

G.R.H. Wright, *Ancient Building Technology, Volume 3, Construction, Technology and Change in History 12/1*, Leiden: Brill 2009, ISBN 90 04 17745 1, Part I, 325pp + xxvi, Part 2, 415 pls, US\$ 350.

Reviewed by Christopher J. Davey

This is the final volume in the *Ancient Building Technology* series by G.R.H. (Mick) Wright. Earlier books in the series are *Volume 1: Historical Background* (2000) and *Volume 2: Materials* (2005). Other publications on the subject by Wright include *Ancient Building in Cyprus*, (Handbuch der Orientalistik, Siebente Abteilung, Kunst und Archäologie, Brill 1992), and *Ancient Building in South Syria and Palestine*, (Brill 1985).

Wright is an Australian archaeologist who has been active in the field since the early 1950's. His early academic training was in law and architecture and he performed surveying and architectural roles on excavation teams where he trained an entire generation of archaeologists to draw plans and sections. His drafting skill is more than evident in the illustration volumes while his didactic style pervades the text.

The role of 'architect' on archaeological excavations may be confused with traditionally trained modern architects who have a grounding in design, modern architectural forms and to some extent the significance of symbol in architectural form. However the responsibilities of the archaeological architect relate more to recording, analysing fragmentary remains and conceiving theoretical reconstructions, none of which are part of the modern profession. Wright sees the built environment from a technological perspective and as such his books are invaluable to the archaeological site architect.

The separation of text and plates into two volumes is useful as it is possible to follow the illustrative material while reading the text. Wright has redrawn many diagrams and sketches to produce a uniform style. Photographs are also included.

The first chapter deals with drawings, specifications and quantities, which he believes to be common to all projects ancient and modern so that 'it is useful to introduce their discussion in ancient building by reference to present day practice and procedure' (p 1). He is no doubt correct that it is a practical place to commence, but there must be a constant awareness that past practices may differ significantly as a result of the technological or social setting. Before plans could be easily drawn and reproduced entire navies were built and rigged on the 'rules of thumb' or proportional measurements in the minds of ship-yard foremen; similar traditions would have existed for building construction. Wright is aware that the plans we have may be 'as built' drawings rather than project designs. The material available for discussion is Mesopotamian, Egyptian, Greek and Roman.

The next chapter on setting out also draws heavily on mid-20th century practice. There is no doubt that people who have not been engaged in these practices are not likely to appreciate the issues involved. Wright discusses all matters of orientation and vertical control, but only has Egyptian and Greek examples to draw upon. In earlier works, such as the *Ancient Building in South Syria and Palestine*, he has discussed proportionality and he acknowledges the issue here in relation to the Mt Gerizim church, but he does not consider it significant where setting out is concerned.

The last introductory chapter deals with site works and the organisation of materials and labour. Most of the chapter discusses specific projects, starting with the tower at Neolithic Jericho and finishing with Roman concrete structures. Wright reviews the available methods of moving materials and the types of temporary support structures necessary to facilitate construction for buildings and includes the pyramids of Egypt and the Pantheon of Rome.

The remainder of the book addresses issues relating to different building materials starting with wood, which includes the *Mudhif* reed buildings of the Marsh Arabs and European lake dwellings, stone, brick, and Roman concrete.

The chapter on wood uses examples from all ancient Mediterranