship-hulls after the seventh century (Steffy 1994).

The *Isis* voyage from Sidon to the Chelidonian Isles passed Cyprus to the east and then sailed close-hauled in variable winds to the Chelidonian Isles taking nine and a half days with a VMG of 1.5 knots. The Chelidonian Isles, which are known today as Beşadalar and are near Cape Gelidonya, about thirty kilometres east of Myra, where Paul's ship docked. At least half of this progress may have been due to the favourable current. The *Isis* continued sailing westward past Cnidus, where Casson (1950: 46) suggests that it encountered south-westerly winds, rather than the normal Etesian winds from the north. It sailed close-hauled across the Aegean Sea, eventually arriving at Athens. The master of the *Isis* expressed frustration with this situation: 'Had they taken Crete on the right [i.e. sailed south of Crete] and avoided Cape Maleas [the southeast tip of the Peloponnese], they would then have been in Rome' (1950: 47-8). Casson amplified this comment by referring to Nelson's experience when returning from the Battle of the Nile in 1799, he sailed south of Crete while his subordinate, Admiral de Saumarez, sailed to the north and arrived at Gibraltar five days after him (1950: 49 n.14; Smith & Smith 1880: 80). A westward passage south of Crete was known to be preferable and was the course that Paul's ship sailed.

Nineteenth century experience was recorded by Purdy: 'On leaving Alexandria work up to Candia [Crete]; the average summer passage to Malta is 22 to 30 days; in winter, from 18 to 26' (1841: 280). A further two to ten days could be added to complete the voyage to Rome. This travel time was as good as could be expected under sail. Roman period ships took somewhat longer and could not sail this course in the winter.

While James Beresford (2013) has argued that commercial seafaring on the Mediterranean Sea was not bound by a 'sailing season', he is aware that there were regional climate variations and that winter weather was much more variable than at other times. Winter season wind averages do not give an indication of the danger of shipwreck caused by storms. Casson notes that 'in the Middle Ages Venetian ships were prohibited by law from returning from Alexandria, Syria or Constantinople between 15 November and 20 January' when treacherous weather was expected (1950: 45 n.1; Jal 1840: 261-2). Flavius Vegetius Renatus, writing in the fourth century about naval operations, specifies a longer period of closure:

> *Therefore, from the third day before the Ides [11th] of November until the sixth day before the Ides [10th] of March, the seas are closed. For the very short day and the long night, the density of the clouds, the obscurity of the atmosphere, the severity of the winds doubled by rain and snow, deter, not only fleets from the sea, but also travelers from land journeys* (Vetegius 4.39; 1990: 285).

Robert Ogilvie recently interviewed four seamen resident at Loutro, on the southern coast of Crete, and found that the prevalent winter winds there were from the north

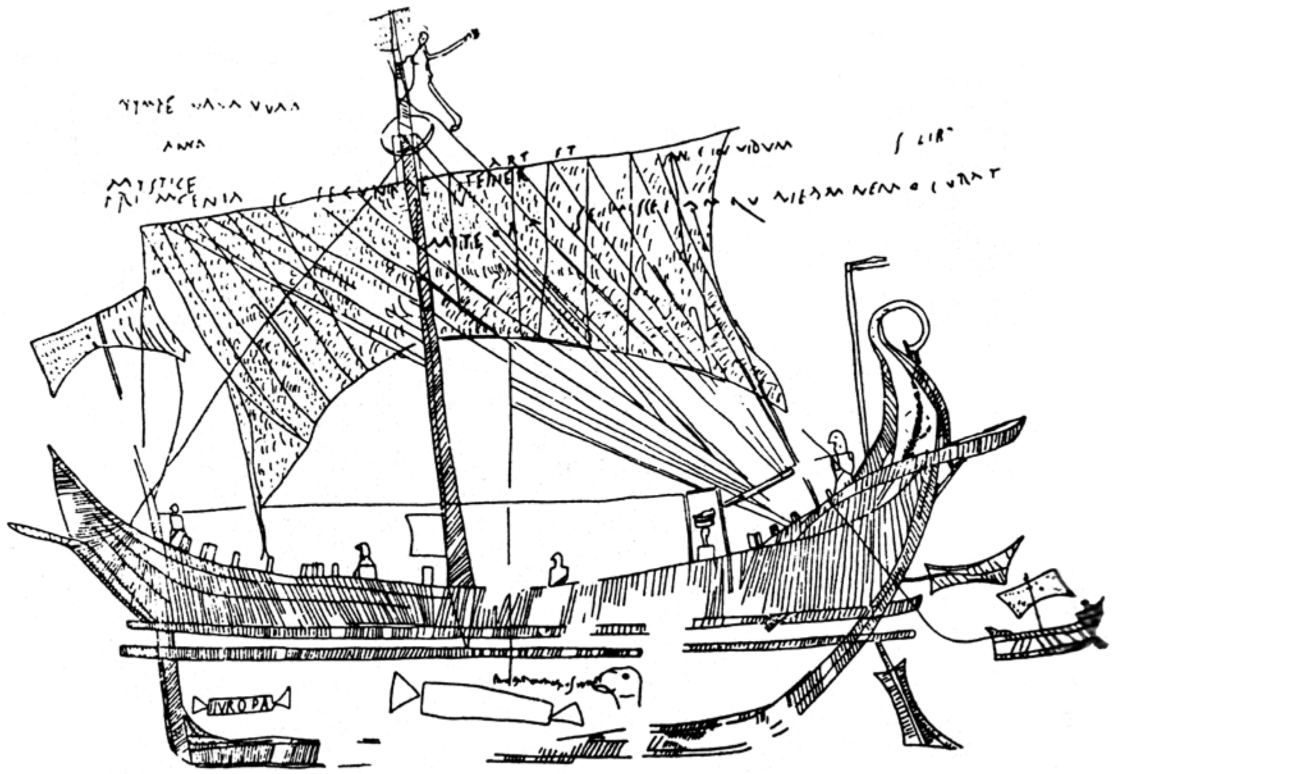

Figure 3: *Graffito of a Roman merchant ship called* Europa *found at Pompeii. The scene would appear to be satirical, but it does have a significant amount of technical detail: the ship's boat trailing astern, a raised steering oar, timberheads on the gunwales, brail-lines on the mainsail, a nameplate, and near the bow, a bowsprit and on it a spritsail (artemon). From Benoit (1961: fig. 73).*

and east (1958: 314). During the winter they therefore, moored their fishing fleet in the west-facing harbour to protect it from the fierce east-northeasterlies, the Grigale wind, that St Paul's ship encountered.

Roman grain ships

To service the Alexandrian grain trade adequately, ships needed to be large and able routinely to sail against the wind. Roman-period merchant ships were commonly depicted in graffiti, as well as more formal artwork such as mosaics, stone reliefs, paintings, and coins (Basch 1987), affirming the status and importance of merchant ships at that time. Their advanced technology was a source of pride. The graffito images clearly do not belong to a formal graphic tradition and would appear to represent what the illustrators saw and knew (Davey 2015). The consistency of the depictions suggests that they reliably showed the important features of the ships, although not necessarily drawing them to scale.

One graffito, Figure 3, found at Pompeii illustrates a merchant ship named *Europa*.[3] Pompeii was destroyed in AD 79 so the image is earlier than that and almost contemporary with Paul's travels, indeed when he eventually disembarked in Italy, it was at the port of Puteoli, which was located on the Bay of Naples opposite Pompeii.

The graffito illustrates several aspects of Paul's ship, which will be mentioned later, but the significance of the small sail on the bowsprit at the front of the ship needs comment here because it was the reason for Roman ships being able to sail routinely to windward and why sailing ships could be made much larger than previously (Davey 2015; 2016; 2018). The sail is called in Latin an *artemo*, and its only known occurrence in Greek is in this narrative (Acts 27: 40). In English it is called a spritsail and is not to be confused with the large foresail used on some Roman ships, the square mainsail used on some smaller river craft, or the *dolon*, a small temporary sail used on ancient warships. There are no depictions of the spritsail from before 100 BC, indicating that it was probably first used in the second century BC. It regularly appears in later Roman period ship illustrations:

> *Basch (1987) depicts about 46 Roman-period merchant ships without oars. Of these, ten have large foresails, while 28 have spritsails or bowsprits on which to rig spritsails. Of the eight ships depicted to have no sail at the bow, only three have square mainsails. There are also images of merchant ships with spritsails not included in Basch, especially on coins (Torr 1895: pl. 6 no. 27; Smith & Smith 1880: 201). (Davey 2018: 24)*

The small size of the spritsail meant that it did not normally provide aerodynamic power, but it was easy to operate and was used to aid steering, principally while sailing to windward and tacking (Davey 2015, 2018). Sailing ships rigged with square sails could sail as close to the wind as six points, that is 67.5 degrees from the wind, although Smith thought that ancient sailing ships could only achieve seven points, 78.75 degrees (1880: 135). Replicas of ancient ships, such as the *Kyrenia II*, have achieved headings of 61 degrees to the wind, suggesting that Smith's reasoning was conservative (Cariolou 1997: 92).[4]

When sailing to windward it is important to maintain the boat's forward motion as the resistance to sideways movement, leeway, is generated by the speed of the ship through the water. Steer away from the wind and the boat increases in speed but does not make very much progress toward the wind; steer too close to the wind and the boat slows, reducing the lateral resistance and increasing leeway, thus reducing progress toward the wind. Steering oars that were used during the Roman period lacked the power and robustness of a rudder and were prone to breaking even in moderate breezes when sailing to windward, so it was the spritsail that was used primarily to guide the ship when sailing close hauled. Ships with spritsails were therefore able to sail to windward and tack routinely in fair sailing breezes.[5]

Spritsails also presented the opportunity to make ships larger (Davey 2016). The forces exerted by larger sail plans could be balanced by spritsails so that the steering oars were not overpowered. It is noticeable that shipwreck data shows that sailing ships increased in size from the second century BC (Davey 2016: table 1). It is the advent of the spritsail that made the trade in bulk commodities feasible in Roman times.

An example of a large grain ship is the *Isis*. Lucian's description states its length to be 120 cubits (55 m), beam 30 cubits (13.75 m), and deck to keel 29 cubits (13.25 m), but does not mention its displacement, which has been variously estimated to have been 1,100–3,000 tonnes (Casson 1950: 186-9). Doubts about the veracity of the account have been raised, because the literary form and purpose of the text was not technical, and no grain ships of that size are known in the maritime archaeological record (Houston 1987), but shipwrecks are normally detected by their indestructible cargo of amphora, and since the large grain ships did not carry amphora, their timbers floated away leaving little trace. There is no *prima facie* reason for the technical deails not being correct. The Madrague de Giens shipwreck was almost two hundred years earlier and was of comparable size. It had 6,000 amphora, was 40 m long and displaced an estimated 520 tons (Tchernia et al. 1978). Casson also describes the accommodation aboard the grain ships, which were able to carry up to 600 people (1971: 172, 175–82). Paul's voyage had 276 people aboard.

Historically, the Roman grain ships were comparatively large. The 17th-century *Mayflower* by contrast, displaced about 250 tons and was about 30m long, and the 18th-century *Endeavour* displaced 360 tons and was also 30m long. In fact, merchant ships of the size of the Roman grain ships were not built again until the 18th century.

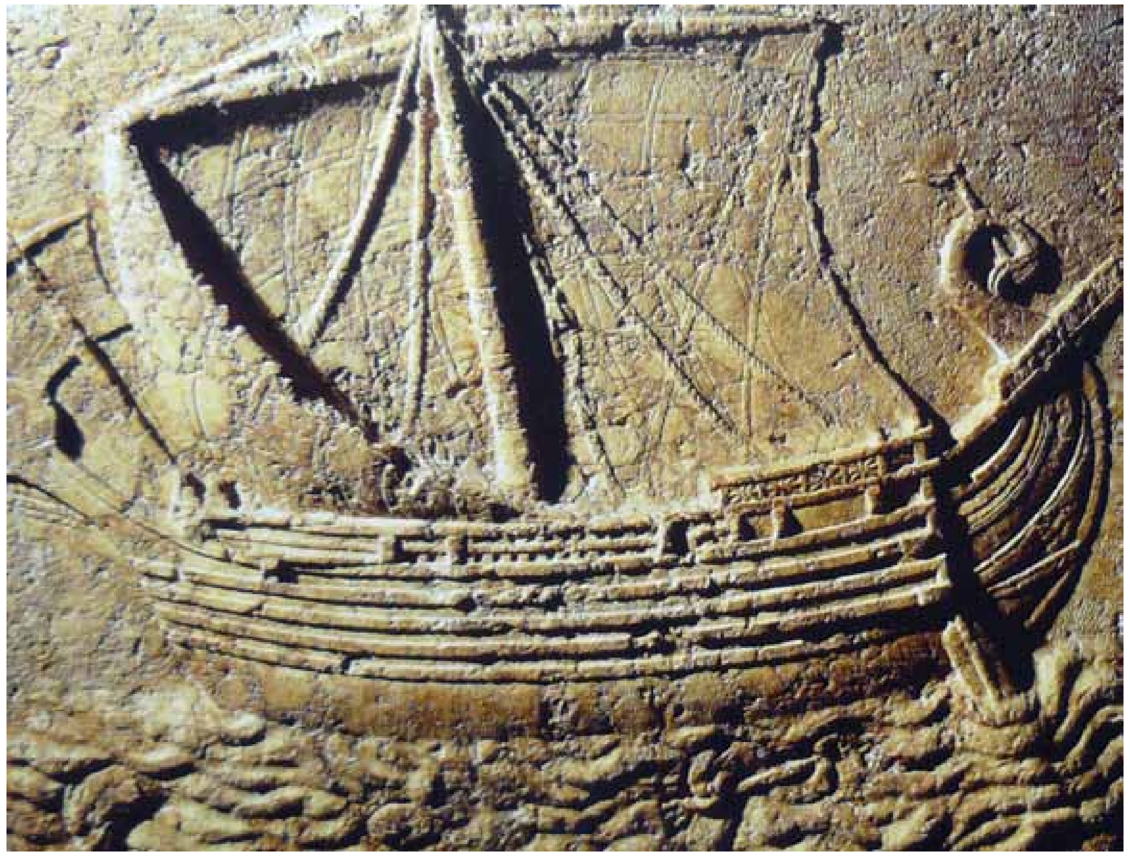

***Figure 4:** Relief of a large Roman merchant grain ship from a sarcophagus found at Sidon, second-century AD in National Museum, Beirut. Image: Public domain, https: //commons.wikimedia.org/wiki/File: Phoenician_ship.jpg.*

***Figure 5:** The Roman site of Andriake, the port of Myra. The port is now partly silted. The roofed buildings are the reconstructed granaries built by Hadrian (117–138), now used as a museum.*
Image: courtesy of Google Earth and e-yasamhberi.com, accessed 11/5/2025.

The narrative of Paul's voyage

The course of the voyage is plotted on Smith's chart (Figure 1). Place names used in this paper may be found in Figure 2, which has been modified from a map prepared by Ramsay.

Throughout the narrative, Luke accurately uses nautical terms (Smith & Smith 1880: 61 n.1). Many of the words used are to be found in Julius Pollux's late second century *Onomasticon*, which has numerous pages of Greek nautical terms and phrases (Pollucis 1824; Smith & Smith 1880: 29). Pollux was born at Naucratis in Egypt, became a Greek scholar and rhetorician, and was appointed to a Chair of rhetoric in Athens by emperor Commodus (AD 177–192).

In Acts 27: 2, the *New Revised Standard Version* (NRSV) fittingly translates the passive voice of Greek *anagō* as 'put to sea'.[6] The term is in Pollux's nautical section and describes a ship getting underway (Smith 1880: 65, n.1). Another nautical term used only by Luke, *katēchthēn*, (27:3) means 'to put in',[7] and is another idiom still in use today conveying the sense of a brief stop.[8]

The sailing distance from Caesarea to Sidon is about 70 nautical miles, and it appears that it took a little over a day at a VMG of about 2.5 knots. Sailing along the coast or *coasting*, could be treacherous if wind conditions changed for the worse especially during the hours of darkness.

According to Strabo, 'Sidon is situated upon a fine naturally-formed harbour on the mainland' (16.2.22). Smith thought it a good place to winter (1880: 64 n.3) and Captain Edward Smith reported that in 1840 it was still possible to anchor there in water 6 fathoms deep (Smith R.N. 1840: 15). At Sidon, Julius gave Paul the freedom to go with his party to eat and sleep ashore. They would have remained near the port in readiness to leave the moment that a favourable wind arose. Land breezes are common at sunrise, allowing ships to leave port and get sea room before the gradient winds of the day set in.

Grain ships frequented Sidon. The *Isis* called in there, and it was there that the most graphic image of a grain ship under sail was found (Figure 4). However, no grain ships were in port when Paul's ship called, so they 'put to sea' again, but as the winds were contrary, they 'sailed under the lee (*hupopleō*)[9] of Cyprus' (27:4). This has been variously understood. Sailing terminology often refers to the wind, and in this case *hupopleō* denotes the sheltered side of Cyprus. Some have argued that the contrary wind was blowing from the north hindering the passage of the ship along the coast of Syria, so they sailed westward to the south of Cyprus. Others, including Smith, have envisaged a westerly wind and a passage to the east of Cyprus (1880: 66–68; Figure 1). The next verse says that they 'sailed through the sea (*diapleúsantes*)[10] of Cilicia', which is to the north of Cyprus, so it appears that the contrary wind was from the west, and that they sailed anticlockwise around Cyprus where they had the advantage of the current that flows in the same direction (Beresford 2013: 101).

The next port-of-call mentioned was Myra, a Lycian town on the south coast of Türkiye. It had a theatre, temples and tombs cut into cliffs with relief facades. Its port was 4 km to the west at Andriake, where there was a substantial, sheltered harbour, which is now partly silted. Hadrian later built a granary there testifying to its strategic importance (Figure 5). As this was a major port, it would have been frequented by many ships returning to Rome from Alexandria with grain. Some may even have spent the winter there. It was there that Paul's group boarded an 'Alexandrian ship' that was sailing to Italy (27: 6).

The grain ship voyage

From Myra, the grain ship followed the southern coast of Türkiye (Smith 1880: 72). They 'sailed slowly' (*braduploоũntes*)[11] and 'with difficulty', indicating that the winds were light and, according to Smith, certainly adverse in direction, until they reached Cnidus (1880: 76). As the wind probably came off the land, it would also have been variable in strength and direction. The distance from Myra to Cnidus is about 290 km, and with a fair wind could have been sailed in about two days, however, it took 'many' days (27: 7).

Cnidus is located at the end of the Datça peninsula. It has two harbours, one on the north side sometimes used by warships and a larger southern port used by merchant ships. The lion statue, now in the British Museum's Great Court, was once atop a monument at an earlier site of Cnidus, now the town of Datça, and may have been visible at the time of Paul's voyage. Northwest of the Datça peninsula is the Aegean Sea and to the south is the Mediterranean Sea.

At Cnidus, the prevailing north-westerly wind was encountered without the shelter of the land, preventing a passage across the Aegean Sea to the north of Crete, so they headed southwest past Point Salmone, now Cape Sidero, the most north-easterly point of Crete. From there, sailing would have been in sheltered waters along the eastern and southern coasts of Crete where progress was again 'difficult' (27: 7–8). Before they reached Cape Malata, they anchored at a place called Fair Havens. This was identified by Smith to be modern Kaloi Limenes (1880: 82). It is 3 km west of a site that *Google Earth* labels as the 'Archaeological site of Lisaia', the ancient town of Lasea. It is near the Island of Trafos and today is adjacent to a small hamlet of holiday homes. All current images of the area depict ships at anchor, revealing that, although the bay is exposed to the southeast, it is a satisfactory anchorage for modern ships (Figure 6).

At Fair Havens, it was time to assess the situation as the voyage had not progressed to the point where it was possible to reach Rome before the winter. The autumnal equinox had passed, and storms could be expected. The voyage had become dangerous (*episphalous tou ploos*),[12] which Smith notes is the correct nautical expression as listed by Pollux (i: 105; Smith 1880: 84). In fact, the Fast, the Day of Atonement (*Yom Kippur*) that was observed on the 10th Tishri, had passed, and it seems that the 15th Tishri, when the Feast of Tabernacles was kept, was still to occur, otherwise that event would have been mentioned instead. This identifies the date, the Fast fell rather late that year (AD 59) on about 5 October (Ramsay 1898: 322; Bruce 1952: 455).

There was a consultation to discuss the best course of action (27: 9–12). Ramsay proposed that this was a 'council' presided over by the centurion, and consisting of the captain (*kubernētē*),[13] the *nauklērō*,[14] and people such as Paul who could contribute from their experience (1898: 323-24; Casson 1971: 315-6; Hemer 1990: 138-9). Ramsay deemed the *nauklērō* to be the sailing master and the ship to be state-owned, but the consensus is that the *nauklērō* was the owner, who had chartered the ship to the government. In either case, the centurion was the most senior officer aboard.

Luke would not have been at the meeting and would have relied on Paul's report of it. Paul advocated staying at Fair Havens, while the sailors deemed the harbour to be unsuitable for a winter stay and wanted to move to Phoenix, another port on the south coast of Crete. There is no doubt about the location of Phoenix. It is Loutro, which has two harbours facing the southwest and southeast, and it has an archaeological site on the promontory between the harbours labelled by *Google Earth* to be *Phoinix* (see above Ogilvie 1958: 314). Smith acknowledged in a footnote that 'Lutro is still known by the name Phenice' (1880: 87 n.3). It is about 73 km west of Fair Havens and, when it was examined by Captain Spratt RN in 1853, it was deemed to be the only harbour west of Fair Havens on the south coast of Crete that was safe to shelter for the winter (Smith 1880: 91 nn.1 & 3). Luke describes Phoenix as having harbours facing the southwest and northwest. He appears to have been mistaken; after all he never saw the place. The centurion accepted the advice from the ship's sailing officers, and so they planned to sail on to Phoenix.

It is significant that the direction the harbours faced was important. Roman ships were not very manoeuvrable in windy conditions, and they had little opportunity to alter their time of arrival at a port. It was therefore important that they could enter the harbour almost directly with the prevailing wind behind them.

The storm

When a light wind (*hypopneusantos*)[15] sprang up from the south presenting what appeared to be a good opportunity to sail westward toward Phoenix, they weighed anchor (*arantes*)[16] and sailed along the coast (27: 13): 'they coasted along Crete, close in' (Bruce 1952: 458). They may not have reached Cape Malata, where the shoreline turns northward, when a violent wind (*typhōnikos*)[17] cf. 'typhoon' rushed down on them from the mountains of Crete (27: 14). This strong wind is identified to have been a northeaster (*eurakulon*)[18] (Rapske 1994: 36–40). The wind is also known as a *Gregale* (Greek wind) by

Figure 6: *A recent image of the anchorage of Fair Havens, modern Kloi Limenes, on the south coast of Crete, looking to the southeast. It is still used as an anchorage, although there are no shore-based support facilities other than a load-out. Image: courtesy Google Earth, accessed 11/5/2025*

the Maltese. The Royal Meteorological Society website, *MetLink*, describes several severe Mediterranean winds including the *Gregale (or Grigale)/Euroclydon/Euraquilo* wind encountered by Paul's ship:

> *A notorious wind of the western Mediterranean which also blows across central parts of the Mediterranean Sea. It is a strong and cold wind from the north-east and occurs mainly in winter. It is most pronounced on the island of Malta, where it sometimes reaches hurricane force and endangers shipping … Paul experienced a gregale. As these winds normally last no more than four or five days, the storm he experienced appears to have been unusually persistent (https://www.metlink.org/resource/local-winds/ accessed 15/5/2025).*

The ship was caught (*sunarpasthentos*)[19] and could not be turned into the wind (27: 15). It appears that turning head-to-wind was the preferred course of action in this situation, but furling (*brailing up)* the sail or part thereof could not be undertaken in time, so they ran before the wind with too much sail aloft, in what was a hazardous manoeuvre (*scudding*), until the sail area could be reduced. Indeed, Bruce translates, 'we scudded before it' (1952: 459). They sailed to the lee of the island of Cauda passing it on their right. Cauda is today called Gavdo and is about 36 km due south of Loutro; so sailing to Phoenix was then out of the question. The bearing from Cape Malata to the south side of Cauda is 256.5 degrees, which would indicate that the wind direction was between ENE and E, that is about East by North. Smith applies a few processes to conclude that the wind direction was ENE (1880: 100–103).

The ship's-boat (*skáphos*)[20] cf 'skiff', was being trailed in the manner seen in Figure 3. As the distance from Crete increased, so too did the wave height, which endangered the ship's-boat, necessitating it to be brought under control (*perikrateĩs*)[21] and then hoisted out of the water (27: 16). Bruce suggests that Luke's use of the first person may indicate that he assisted in the process and that his comment that it was 'difficult', may infer that it was not a fond memory (1880: 459).

To strengthen the hull, the crew undergirded it (*hupozōnnumi*)[22] by securing ropes tightly around it (27: 17). Casson describes this practice, called 'frapping', as it was applied to ancient warships, and he states that on merchant ships there were cables 'for use in emergencies to secure planking that had loosened' (1971: 211 n.45; 91–2). Smith discusses the procedure in a nineteenth century context describing one instance of the practice (1880: 108–10).

With the hull strengthened and the ship's boat secure, it was then necessary to consider its direction of travel. They did not want to be driven into the *Syrtes*, two large areas of shallow water, reefs, and sandbanks in the 900 km wide Gulf of Sidra. Syrtis Major is on the eastern side of the gulf, near Benghazi, and Syrtis Minor is on the westside toward Tunis (Carthage). Captain Smyth's comments about these hazards are quoted by John Purdy:

> *All the world knows that the two Syrtes are the great gulfs on the northern coast of Africa, between Carthage and Cyrene, and that they were the terror of the ancient mariners: I did not find it a coast desolate, melancholy, and without*

form, but we saw distinctly how the waves, which are perpetually breaking against the shore, wash and leave the rocks uncovered which abound on this coast, and which are also strewed with the remains of many wrecks ... but it is necessary to reflect that vessels should not enter into this gulf when chased by tempests which it is impossible for them to resist; for, in rough weather, the sea rises here to a prodigious height (1841: 273).

The main danger was the sea state created by the shallow water; as the water depth decreases, the waves increase in steepness and height until they break, battering everything in their path. The shell construction of the hulls of Roman ships meant that they were vulnerable. The gale blowing from the East to ENE was likely to drive them into one of the Syrtes where it would be 'impossible for them to resist'. They needed to travel on a more northerly bearing of about 277 degrees. How this was achieved has been the subject of much speculation.

Luke says that, to sail the course to avoid the Syrtes, they lowered the *skeũos.*[23] Some modern versions translate *skeũos* as 'sea-anchor', however, this meaning is not found in ancient literature. Modern sea-anchors are like undersea parachutes, but can be anything bulky, that may be dragged behind a ship to keep it progressing directly away from the wind. In this case, that would have meant drifting toward the Sytres and disaster. A sea-anchor could not change the direction of drift in the manner required.

In nautical contexts, *skeũos* normally refers to a ship's gear, that is the running rigging, yards and sails but not the standing rigging, such as masts and stays. The Authorised Version uses an archaic term that they 'strake sail', meaning that they lowered the yard and the sail to the deck. When sails were furled on square-rigged ships, it was normal to lower some of the yards, to bring down the ship's centre of gravity and reduce its propensity to roll. Smith (1880: 111, n. 2) quotes Richard Gower's 1796 *Treatise on Seamanship* on preparing for a gale:

Let the top-gallant yards and masts, mizen-topsail yard, mizen yard, and cross-jack yard, be got down on deck, that the ship may be made as snug as possible.

Smith agrees that they lowered the yards and sails to the deck, although, in his view, having them aloft was important if they were to bypass the Syrtes (1880: 110-16). He maintains that they then hoisted some storm sails to 'lie-to' or heave-to, on the starboard tack so that they would drift in a more northerly direction but Luke makes no mention of the hoisting of storm sails at this point, which puts his suggestion into question. It is possible that a heave-to configuration was formed by using the steering oars to manoeuvre the ship to starboard while the spritsail (*artemon),* the small sail on the bowsprit, was set to steer the ship to port.

There is no evidence for this practice, but it is feasible and does seem to be the best interpretation. After lowering the yard and sail to the deck to make the ship 'snug' and less likely to roll, the steering oars turned the ship to starboard, while the spritsail was adjusted to make the ship move forward slowly without broaching (turning uncontrollably into the wind). Luke does not mention this happening, possibly because manoeuvring the ship with the steering oars and operating the spritsail was nothing out of the ordinary. Lowering the yard and sail would have made the ship easier to steer in the rough seas, which may explain why it was linked by Luke to the endeavour to avoid the Syrtes. Smith does not consider this approach, possibly because the sailors who advised him were more familiar with the use of jibs, rather than spritsails, and they had no experience of steering oars, single-masted large ships with long yards, and double-ended hulls, having bow-shapes fore and aft.

Luke says that, after lowering the gear, they *epheronto* (27: 17), which is often translated here to have been 'driven' (AV, NIV, NRSV etc). It took about fourteen days to reach Malta, which implies a speed of about 1.5 knots, and is more like drifting than being driven. In this case, 'carried along' seems a better translation of the passive voice of the verb 'to carry'. It gives the sense of travelling with limited command rather than being driven, or drifting, out of control.

The partially cross-wave course that the ship followed meant that they were *sphodrōs dè cheimazoménōn*[24] 'tossed', 'pounded', or 'battered' (27: 18). If they were drifting directly away from the wind, they would have been pitching and not being battered to the same extent because the bow-shaped stern would have ridden the waves more comfortably. When ships were in danger of foundering, they needed to be lightened by throwing superfluous objects overboard. The stresses rough seas can induce may cause hulls to leak and as the ship lowers into the water, more water starts coming over the sides. This situation would have been exacerbated by the oblique course across the waves that they followed. They jettisoned cargo, and on the third day they threw the gear (*skeũos*) overboard, which seems to have included the yard and sail (27: 19). Tossing the prime means of propulsion overboard would have seemed final and increased the sense of hopelessness. Paul stepped into this situation to provide encouragement (27: 21–26). As someone who had been shipwrecked three times and spent a night and a day adrift in the sea (2 Cor 11:25), he had some experience to draw upon.

Approaching a shore

The sailing of the ship seems to have been carried out professionally, and the crew must have operated the ship industriously to bypass the Syrtes and cross the Adriatic Sea. They were alert on the fourteenth night when they sensed that land was near (27: 27); they may have been aware of a change in sea state or may have seen or heard the breaking of waves ahead or on the portside.

Mediterranean coastlines are notoriously rocky and threatening and Malta, in particular, is mostly surrounded

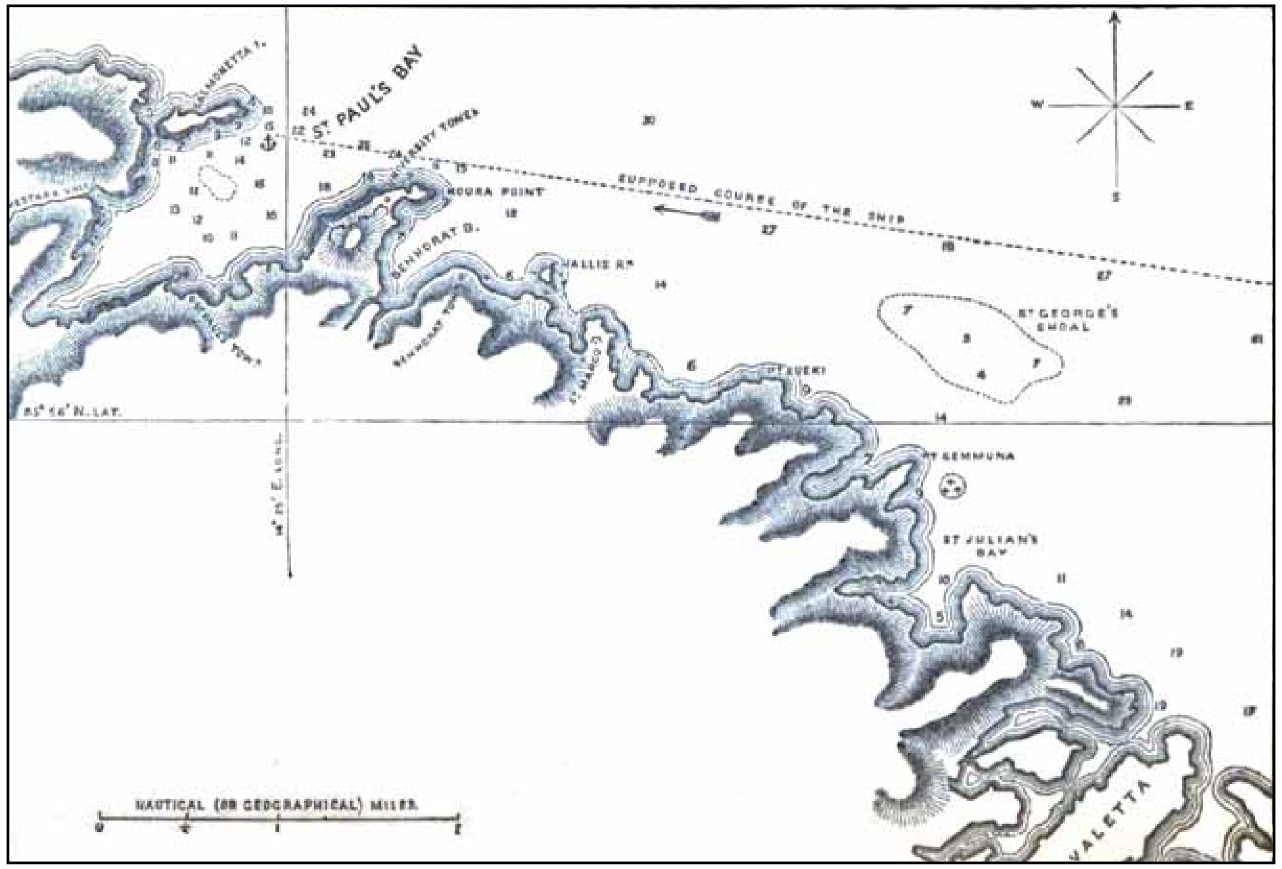

Figure 7: *A suggested approach of St Paul's ship to Malta travelling at a bearing of about 280 degrees from Crete and anchoring at the entrance of St Pauls Bay, in about 15 fathoms of water (from Smith 1856: opp 124).*

by vertical cliffs. The eastern shoreline is not so severe, and there are a few bays: Marsaxlokk Bay, St Thomas Bay, Valetta Harbour, Mellieha Bay, about half a dozen small bays or coves and, St Paul's Bay, the traditional site of the shipwreck. Figure 7 illustrates a plausible approach to the Bay from Crete. Sea levels today are a few metres higher than they were in Roman times, so the bay that they fortuitously arrived at may not be known with certainty. The sailors did not recognise the area, so it was not in the immediate vicinity of Valetta, where ships would normally have docked (27: 39). All we know is that in the bay there was a cove that had a beach, and that the water depth near the entrance was about 15 fathoms. St Paul's Bay does satisfy these conditions. Smith was comfortable that the geography of St Paul's Bay, and the experience of contemporary sailors who anchored there, made it the most likely location of the shipwreck (1880: 130–133).

To confirm the proximity of the shore, the sailors (*nautai*)[25] 'threw the lead' (*bolisantes*),[26] that is, took a sounding and found that the water depth was twenty fathoms (*orguias*).[27] A fathom is the distance between two outstretched arms, about 6 feet, (1.85m), giving a depth of 120 feet (36.6m) (27: 28). A second sounding a little later indicated that the depth was five fathoms less, confirming that they were approaching a shore. Lead sounding weights are some of the few imperishable items aboard ships and have been discovered in many shipwrecks (Oleson 2008). They then lowered four anchors (*agkura*)[28] from the stern (*prunes*)[29] to halt the ship's progress toward the land (27: 29).

Commentators have queried the anchoring of the ship from the stern and Smith was uncertain about it (1880: 133–135); however, it is a common practice aboard double-ended ships such as Viking longboats and most ancient Mediterranean ships. Getting underway was easier when a ship was anchored from the stern rather than the bow. The ship depicted in Figure 3 shows lugs protruding from the gunwales near the bow and the stern; these are called *timberheads* and were used to secure mooring and anchor ropes. When approaching the shore without the mainsail hoisted, it was difficult to turn the ship into the wind. The pretext for the sailors to put out anchors from the bow using the ship's boat was clearly a ruse to escape (27: 30). The soldiers' decision to cut the rope (*schoinia*)[30] and set the ship's boat adrift limited the ship's options and may indicate that they had decided that a shipwreck was inevitable. Bruce suggests that the soldiers misunderstood Paul's advice (1952: 464).

Luke does not mentioned that at the time of anchoring they lifted the steering oars out of the water and secure them with lashings (Smith 1880: 135). They may have been damaged had they been left in the water with a following sea. The ship in Figure 3 has one steering oar lifted out of the water in this fashion.

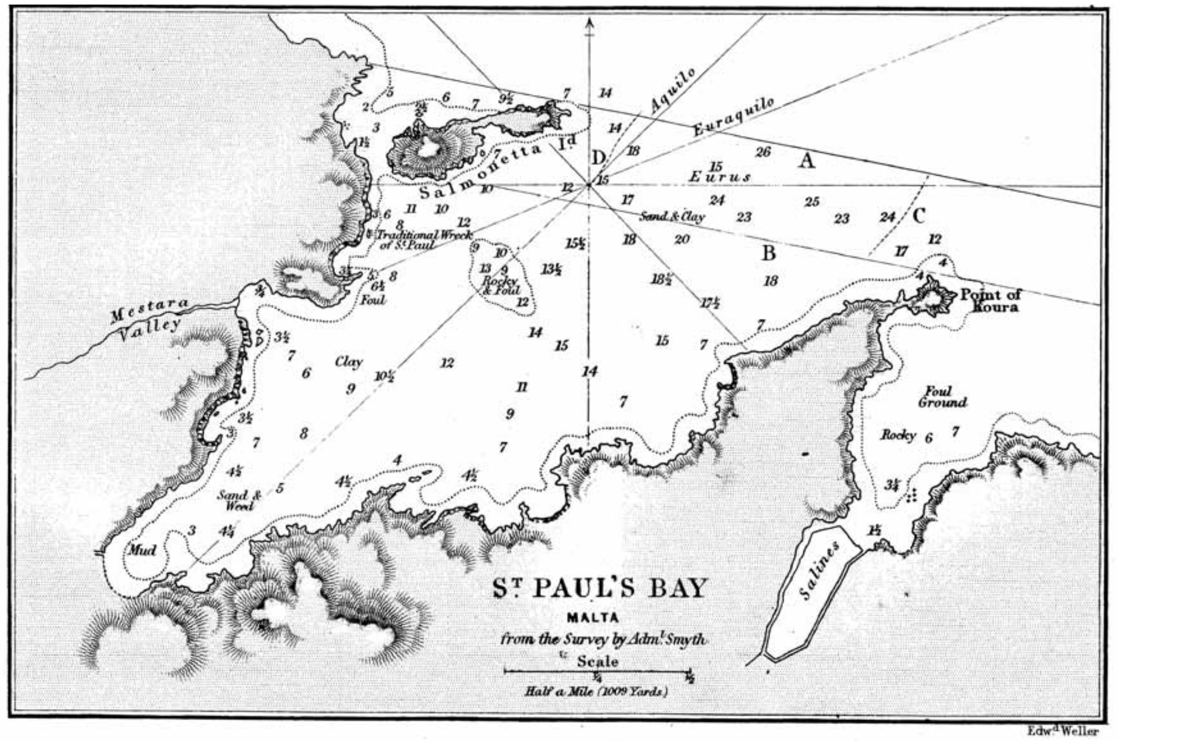

***Figure 8:** A chart of St Paul's Bay completed by Admiral William Henry Smyth (1788–1865) in about 1825. The possible location of the shipwreck is marked. From Smith (1880: opp. 129).*

Prior to the dawn, Paul encouraged everyone to have something to eat (27: 33–35). The rough weather would have limited the options for food preparation and many people do not like eating in turbulent and stressful circumstances. It is at this point that Luke reports that there were two hundred and seventy-six souls (*psuchai*) on board. Codex Vaticanus says that there were seventy-six people aboard and the *Revised Version* follows it. However, Bruce (1952: 466) and most versions follow the majority of old Greek manuscripts and accept the larger number.

The shipwreck

When daylight came, they found themselves anchored to the south of Salmonetta Island (Figure 8). From there the sailors saw a *kolpon*,[31] which is sometimes translated as 'bosom' or a 'fold' in a garment, but here means an indent in the shoreline or a 'cove' (27: 39). In the cove there was a beach (*aigialov*) where it was decided to run the ship aground (*exōsai*).[32] To do this the sailors: released or slipped the four anchors, leaving them and their hawsers (ropes) in the sea; untied the lashings (*zeuktērias*)[33] to lower the steering oars (*pēdalion*)[34] cf. 'paddles'; and hoisted the spritsail (*artemōna*)[35] to the wind, which is a round-about way of saying that 'they set the spritsail' (27: 40). This is the only mention of this sail-name in extant Greek literature. As already discussed, spritsails can be seen at the bows of most sea-going ships at that time (Figures 3 & 4), and functioned as an effective means of directional control, but in this instance, it was used to power the ship toward the shore.

No two translations of the shipwreck described in verse 41 are the same. It literally reads: but unfortunately coming upon (*peripesontes*)[36] a place between the two seas (*dithalasson*)[37] the ship (*naus*)[38] ran aground (*epekeilan*)[39] and the bow (*prōra*)[40] became stuck (*ereisasa*)[41] and it remained immoveable (*asaleutos*),[42] but the stern (*prumna*)[43] was being broken up by the force (of the waves). Most of the words are archaic and would have been recognised by the first readers because they were used in Homer's *Odyssey;* Bruce says that the language is poetic (1952: 467). Luke imbued the narrative with a sense of grandeur by channelling the *Odyssey*. If the scene was in a modern movie, the Jupiter 'theme' from Gustav Holst's *Planet Suite* would no doubt be the soundtrack to give the same sense of gravitas.

The elaborate language does shroud some of the meaning. Clearly, there was no reef, in fact the ship ran aground on a sand or clay bank, but the 'place between the two seas' is mysterious (Figure 8). Smith (1880: 142-3) describes the shipwreck in the context of St Paul's Bay and suggests that the second sea was through the narrow channel between Salmonetta Island and the mainland (Figure 9). The channel is only about 100m wide and at the time of the shipwreck would have been even narrower, so the physical effects of the channel were negligible. Luke appears to be alluding to Homer, where Odysseus had to sail through of the Strait of Messina, the 'place between two seas', the Adriatic and the Tyrrhenian, on a course between Scylla, thought to have been a rock shoal, but described as a six-headed sea monster on the

***Figure 9:** St Paul's Bay looking northwest from the southern shore. The traditional location of the shipwreck is near the break in the far shore of the bay above the white post on the right.*
Image: courtesy of Google Earth, accessed 1/7/2025.

Calabrian side of the strait, and Charybdis, a whirlpool off the coast of Sicily. He was advised to pass nearer to Scylla and risk losing a few sailors, rather than sail near the whirlpool and risk the loss of the entire ship. The myth gives rise to idioms such as, 'between a rock and a hard place,' 'to choose the lesser of two evils,' 'on the horns of a dilemma,' 'making the best of a bad lot,' and 'between the devil and the deep blue sea'. In this instance, rather than striking a reef or rocky shoreline, where the ship would have disintegrated rapidly and the people would have been overwhelmed by the tempestuous sea, the ship was stuck fast in the clay sea floor not far from a beach where there was time to arrange for people to go ashore. To achieve this, the centurion exercised his authority by sparing the lives of the prisoners, and ordering those who could swim to make their way to the beach, where they would be able to assist the people following who would be clinging to planks (*sanisin*)[44] or anything else from the ship that would help them stay afloat.

On Malta

As Paul had foreshadowed, everyone survived. During their sojourn in Malta, Paul continued to improve the circumstances of the people he encountered, starting by collecting firewood, and later, he cured people by the laying on of hands (28: 1–10).

Three months later, at the beginning of February, Paul's party joined another Alexandrian grain ship that had spent the winter (*parakecheimakoti*)[45] at Malta. The ship had a nameplate (*parasema*)[46] on the side with the name of the twin brothers (*Dioskouroi*),[47] the sons of Zeus, *Castor and Pollux*. The ship depicted in Figure 3 had its name, *Europa,* on such a nameplate on the ship's side. It is interesting that the name of Paul's ship was not mentioned by Luke. If it was state-owned, as Ramsay suggested, it may not have had a nameplate. Casson notes that in fact we know very few merchant ship names, and those that we do know, derive from the names of Egyptian, Greek or Roman deities (1971: 359).

The strategy of the owner of *Castor and Pollux* appears to have been astute. The prevailing north-westerly summer winds were yet to commence and there was a chance of favourable southerly winds that would expedite the voyage from Malta to Rome. They may then be the first ship for the season to arrive in Rome where there would be little competition for stevedores, the demand for grain would be at its greatest, and prices would be at their highest. They would get a rapid turnaround, and be back in Alexandria by the end of March, to take on a second consignment of wheat for the season. All being well, they would be returning from Alexandria with a third consignment at the end of the season, when they may again winter in Malta, or Crete (cf . Casson 1971: 297–9).

The *Castor and Pollux*, put in at Syracuse for three days, maybe to replenish supplies that were depleted during the winter in Malta. At the next port of call, Rhegium, a south wind sprang up prompting an immediate departure. The northward voyage from Rhegium to Puteoli took a little over a day at an average speed of 5 knots and is often referenced in studies discussing Roman period sailing passage times (Casson 1971: 284; Whitewright 2011: 4; Beresford 2013: 102). Beresford points out that for much of the year, winds in the Tyrrhenian Sea were from the northwest and, that early in the year southerlies may occur, giving ships a fast passage to Puteoli. At that time, it was normal for passengers to disembark at Puteoli and to travel overland to Rome. The new port, Portus, was to be commissioned about four years later (Keay 2012), so until then, cargoes were discharged at Ostia.

Concluding comments

The narrative of the voyage deals with circumstances not encountered elsewhere in the NT and so it includes words and concepts that are not common. Translating it has always been a challenge and some of the recent versions still need some revision. It is suggested that:

- σκεῦος,*/skeũos* (27: 17) is the 'sailing gear', referring to the running rigging including the mainsail and yard, so 'sail and yard' is also correct, but it is certainly not a 'sea anchor'.
- ἐφέροντο/*epheronto* (27: 17) is 'carried along' rather than 'driven'.
- ἀρτέμωνα/*artemōna* (27: 40) is a 'spritsail', not a 'foresail' or a 'dolon', and certainly not a 'mainsail' (AV).
- παρασήμῳ/*parasema* (28: 11) should be 'nameplate', not 'figurehead'.

The application of research associated with the spritsail has facilitated an understanding of the operational capacity and limitations of grain ships sailing from Alexandria to Rome against the prevailing summer winds. Little was written at the time about Roman seamanship, so Luke's description provides valuable information about first century maritime practices. The shipwreck was not reckless and accidental, but planned in the light of limited altenatives.

The account portrays Paul as a confident figure in the marine environment. He had no intention of escaping, and he used the connection with his captor to influence the course of events to help secure the safety of all aboard. Luke's use of nautical terms adds credibility to the narrative, which reinforces his perspective that while some of the disciples would appear to have forsaken Paul, he still had a vital role in the development of the Christian community.

At the beginning, it was mentioned that some scholars have been sceptical about the narrative of Paul's shipwreck. They seek organised theological constructions behind the text, but as Hemer has explained, 'The locations of insignificant places in Crete, the frustrated plans of the ship's company, the nautical manoeuvres and the topography of the Maltese shore are not only theologically irrelevant, but hard to explain except as vivid experience recalled before the details could blur or be merged in a longer perspective of reflection' (1990: 389).

This is the last action narrative in the Book of the Acts of the Apostles and should be its high point, but some modern readers have been let down by the way the story seems to peter out. The book is about acts, not theology. Paul's life of travel was being contrasted with that of his fellow apostles who were safely dwelling in Jerusalem where they would appear to have forgotten nearly everything that Jesus had told them and had given tacit approval to the views of exclusive Judaistic nationalists, who had sought to assassinate Paul. Instead, Paul was risking his life to introduce people to this new universal faith and to demonstrate how to practise that faith. He was aboard a ship, the size of which would not be common again for another seventeen hundred years, that was supplying the capital of the empire with essential provisions, when he found himself in the thick of a major disaster involving the most sophisticated technology and maritime traditions of the time. Even though he was under arrest, he was composed in the confusion, he was not overwhelmed by the life-threatening circumstances, and was able to act with integrity and compassion to make a positive contribution to the situation.

Luke draws on his own Classical Greek education to cast Paul's challenging voyage into the shadow of the *Odyssey* by using Homeric language to describe the ship's demise. This embedded the narrative in the cultural world and experience of the first readers of the book. The nationalistic themes of the Old Testament, such as the Exodus and the activities of ancient Israel, were not then known to most people, and in any case, were not relevant to them, as they made the best of life's daily struggles and challenges as citizens of the Empire. By including this voyage narrative as the penultimate record of the New Testament, Luke was suggesting that the followers of this new monotheistic faith could expect to prevail over the uncertainties of daily life. Rather than placating idols and adopting formulaic rituals, or pursuing exclusive utopian nationalisms, the followers of the faith were committed to a compassionate and constructive way of life, whatever the cost and inconvenience. It is hard to imagine a more fitting climax to the Book of the Acts.

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Bibliography

Aly, Samuel, 2017 The Gracchi and the Era of Grain Reform in Ancient Rome, *Tenor of Our Times* 6, 10–22.

Basch, Lucien, 1987 *Le Musée imaginaire de la marine antique*, Athénes: Institut hellénique pour la préservation de la tradition nautique.

Benoît, Fernand, 1961 *Fouilles sous-marines: l'épave du Grand Congloué à Marseille*, Paris: Centre national de la recherche scientifique.

Beresford, James, 2013 *The ancient sailing season*, Leiden Boston: Brill.

Bruce, Frederick F., 1952 *The Acts of the Apostles: The Greek text with introduction and commentary,* 2nd ed., London: Tyndale Press.

Cariolou, G.A., 1997 Kyrenia II: The return from Cyprus to Greece of the replica of a Hellenic merchant ship, in S. Swiny, R. Hohlfelder & H. Swiny eds, *Res Maritimae, Cyprus and the eastern Mediterranean from prehistory to late antiquity, Proceedings of the second international symposium 'cities on the sea'*, Atlanta, GA: Scholars Press, 83–97.

Casson, Lionel, 1950 The Isis and Her Voyage, *Transactions and Proceedings of the American Philological Association* 81, 43–56.

Casson, Lionel, 1971 *Ships and seamanship in the ancient world*, Princeton, NJ: Princeton University Press.

Casson, Lionel, 1991 *The Ancient Mariners: Seafarers and Sea Fighters of the Mediterranean in Ancient Times,* 2nd ed., Princeton, NJ: Princeton University Press.

Davey, Christopher J., 2015 Sailing to windward in Roman times: the sprit-sail legacy, *Buried History* 51, 31-44.

Davey, Christopher J., 2016 Large merchant ships in Roman times: the Spritsail legacy, Part II, *Buried History* 52, 35–44.

Davey, Christopher J., 2018 The Roman merchant ship sail plan, *Buried History* 54, 23–32.

Erdkamp, Paul, 2009 *The Grain Market in the Roman Empire: A Social, Political and Economic Study*, Cambridge: Cambridge University Press.

Graham, Daryn, 2024 Imperial responses to the food crisis that began under Claudius, *Mouseion: Journal of the Classical Association of Canada* 20 (1), 23–56.

Hastings, James, 1947 *A Dictionary of the Bible, dealing with the Language, Literature and Contents, including the Biblical Theology*, Edinburgh: T&T Clark.

Hemer, Colin J., 1990 *The Book of the Acts in the Setting of Hellenistic History*, Winona Lake, IN: Eisenbrauns.

Hemer, Colin J., 1985 First person narrative in Acts 27–28, *Tyndale Bulletin* 36, 79–109.

Hoff, Michael C. & Rhys F. Townsend, 2013 *Rough Cilicia: New Historical and Archaeological Approaches, Oxford*: Oxbow Books.

Holtzmann, Heinrich Julius, 1892 *Hand-Commentar zum Neuen Testament*, Freiburg: J.C.B. Mohr.

Houston, George W., 1987 Lucian's Navigium and the Dimensions of the Isis, *The American Journal of Philology* 108 (3), 444–50.

Jal, Auguste, 1840 *Archéologie navale*, Paris: Arthus Bertrand.

Keay, Simon ed., 2012 *Rome, Portus and the Mediterranean*, London: British School at Rome.

Ogilvie, Robert M., 1958 Phoenix, *Journal of Theological Studies* 9 (2), 308–14, https://doi.org/10.1093/jts/IX.2.308.

Oleson, John Peter, 2008 Testing the Waters: The Role of Sounding Weights in Ancient Mediterranean Navigation, *Memoirs of the American Academy in Rome Supplement* 6, 119–76.

Pollucis, Iulii, 1824 *Onomasticon: cum annotationibus interpretum*, Leipzig: Libraria Kuehniana.

Purdy, John, 1841 *Sailing directions for the Strait of Gibraltar and the Mediterranean Sea*, London: R.H. Laurie.

Ramsay, William Mitchell, Sir, 1898 *St. Paul the Traveller and the Roman Citizen,* 3rd ed., London: Hodder and Stoughton. http://www.archive.org/details/paulthetraveller00ramsuoft.

Rapske, Brian M., 1994 Acts, Travel and Shipwreck, in D.W.J. Gill & C. Gempf eds, *The Book of Acts in Its Graeco-Roman Setting*, The Book of Acts in its First Century Setting vol. 2, Grand Rapids, MI: William B Eerdmans, 1–47.

Rauh, N.K., 1998 Who were the Cilician pirates?, in S. Swiny, R. Hohlfelder & H. Swiny eds, *Res Maritimae, Cyprus and the eastern Mediterranean from prehistory to late antiquity, Proceedings of the second international symposium 'cities on the sea'*, Atlanta, GA: Scholars Press, 263–83.

Rauh, N.K., R. Townsend, M. Hoff & L. Wandsnider, 2000 Pirates in the Bay of Pamphylia: An archaeological inquiry, in G.J. Oliver, R. Brock, T.J. Cornell & S. Hodkinson eds, *The sea of antiquity*, 899 ed., Oxford: BAR Publishing, 151–80.

Rickman, Geoffrey E., 1980a The Grain Trade under the Roman Empire, in John H. D'Arms & E. Christian Kopff eds, *The Seaborne Commerce of Ancient Rome: Studies in Archaeology and History,* Memoirs of the American Academy in Rome, 36, Rome: American Academy in Rome, 261–75.

Rickman, Geoffrey E., 1980b *The Corn Supply of Ancient Rome*, Oxford: Clarendon Press.

Rushmer, Tonya, 2025 Who Counts as the Roman People? Caesar's recensus and Discriminatory Populism, in F.J. Vervaet, D. Rafferty & C.J. Dart eds, *How Republics Die: Creeping Authoritarianism in Ancient Rome and Beyond*, Berlin: de Gruyter, 363–388.

Sherwin-White, A.N., 1963 *Roman society and Roman law in the New Testament*, Oxford: Clarendon Press.

Smith, James of Jordan Hill, 1856 *The Voyage and Shipwreck of St. Paul: with dissertations on the sources of the writings of St. Luke, and the ships and navigation of the antients* Second edition, London: Longman, Brown, Green, Longmans, & Roberts.

Smith, James of Jordan Hill & Walter Edward Smith, 1880 *The Voyage and Shipwreck of St. Paul: with dissertations on the sources of the writings of St. Luke, and the ships and navigation of the antients,* Fourth edition, revised and corrected by Walter E. Smith. With a preface by the ... Bishop of Carlisle [H. Goodwin]. ed., London: Longmans & Co.

Smith R.N., Captain Edward, 1840 *Sailing Directions for the Coast of Syria*, London: W. Eden & Co.

Steffy, J. Richard, 1994 *Wooden ship building and the interpretation of shipwrecks*, College Station TX: Texas A & M University Press.

Steinby, Christa. M., 2020 The Role of Ostia and Portus in Roman Seafaring – The Literary Evidence, in A. Karivieri ed. *Life and death in a multicultural harbour city: Ostia antica from the Republic through late Antiquity*, Roma: Institutum Romanum Finlandiae, 29–39.

Tchernia, André, P. Pomey & A. Hesnard, 1978 *L'épave romaine de la Madrague de Giens, Var: campagnes 1972-1975*, Paris: Centre national de la recherche scientifique.

Torr, Cecil, 1895 *Ancient Ships, Illustrated*, Cambridge: University Press.

Vegetius Renatus, Flavius, ed. and trans. Leo F. Stelten, 1990 *Epitoma rei miliarius*, American university studies series XVII, New York: P. Lang.

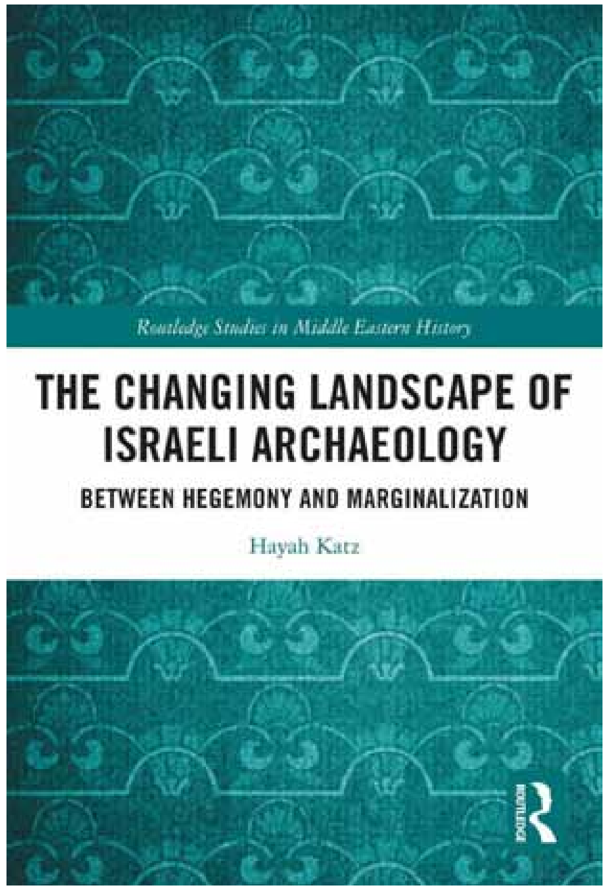
Vervaet, Frederik J., 2020 No Grain of Salt: Casting a New Light on Pompeius' Cura Annonae, *Hermes* 148.2, 149–172.

Whitewright, Julian, 2011 The Potential Performance of Ancient Mediterranean Sailing Rigs, *International Journal of Nautical Archaeology* 40 (1), 2–17, 10.1111/j.1095-9270.2010.00276.x.

Endnotes

1 Pliny the Elder, *Natural Histories* 19: 3–4.
2 Velocity-made-good measures the rate of advance along the achieved course and when beating (sailing a zig-zag course toward the wind), it allows for the leeway of the ship and currents of the sea.
3 A Phoenician princess who in Greek Mythology was abducted to Crete by Zeus.
4 Modern recreational sailing boats normally can sail at 45 degrees to the wind.
5 Maritime archaeologists tend to consider that a deep wine-glass hull shape was important for windward sailing. However, most sailing ships during the Age of Sail had flat bottoms and could be sailed to windward satisfactorily in a fair wind. All sailors know that sailing boats to windward requires a balanced sail-plan, effective command, and good seamanship.
6 ἀνάγω, only used by Luke in the NT, six times Lk 8: 22; Ac 16: 11; Ac 20: 3; Ac 21: 1; Ac 27: 2. Luke also uses the word five times in an active voice meaning 'to lead'. The AV is incorrect to translate 'to launch'.
7 Κατάγω, in the passive voice 21: 3, 27: 3 and 28: 12. *The New International Version*, for example translates 'we landed', which has a different implication.
8 https: //www.merriam-webster.com/dictionary/put%20in
9 ὑποπλέω, only used here and in verse 7 in the NT.
10 Διαπλεύσαντες, only occurrence in the NT.
11 βραδυπλοοῦντες, only occurrence in the NT.
12 πλοὸς, only used in the NT here, 27: 10 and 21: 7.
13 κυβερνήτῃ, used only here and Rev 18: 17.
14 ναυκλήρῳ, only occurrence in the NT.
15 Ὑποπνεύσαντος, only occurrence in the NT.
16 ἄραντες, only use of this word with this meaning in the NT.
17 τυφωνικὸς, only occurrence in the NT.
18 Εὐρακύλων, a *hapax legomena* referring to a well-known wind.
19 Συναρπασθέντος, only occurrence in the NT.
20 Σκάφης, only used here in the NT and verses 30 and 32.
21 περικρατεῖς, only occurrence in the NT.
22 ὑποζώννυμι, only occurrence in the NT.
23 σκεῦος, most of the 22 other occurrences refer to containers, jars etc.
24 Χειμαζομένων, only occurrence in the NT.
25 Ναύτης, only four occurrences in the NT.
26 Βολίσαντες, the only two occurrences in the NT.
27 ὀργυιὰς, only two occurrences in the NT.
28 ἀγκύρας, only four occurrences in the NT.
29 Πρύμνης, only three occurrences in the NT.
30 Σχοινία, only two occurrences in the NT.
31 Κόλπον, AV 'creek' is not very convincing.
32 ἐξῶσαι, used once elsewhere in the NT to mean 'drive out' Acts 7: 45.
33 Ζευκτηρίας, only occurrence in the NT.
34 Πηδαλίων, used twice in the NT, see James 3: 4.
35 ἀρτέμωνα, a hapax legomena, known from Latin *artemo*. The AV 'mainsail' is incorrect.
36 Περιπεσόντες, used once elsewhere in Lk 10: 30 where a man fell among thieves.
37 Διθάλασσον, only occurrence in the NT.
38 ναῦν, only occurrence in the NT.
39 ἐπέκειλαν, only occurrence in the NT. Homer: *Odyssey* 9: 148.
40 πρῷρα, only occurrence in the NT.
41 ἐρείσασα, only occurrence in the NT.
42 ἀσάλευτος, used once elsewhere Hb 12: 28 where it is the kingdom of God that is unshakeable.
43 Πρύμνα, used once elsewhere in Mk 4: 38.
44 Σανίσιν, only occurrence in the NT.
45 Παρακεχειμακότι, only occurrence in the NT.
46 παρασήμῳ, only occurrence in the NT. 'Figurehead' (NIV, NRSV, etc) is an incorrect translation.
47 Διοσκούροις, only occurrence in the NT.

Reviews



Hayah Katz, 2024 *The changing landscape of Israeli archaeology: between hegemony and marginalization,* New York, London: Routledge, ISBN: 9781032487144, pp 140, 18 B/W Ills, USD 144.

Reviewed by Steven A Rosen

The archaeology of the region variously known as the southern Levant, Palestine, the land of Israel, the Holy Land, etc. has been the subject of several sociological and historical analyses. These studies have invariably focused on the relationship between nationalism and archaeological practice/interpretation, which is hardly surprising given the region. The development of Israeli archaeology, from its origins in nineteenth century biblical investigations to current theory and practice, offers a seemingly ideal case study of the relationships between imperialism/colonialism, religious ideologies, nationalism, and archaeology in areas of conflict. Many of these studies are overly polemic, with clear political agendas. The relationship between the politics and the science is indisputable. In spite of this, as naive as it may sound, beginning in the 1980s and coincident with worldwide trends in archaeology as well as developments in local societies, critical approaches to the archaeology of the region have constituted a strong stream in regional practices of the discipline.

Against this backdrop, in *The changing landscape of Israeli archaeology: between hegemony and marginalization*, Hayah Katz examines the changing roles of three marginalised groups in the practice of archaeology in Israel: Orthodox Jewry (in its different permutations), Palestinian Israelis (in earlier times referred to as Arab Israelis), and women. The underlying thesis links the changing roles of these marginal groups to fundamental changes in Israeli society. In this, Katz offers a more nuanced critique of the hegemony of European/Israeli approaches to the post-prehistoric periods in the region than the usual and simplistic 'Israeli archaeology equals nationalism'.

The volume is organised into seven sections, including an introduction, five chapters, and conclusions. The substance of the book is reflected in the five chapter titles: 'The place of archaeology in Israeli secular society', 'Religious society and its attitude to archaeology', 'Religious society and the attitude to excavating graves', 'The Palestinian citizens of Israel and their attitude to archaeology', and 'Women in Israeli archaeology'. Important background information, for example a glossary of terms and discussions of Jewish law, makes the book accessible to a larger audience.

In the first chapter, Katz traces the evolving role of (post-prehistoric) archaeology in Israel. With its origins in European Christian exploration of the Holy Land beginning in the nineteenth century, and the early Jewish practitioners being almost exclusively of European origin, it is hardly surprising that archaeological narratives were dominated by Biblical interpretation, Ashkenazi (European) Jews, Zionist agendas, and the construction of a national identity in the formation of the state of Israel. This territory has been explored by many researchers (e.g., Silberman 1982; Zerubavel 1995; Abu El-Haj 2001; Ben-Yehuda 2002; Feige & Shilony 2008; Kletter 2014); however, the remarkably small scale of these early Jewish archaeological endeavours, dwarfed by the foreign 'colonialist' archaeological activities prior to the foundation of the state of Israel, has rarely been noted. By contrast, Katz paints a more dynamic picture, noting the rise of community archaeological projects in the 1990s, and the development of educational and heritage projects by the Israel Antiquities Authority (IAA) in the twenty-first century. Both phenomena considerably expanded the foci of archaeological practice in Israel. Even in the tendency to emphasise the Jewish aspects of some of these projects, it is this more dynamic view of Israeli archaeology that serves as a theme for examining the role of smaller, marginal communities in the development of Israeli archaeology. It is also worth adding that even the 'hegemonic' narratives of Israeli archaeology now include considerable diversity in theory, methods, and chronological foci. Examples include: the expansion of datasets beyond architecture, stratigraphy, and ceramics (most notably, but not exclusively, in the archaeological sciences), the partial adoption of social science (as opposed to biblical historical) approaches to the interpretation of the archaeological record, and the increasing emphasis on periods that have previously received less attention, most notably prehistory and the Middle Ages, especially the Islamic periods, and which is reflected in university positions and excavations conducted by the IAA.

The following chapters offer case studies of the developing roles of different groups in the practice of Israeli archaeology. Chapter 2 focuses on the place of religious Jewish communities in archaeological practice in Israel. Notably, Katz (openly declaring herself to be a religiously observant Jew) distinguishes between different streams of orthodox practice: religious Zionists, Haredi Orthodox, a rigorous orthodoxy, and the militant minorities within the Haredi community, which she refers to as the ultra-Orthodox (the use of the term in this context is not standard). The division is useful in the context of her discussion, but it is worth noting that even within observant Judaism, there are many nuances of community and practice. Although not orthodox, the reformed and conservative streams of Judaism, who are certainly less strict in their observance of Jewish law, have produced important archaeologists, the most notable of whom was Nelson Glueck, the pioneer of desert surveys.

The contrast between believing Christian and Jewish approaches to archaeology are notable. Many of the leading practitioners, indeed founders, of early biblical archaeology saw in archaeology an affirmation of biblical accounts and Christian theology. Orthodox Jewry saw no need for such affirmation, and very few Jewish archaeologists in the early days of archaeology in the Holy Land were religious/observant. Beginning roughly in the 1980s, a new generation of observant Jews began to achieve prominence in Israeli archaeology. Although they focused primarily on 'Jewish archaeology' (the biblical periods and Jewish subjects such as synagogues in the Classical period), their research falls well within mainstream practice. Katz also notes the founding of the Land of Israel Studies department (incorporating archaeology) at Bar Ilan University, a university whose mandate was the integration of Jewish observance and science. This department offered a natural home for observant archaeologists.

Chapter 3, on the archaeological excavation of graves, is really a continuation of the preceding chapter on religious attitudes towards archaeology. After reviewing Jewish laws concerning the excavation of graves, Katz traces the origins of disputes between archaeologists and orthodox Jewry to as early as the nineteenth century, reviewing the escalating tensions between archaeology and the religious sector well into the twenty-first century. The excavations at the City of David offer an in-depth examination of how this conflict developed.

The issue is fraught, and several points are neglected in the discussion. The religious burial societies, to which bones are handed over when excavations are deemed necessary, receive payments from the state for each reburial, a direct economic incentive to insist that all human bones from archaeological excavations be surrendered to these societies, regardless of ethnic or religious affiliation. This has led to confrontations over bones from patently pagan contexts (or, for that matter, Christian or Muslim contexts), and the levels of mistrust between the interested parties are clearly evident.

Reburial can be problematic. Protests over the excavation of burials, ostensibly to protect the rights of the dead, do not distinguish between Jews, pagans, Christians, and Muslims. There is a de facto and ironic recognition of this when the bones of these different peoples are reburied without distinction in non-denominational interments, without regard to their religious affiliations. Although a status quo exists concerning prehistoric burials, which are clearly not Jewish, tensions still arise during the excavation of protohistoric burials. The increasing power of Haredi political parties in coalition governments, reflected in other aspects of Israeli society, such as the absence of public transportation on the Sabbath, further exacerbates these tensions.

In Chapter 4, Katz addresses the issue of Palestinian Israeli (that is, Palestinian/Arab citizens of Israel) participation in Israeli archaeology. The role of archaeology in the Arab-Israeli conflict in forging a national identity for Jewish Israelis and legitimising the state of Israel, has been explored by many researchers. While Katz briefly reviews some of these arguments, the focus of her study is on the specific role that Palestinians played, or play, in archaeological practice, beginning during British mandate times and continuing into the twenty-first century. Tracing individuals and their roles in the archaeology of Palestine during the British mandate, the primary conclusion is that there was fundamentally little Palestinian interest in archaeology; Katz suggests that Palestinian identity and heritage were built on ethnography and ethnohistory. The number of Palestinian archaeologists was small.

The *Nakba* (catastrophe) that accompanied establishment of the state of Israel left Palestinian society shattered. The Palestinian archaeologists who had worked for the Palestine Department of Antiquities became refugees. For all intents and purposes, there were no Palestinian archaeologists working in the new state until well into the 1980s. Naming a number of currently prominent Palestinian Israeli archaeologists, Katz suggests that the increasing Palestinian (Israeli) participation in Israeli archaeology stems primarily from the increasing professionalisation of the field and the transition from the Israel Department of Antiquities and Museums to the Israel Antiquities Authority, a larger and stronger institution. The establishment of a Palestinian Authority in the 1990s, whose civil administrative functions also included the Ministry of Tourism and Antiquities, necessitating a cadre of professional archaeologists, suggests a broader context for the rise of Palestinian research in archaeology.

The final section in the chapter deals with the development of an archaeology of the *Nakba*, specifically investigations of Arab villages abandoned, and often deliberately destroyed in 1948. As with other aspects of the development of Israeli archaeology, Katz suggests that attitudes towards these very late periods have evolved from a general policy of erasure, to one of greater appreciation for Palestinian culture, and to grappling with the implications of the *Nakba*. Although she offers examples from modern Israeli practice, it would be hard to argue that such practice is the rule.

The final substantive chapter deals with the role of women in Israeli archaeology. After reviewing the rather substantial contributions of women to archaeology during the British Mandate Period, Katz offers thumbnail sketches of major women archaeologists within Israeli archaeology, with particular emphasis on Ruth Amiran, author of a seminal book on ceramics, and known especially for her excavations at the Early Bronze Age town of Arad. Further discussion focuses on data taken from the Israel Science Foundation grants, suggesting that there were biases against women in the granting processes. The data are more nuanced than this. For example, for the 11 years sampled (2010–2020), women received above their expected proportion of grants in five of those years, and below the expected proportion in the other five years (in 2010 they received exactly the expected proportion); this is hardly a suggestion of bias. Katz notes that the subject matters of the grants differ, with men receiving more money for field work and women more for 'archaeological housework', i.e. various types of analytical studies. It is impossible to evaluate whether such classifications reflect real bias or sociological tendencies, but the case for bias is certainly not demonstrated here. On the other hand, the universities have clearly proven to be more conservative in the hiring of women in archaeology than has the Israel Antiquities Authority, and the development of the Authority has certainly offered career options for women. Katz places these trends in the larger context of social structures and compares them to archaeological practice in other countries. The issue of intersectionality, persons filling more than one category of minority, is also reviewed.

The final chapter summarises the conclusions and trends that were discussed earlier. While on the one hand, Katz accepts the fact of underlying biases in the practice of Israeli archaeology, on the other hand, the picture she draws is not static or flat, but, in fact, one of increasing diversity and inclusion. This is an important dynamic rarely noted in previous studies. Some of these trends are tied to specific features of archaeology and Israel – for example, the increasing professionalisation of the discipline – and others to broader developments in Israeli society, for example, the increasing role of women in archaeology is part of a larger trend of women in the professions in Israel, and is not restricted to archaeology, either in academia or the Israel Antiquities Authority. While such linkages seem relatively clear, the complexities of Israeli society, for example, the fluctuations in political trends, demographic growth, economic growth based on high tech, etc., suggest that the causes are complex. Some of these trends contradict one another, for example, the increasing secularisation of some elements of society against the growth of the Haredi sector. Thus, the increasing presence of observant Jews in archaeology has as much to do with changes within the structure of orthodoxy as it does with changes in archaeological practice and structure. These are discrete trends, not necessarily linked to one another.

Katz offers a more nuanced and less judgmental version of hegemony and placing it in a cultural context. Biases existed, but she makes no attempt to 'place blame'.

There are other issues. The archaeology that Katz deals with, dominated by its biblical and Jewish subfields, is a very narrow aspect of the discipline as it is practiced in the rest of the world. Prehistoric archaeology is barely touched on, and yet it plays a major role in the shifting structures of Israeli archaeology, having served as a kind of gateway for adopting both scientific methods and anthropological paradigms into Israeli archaeology. Women prehistorians spearheaded the place of women in Israeli archaeology.

This issue of broader frameworks, of archaeology as social science as opposed to particularistic history, is hardly addressed even though it is integral to the development of Israeli archaeology. Global trends in archaeology, from processual to postmodern approaches and beyond, have had significant impacts on theory and practice in Israeli archaeology, even if adopted critically and piece meal. The ever-greater integration of Israeli archaeology into the larger world – evident for example in Israeli publication in journals well beyond those dealing exclusively with Near Eastern archaeology – is virtually by definition also a reflection of the impact of world archaeology on Israeli practice.

If the picture that Katz paints is essentially an optimistic one of greater inclusion and more sensitivity in archaeological practice, there are major unresolved conflicts and contradictions in Israeli archaeology. The increasing polarisations within Israeli society, between left and right, religious and secular, Arab and Jew, and even conflicts between Jewish ethnic subgroups, are well reflected in archaeological debates; for example, over the activities of the Archaeological Staff Officer of the Civil Administration of the West Bank (a unit of the Israel Defence Ministry), have often been characterised as illegal under international law (Greenberg and Keinan 2009) (although to be sure, some are clearly mandated by United Nations charters). Although there is a status quo concerning the excavation of graves and grave goods, the agreements are fragile, and unquestionably subject to the vagaries of political fluctuation. If there are indeed more 'subaltern' archaeologists today than in the past, the social and cultural trends behind these inclusions are fraught.

Hayah Katz has presented a nuanced view of Israeli archaeology and its development. This is most welcome and will undoubtedly stimulate important discussion.

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Bibliography

Abu El-Haj, N., 2001 *Facts on the Ground: Archaeological Practice and Territorial Self-Fashioning in Israeli Society*, Chicago: University of Chicago.

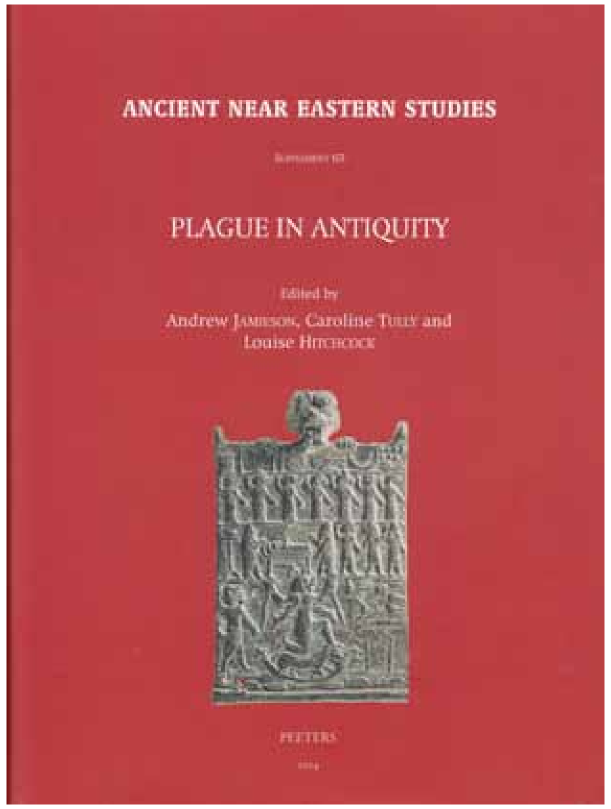
Feige, M. & Z. Shilony, eds, 2008 *A Spade to Dig With: Archaeology and Nationalism in the Land of Israel.* Sede Boqer: Ben-Gurion Institute. (Hebrew).

Greenberg, R. & A. Keinan, 2009 *Israeli archaeological activity in the West Bank 1967–2007: A sourcebook*. Jerusalem: Ostracon.

Kletter, R., 2014 *Just past?: the making of Israeli archaeology*, London: Routledge.

Silberman, N.A., 1982 *Digging* for *God and Country*, New York: Knopf**.**

Zerubavel, Y., 1995 *Recovered Roots*, Chicago: University of Chicago.



Andrew Jamieson, Caroline Tully and Louise Hitchcock, eds, 2024 *Plague in Antiquity,* Ancient Near Eastern Studies, Supplement, 65, Leuven: Peeters, pp. xiv, 264, ISBN 9789042950689, EUR 165.

Reviewed by Christopher J. Davey

This book was conceived in the wake of Covid-19 to explore the possibility that historians and archaeologists of the ancient world may be able to relieve the 'social anxiety caused by pandemics' and to review 'our own research in a fresh, new light' (p. 1). There are ten contributions, ordered alphabetically by the authors' surnames, spanning the Bronze Age to Late Antiquity in Mesopotamia, Egypt, the Levant, Cyprus, Anatolia and the Indus Valley. Classical and biblical literature is not included, although there are some Old Testament references where they relate to cuneiform texts.

Plague and pandemic were probably more common in the ancient world than they are now, but they do not feature prominently in historical research. The experience of Covid-19 has brought the subject to the fore. Several of the contributors to the book are early-career academics so the topic will no doubt be revisited by them for some years to come.

The book commences with an introduction, which defines the topic, summaries the main themes and outlines each contribution. Authors are not only expected to draw on the study of the ancient world, but also on their own encounters with the Covid-19 pandemic. Reflection on personal experience is often deemed anecdotal and irrelevant in scholarly circles, however, physical involvement in a subject area appropriately applied, as it is in this book, adds legitimacy and accuracy to the studies. It assists that most readers will have their own vivid memories of Covid-19.

Chapter One is the first of the five contributions dealing with cuneiform literature. It is by Troels Pank Arbøll, an Assistant Professor in Assyriology, University of Copenhagen, and a Junior Research Fellow, Linacre College, University of Oxford. The paper focusses on second and first millennium BCE texts as sources for plague events. It begins by discussing problems with Akkadian terminology: words referring to mass death or depopulation events may in fact describe famine, flood, or massacre, rather than a medical event. Relevant cuneiform texts are not only Mesopotamian, but also include Hittite literature from Anatolia, and the Amarna Letters from Egypt. Also discussed are apotropaic and prophylactic procedures such as omens and rituals, the close relationship between war and epidemic, and the Erra Epic. This paper is a fitting lead-in to the subject and has a useful bibliography.

Chapter Two is by the late Professor Robert Arnott, Green Templeton College, University of Oxford, who discusses malaria in the Harappan Civilisation, using environmental and archaeological data. He concludes that malaria may have had 'depressive effects' in the Pre-Harappan Phase, but by the Mature Harappan Phase, with 'ecological and geographical changes and human intervention such as improvements to farming techniques, malaria would have been reduced to a manageable level' (p. 35). In other words, malaria was not an epidemic in the Harappan Civilisation.

A second paper on cuneiform is in Chapter Three. Maria Erica Couto-Ferreira, Universität Heidelberg, Seminar for the Languages and Cultures of the Near East, is an Independent Scholar in Assyriology, and is also an author of horror genre novels. In addition to themes discussed in Chapter One, Couto-Ferreira refers to *Atra-ḫasīs*, the role of Nergal, the Mesopotamian god of pestilence, and the idea that plague was a means used by the gods to control population growth and to punish humanity. She also explains that in cuneiform texts there was a recognition that personal contact could transmit disease, leading to the practice of isolation and quarantine as a means of disease control. In cuneiform texts, both demonic causation of epidemics and personal behaviour as prophylaxis could be written about in the same text.

In Chapter Four, Louise Hitchcock, previously of the University of Melbourne and now retired, discusses Amarna Letter EA 35, which reports that copper supplies to Egypt had dwindled because the men, including copper-workers, in the land of Alašiya had been slain by Nergal (p. 71). However, 500 units (maybe talents) of copper were sent to Egypt with the letter, which according to Hitchcock, indicates that the pestilence had not resulted in the cessation of copper production. There is no convincing justification for this point. Instead, Alašiya is identified to be Alassa-*Palaiotaverna*, and there is a discussion about a substantial building excavated there that post-dates Letter EA 35 and is deemed to have had Mycenean connections. The reference to a Mesopotamian god in a letter from Cyprus is interesting, but does not draw comment.

Brandon McDonald, Rumsey Family Assistant Professor in Interdiscplinary Studies, Classical Studies, Tufts University, contributed Chapter Five, which discusses the reason for the environmental decline of the Negev in the sixth century BC: was it the Justinianic Plague or the Late Antique Little Ice Age (LALIA)? The Justinianic Plague began in the eastern Nile Delta in July AD 541, and spread throughout the Empire. DNA analyses referenced by McDonald confirm the pestilence to be *Yersinia pestis*, the bacterium that causes bubonic plague. The LALIA was triggered by a series of earthquakes. Based on archaeological and written evidence, McDonald decides that the plague was the primary cause of the Negev's decline. However, as the paper acknowledges, the reason for the ongoing depressed state of the region is an open question.

Strahil V. Panayotov, Curator Assyrian Medicine British Museum, and Assistant at the Bulgarian Academy of Sciences, wrote the third cuneiform paper, Chapter Six. Demons, which in Mesopotamia were far less than gods, were deemed to be the cause of disease. Panayotov considers that this is parallel to the way people today view viruses, however, he does not take the next step and link different demons with specific viruses. He focuses on the way people treat unseen demons and viruses, developing diverse apotropaic rituals, which he considers analogous to the constant development of vaccines. He concludes 'the juxtaposition of demons and viruses exemplify how little [the] human mind has changed since Mesopotamian times' (p.121).

Chapter Seven by Nicholas Vlahogiannis, Honorary, School of Historical and Philosophical Studies, University of Melbourne, considers attitudes to disability in ancient Egypt and Mesopotamia. This scholarly essay draws on texts and iconography to explore the topic, but does not develop aspects of social structure. He notes that disabilities appear amongst the lower classes in Egyptian tomb paintings. Maybe, like today, people with disabilities in lower classes live with their families, while the affluent were able pass such people off to servants. Whatever the case, disability has little or no relationship to plague.

Klaus Wagensonner, Associate Research Scholar, Near Eastern Languages and Civilization, Yale University, prepared Chapter Eight, dealing with plague and misfortune, and the production and use of amulets and charms to ward off evil. In doing so, he presents cuneiform tablets from the Yale Babylonian Collection and the British Museum, some of which were unpublished. The texts list stones to be threaded to form amulets and sometimes describe the purpose of the amulet. The paper is a reminder that ancient bracelets and other adornments often had a function and were not just for display.

Chapter Nine by John Z. Wee, National University of Singapore, Tembusu College, Faculty Member, previously of Yale University, Near Eastern Languages and Civilizations, discusses Mesopotamian etiological divination in the light of the Greek Hippocratic writings, *On the Sacred Disease*. According to Wee, *Sacred Disease* considered the attribution of diseases to divine action, common in Greek society at the time, to be false because the origin was in fact 'the impersonal forces of nature' (p. 221). Wee thinks that Mesopotamian divination practice was like common Greek practice and so stands equally condemned. This is a fascinating discussion, which remains relevant in a world where anti-vaccinators are not uncommon. However, as argued in Chapter Six, in Mesopotamia sometimes diseases were thought to be the result of demonic activity rather than that of the divine.

The last chapter by Valeria Zubieta Lupo, Johannes Gutenberg-Universität Mainz, Institute of Ancient Studies, and Independent Scholar, Ancient History, returns to the issue of plague. In about 1320 BC, after fighting against the Egyptians, the Hittite King, Šuppiluliuma, returned to Hattusa, the Hittite capital with many prisoners, only to find an infectious disease spreading through the kingdom. The records associated with the epidemic were discovered in the royal Hittite archive. Šuppiluliuma died on his arrival home, probably from the plague. His successor, Muršili II had to deal with what became 20 years of recurrent epidemic. Lupu describes the Hittite actions against the epidemic using the World Health Organisation's five critical stages: anticipation, early detection, containment, control and mitigation, and elimination or eradication.

The subject of the book will be of interest to scholars of the ancient world, and its contents will have a certain resonance with readers who remember Covid-19. Some may not be enthusiastic about the inclusion of five papers dealing with cuneiform texts; however, they provide a wealth of relevant material for study. While every paper is interesting, a number do not focus on plague. The religious practises described to manage the medical unknowns in a pre-scientific age may seem quaint to readers now, until one remembers Covid-19 and non-scientific responses often made by governments. Nor have we, in Australia at least, had any independent scientific inquiry about the pandemic and the measures taken to manage it. Like so many people who lived through the events mentioned in this book, we had to make our own decisions and suffer the consequences. But ultimately, vaccinations were available to us and we did not have to sacrifice our pets to placate angry gods or recite incantations to fetter demons.

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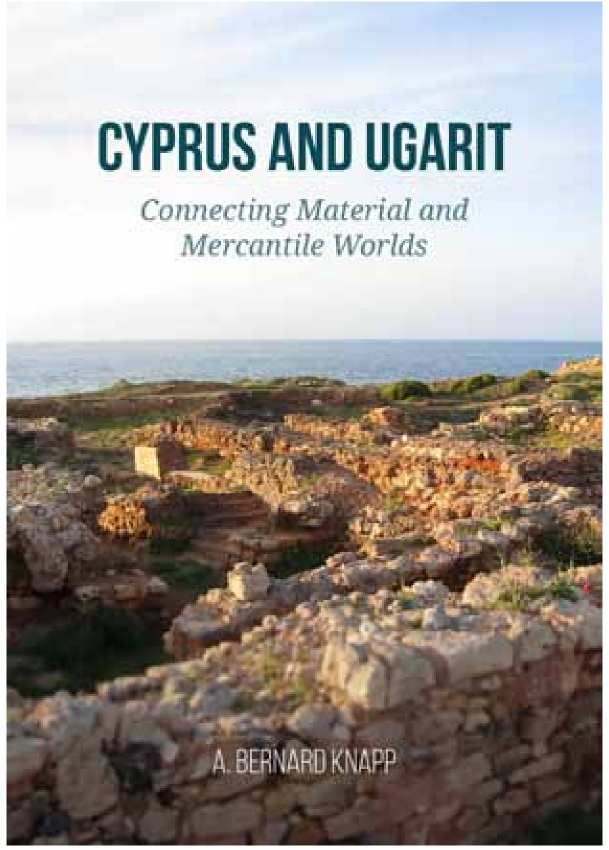

A. Bernard Knapp, 2024, *Cyprus and Ugarit, Connecting Material and Mercantile Worlds*, Sidestone Press, ISBN: 9789464263046, pp 118, 6 b/w illus, 5 c illus, EUR 30.

Reviewed by Caroline Sauvage

This short book aims to provide new insights into the long-term relations between the Levant – especially Ugarit – and Cyprus through a detailed study of the archaeological and textual sources. The author's goal is to discuss all of the available evidence regarding three specific factors: people, politics and professions, while targeting connectivity and the mercantile spheres of interactions. In conclusion, the author argues 'that although Ugarit and Cyprus were two very different kind of society, they shared a vital, commercial link, one that – over time – had a transformative impact on Cyprus' (p. 9). The following review will summarize and discuss each chapter of the book.

In a short introduction (chapter one) Knapp introduces the concept of his book, which aims to engage with several topics: maritime space and modes of interaction, merchants and mercantilism, agents and actors. His aim is to further our knowledge of the long-term relationship between Ugarit and Cyprus and to move away from the traditional material or stylistic analysis, and the primary lens of textual evidence.

Chapter two is a prelude to the book and reviews the scholarship on the relations between Cyprus and Ugarit, including the many contributions by M. Yon, but also by G. Cadogan. This chapter also touches upon maritime connectivity studies regarding long distance trade and cabotage (Arnaud 2005), as well as documentary evidence (such as Monroe 2011). A quick overview of the tell of Ugarit and its surrounding sites (Minet el-Beida and Ras Ibn Hani) is presented. It introduces the main merchants known through textual evidence (Yabninu, Urtenu, Rap'anu and Rashap-Abu), as well as their associated houses. Finally, the reader is introduced to Cyprus, its geographical setting as well as the natural resources and main sites. A broad overview of the town-centred and industrial economy of the Late Cypriot period is then discussed. Knapp notes that the people and merchants of Cyprus were engaged in diverse networks of exchange involving the Levantine coast, Egypt, Anatolia and the Aegean. Material culture, and especially prestige items such as gold, ivory and faience, attest to the numerous imports received on the island in exchange for copper, pottery and other goods such as timber and textiles. Oil is not mentioned by the author in this chapter but should very much be included in the list of exports (and probably imports) from and to Cyprus, especially since it is later mentioned in the book.

Chapter three examines the common material culture and architectural features between Ugarit and Cyprus (mostly Enkomi), and focusses on ashlar masonry, composite stone anchors and Cypro-Minoan script. Knapp reminds the reader that the appearance of ashlar masonry in Cyprus is not associated with any real changes in the ceramic repertoire (p. 27). A comparison of the urban mortuary practices at both Ugarit and Cyprus as assessed by Keswani (1989, 2004, 2012) is presented, with an emphasis on the similarities and differences between the ashlar tombs in both locations. Most notably, the private aspects of the Ugarit tombs accessible from within houses, while built at the same time as their surrounding building, is highlighted. By contrast, the Enkomi tombs were more public in nature as they could be accessed from the outside of the buildings. The timing of their construction and relationship to their building is not discussed. Knapp proposes to follow Keswani's suggestion that these tombs were those of international merchant kin groups which were linked by marriage and alliances (p. 31). Although this is certainly a tempting possibility, it can neither be inferred nor disproved with the available evidence, because although they share key characteristics, both tomb groups differed in the way they were conceived and used/accessed, and one cannot identify merchant groups through their material culture or built environment. Moreover, this proposal is problematic because it seems to imply that the built tombs in Ugarit only belonged to merchant groups and that only merchants could have settled in Enkomi. Sources show that movement of people between Ugarit and Cyprus was frequent, with for instance high-ranking Ugaritans who 'moved' (were exiled) to Cyprus (RS 17.35, RS 17.352 detailed in chapter six). That the tombs reflect a shared – yet not identical – tradition is certain, but it is impossible to interpret it as exclusively associated with the mercantile world. It might be better understood as part of a koine/elite emulation model or as part of the movement of people, whose professions and specific identities cannot be completely assessed.

When reviewing types of anchors and their find spots, Knapp rightly reminds us that it is difficult to associate anchor types with regions or cultures. We should add that anchors can easily be lost on the seafloor and replacing them during sea-voyages would have been essential. Therefore, the type(s) of anchors found on a specific ship cannot be taken as characteristic of the ship's origin. Finally, this chapter concludes that both areas would have had intimate cultural knowledge of each other as well as commercial relations.

In chapter four, Knapp surveys the Cypriot material found in Ugarit including seal impressions, metal and pottery. The chapter starts with a brief discussion of spindle whorls and bathtubs (p. 35), and although it is possible that bathtubs in Ugarit were imports or inspired by Cypriot examples, it is not possible to say the same for spindle whorls. Parallels in the shape, weight and decoration of some objects are found both in Ugarit and Cyprus. This certainly points to similar thread production, and maybe a shared material culture as often seen in the Late Bronze Age, but it does not mean that these objects were traded. A local production of spindle-whorls is attested in Ugarit by an unfinished example (81 AO 918 – Sauvage 2013, fig. 11.2), and textile tools from several other Cypriot sites such as Kition, or Kourion-Bamboula (Penn Museum no. 54-41-83) show similarities with the Enkomi material (Sauvage and Smith 2016; Smith et al. 2015).

One must note that this chapter is remarkable because the author establishes a table of Cypriot imports complied from several recent publications to provide an idea of the Cypriot wares and their percentage in Ugarit. Of course, this is an attempt to give an impression of the items that were exchanged, while recognizing that the actual numbers would have been much greater. Knapp rightly reminds the readers that Schaeffer did not publish nor preserve all of the ceramic material of the early excavations at Ras Shamra preventing any scholar from establishing percentages of pottery types. On should also add that in Schaeffer's early publications, a heavy emphasis was placed on imported ceramics (Mycenaean and Cypriot) as these were not only 'nicer' than the plain local ceramics but allowed the excavator to highlight the maritime connections of the site if not the presence of a Mycenaean colony (a theory that was advanced in the 1930s). It could have been a useful exercise to use the additional lists of objects from funerary contexts discussed in Sauvage & Lorre (2023), because Schaeffer seemed to have recorded all of the material found in built tombs in his inventory. The numbers of imports should also of course be replaced in their context, as imports are overall found in greater quantities in (generally looted) tombs than in domestic contexts, and when a study of the percentage of imports was possible at Ugarit, Monchambert found that they represented only 1% of the total assemblage (Monchambert 2004).

Chapter five presents the Levantine imports in Cyprus. Here too, the author emphasizes the incomplete publication of the French material excavated at Enkomi by Schaeffer. Schaeffer had strong preconceived ideas regarding the nature of both settlements and was clearly looking for the signs of external (Mycenaean) influences during his early campaigns. As Knapp points out, it is extremely difficult to recognize Ugaritic material at Enkomi. This is of course due to the incomplete publications of the ceramic corpus at the time of excavation, but also to the fact that the bulk of the Enkomi (fragmentary?) ceramic material may still be in the Enkomi warehouses, which have been inaccessible to archaeologists since 1974. One should also point out the obvious: since Schaeffer was only selectively publishing locally-made ceramics – unless complete or unusual – in the Ugarit volumes, he probably wouldn't have published these types of ceramics at Enkomi either.

The evidence detailed in this chapter aims to demonstrate the 'widespread presence on Cyprus of objects imported from Ugarit or the wider Levant' and objects that can be linked to either Cyprus or the Levant through their iconography. As with the case for Ugarit, Knapp notes that one should not discount the invisible imports that would have included organic material such as food, or clothing.

When looking at trade and trade connections, it is always tempting to talk about overwhelming evidence and widespread evidence because of relative high number of exceptional objects (the author of the review is also guilty of this), but we need to remind ourselves that funerary material is not representative of the actual uses of imports in daily life, and we rarely know how many individuals were buried in any given tomb, making assumptions on specific numbers and percentages hard to achieve.

Chapter six describes the documentary evidence found at Ugarit regarding contacts and its relationship with Cyprus. It focusses on texts in Akkadian cuneiform and alphabetic/Ugaritic cuneiform. The textual evidence shows that Cypriots (broadly speaking) were present in Ugarit, while also demonstrates that people and divinities of Cyprus were involved in aspects of the Ugaritic ceremonial life. Particularly useful in this chapter are tables 3 and 4, which conveniently gather all the texts from Ugarit dealing with Cyprus. These tables include the tablets' findspots as well as publications and incorporate the latest finds from Ugarit.

This chapter, like the others, is very descriptive and rehearses information known from texts, especially regarding the end of the kingdom of Ugarit, and the 'enemy from the Sea'. It lists the diverse goods exchanged between Ugarit and Cyprus, including horses, ships, pitchers and pots, oil, trowels, food. Knapp includes in this section texts dealing with deliveries of copper (for instance RS 18.24) even if the text does not mention directly Cyprus or a Cypriot merchant. He also includes documents (RS 17.36 and RS 17.149) that do not mention Cypriots but bear Cypriot-style seals that were used before the tablets were inscribed. Although it is hard to identify clearly a Cypriot merchant or official just based on a seal impression, these texts are unusual as they do not bear the Ugaritic king's dynastic seal. Other documents, such as text RS 16.238+254 narrating the travel from Sinnaranu to Crete, along with texts about deliveries of grain to Ura in Cilicia (RS 20.212 and RS 26.158) are included in the table maybe because they are mentioned later in the book and not because they relate to Cypriote matters. In short, the author is here reviewing all possible evidence, including texts that may not directly relate to Cyprus or Cypriot material.

In his last chapter 'Material and Mercantile Connectivity in the Late Bronze Age Eastern Mediterranean', Knapp asks relevant questions regarding the trading system of the Late Bronze Age Eastern Mediterranean. For instance, he wonders about the role and influence of some of the well-known Ugaritic merchants (such as Urtenu) and also wonders if the picture of trade relationships between Cyprus and Ugarit as depicted in the existing modern literature is true, as the narrative has often been driven by Ugaritic textual sources.

Knapp states that 'the role of the state in maritime trade at Ugarit thus seems to have been indirect, or "symbiotic" and was typically overseen by a *sakiny* (prefect)' (p. 68). He postulates that seagoing ships would have belonged to the merchants themselves and not the state. This point raises questions and is still debated by scholars, because textual sources from Ugarit (or elsewhere) do not say who had the expertise to build and maintain these ships. It seems however, that the royal authority in Ugarit was interested in shipbuilding as is demonstrated by RS 14.001, a probable list from the royal palace mentioning 'ship makers' (*ḥrš ʾanyt*). (Virolleaud 1957, 66-68 (PRU 2 n° 40 - CAT 4.125, Dietrich, Loretz & Sanmartín 1995, 261); Ernst-Pradal 2000; 2023, 1). Although Knapp argues that RS 18.113A indicates that the harbourmaster of Ugarit sold ships to a merchant from Alashiya (but see Pardee 2012; 2023:72), the assumption that he was acting on private ground is disputable. Indeed, Pardee has argued that the harbor of Minet el-Beida was a royal possession, under royal jurisdiction, and it would therefore seem evident that the harbourmaster would have been operating as a royal agent. As Pardee (2023: 90) argues: 'Urtenu was effectively the State', and it seems that this argument can be extended to other wealthy merchants or high officials from Ugarit whose 'private' archives all contained state related documents, making it hard to draw a line between what was private and what was under the authority of the state through their official's authority. One should also note the quasi-absence of ship representations in Ugarit, which should not be neglected when looking at maritime connections. Although Knapp, in his conclusion, refers to the recent study by Matoïan (2021) of the rare ship representations from Ugarit, and notes the lack of discussion on their economic or mercantile significance, he doesn't engage in the discussion himself.

In conclusion, this book is extremely useful for anyone interested in the mercantile world of the Late Bronze Age, and the interactions between the Levant and Cyprus. It summarizes the existing evidence in one convenient place and presents tables of both texts and imported Cypriot ceramics in Ugarit that will certainly help the readers with their own inquiries. Because of its focus on the mercantile world, seen as a driving factor for Late Bronze exchanges, the book tends to overlook other possible explanations for shared ideologies, and consumption. At times, it feels that the underlying claim of the book is that all of the elites consuming imports at Ugarit were part of wealthy mercantile families. Although such a proposal is certainly a stimulating thought about the *koiné* of the Late Bronze Age eastern Mediterranean in general and can even explain the *raison d'être* of this phenomenon, it seems to be reductive, or even extreme to consider that *all* elites, including the king of Ugarit, belonged to kin groups of merchants. Nevertheless, the evidence presented in this book nicely brings to the forefront the extreme connectivity of the Late Bronze Age eastern Mediterranean, especially that of Ugarit and Enkomi, and highlights the constant travels, regional interconnections and social entanglements of the regions, while providing stimulating views of their mechanisms.

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Bibliography

Arnaud, P., 2005 *Les Routes de la navigation antique. Itinéraires en Méditerranée*, Paris: Errance.

Dietrich, M., O. Loretz & J. Sanmartin, 1995 *The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani and Other Places,* (KTU second enlarged edition), Münster: Ugarit-Verlag.

Ernst-Pradal, F. 2000 *Ougarit au Bronze récent, ports et métiers de la mer*, Unpublished Mémoire de Maîtrise.

Keswani, P.S., 1989 Dimensions of Social Hierarchy in Late Bronze Age Cyprus, an analysis of the mortuary data from Enkomi, *Journal of Mediterranean Archaeology* 2: 49–86.

Keswani, P.S., 2004 *Mortuary Rituals and Society in Bronze Age Cyprus*, Monographs in Mediterranean Archaeology 9, London: Equinox.

Keswani, P.S., 2012 Urban Mortuary Practices at Enkomi and Ugarit in the second Millennium BC, in P. Pfälzner, J. Niehr, E. Pernicka & A. Wissing eds, *(Re-)Constructing Funerary Rituals in the Ancient Near East*, Qatna Studien Supplementa 1, Wiesbaden: Harrassowitz, 183–203.

Matoïan, V., 2021 Représentations de bateaux à Ugarit: un réexamen du document RS 19.199 découvert dans le 'Palais sud'/'maison de Yabninu', *Ugarit Forshungen* 52: 127–148.

Monchambert J.-Y., 2004 *La céramique d'Ougarit. Campagne de fouilles 1975 et 1976*, RSO XV, Paris: ERC.

Monroe, C., 2011 From Luxuries to Anxieties: a liminal view of the Late Bronze Age World System, in T.C. Wilkinson, S. Sherratt, & J. Bennett eds, *Interweaving Worlds: Systemic Interactions in Eurasia, 7th to the 1st Millennia BC*, Oxford: Oxbow, 87–99.

Pardee, D., 2012 RS 18.113 A+B, letter d'un serviteur du roi d'Ougarit se trouvant à Chypre, in G.A. Kiraz & Z. al-Salameen eds, *From Ugarit to Nabatea, Studies in Honor of John F. Healey*, Gorgias Ugaritic Studies 6, Piscataway NJ: Gorgias Press, 167–206.

Pardee, D., 2023 The 'merchants' of Ugarit: the textual evidence, *Semitica et Classica* 16: 41–104.

Sauvage, C. 2013 Spinning from old threads: the whorls from Ugarit at the Musée d'Archéologie Nationale of Saint-Germain-en-Laye and at the Louvre, in M.-L. Nosch, H. Koefoed & E. Andersson Strand eds, *Textile Production and Consumption in the Ancient Near East: Archaeology, Epigraphy, Iconography*, Oxford: Oxbow books, 189–214.

Sauvage, C. & C. Lorre, eds, 2023 *À la découverte du royaume d'Ougarit (Syrie du IIe millénaire): les fouilles de C.F.A. Schaeffer à Minet el-Beida et Ras Shamra (1929–1937),* la collection C.F.A. Schaeffer d'Ougarit au Musée d'Archéologie Nationale de St-Germain-en-Laye, Contributions to the Archaeology of Egypt, Nubia and the Levant, 7, Vienna: Verlag der österreichischen Akademie der Wissenschaften.

Sauvage, C. & J. Smith, 2016 Local and Regional Patterns of Textile Production in Late Bronze Age Cyprus, in G. Bourogiannis & C. Muhlenboch eds, *Ancient Cyprus Today: Museum Collections and New Research*, SIMA Pocket-book 184, Uppsala: Paul Forlag Astroms, 195–205.

Smith, J.S., J. Cutler, E. Andersson Strand & M.-L. Nosch, 2015 Textile tools from Kition, Cyprus, in E. Andersson Strand & M.-L. Nosch eds, *Tools, Textiles and Contexts: Textile Production in the Aegean and Eastern Mediterranean Bronze Age* (*Ancient Textiles Series*), Oxford: Oxbow books, 337–345.

Virolleaud Ch., 1957 *Le palais royal d'Ugarit II*, Paris: C. Klincksieck.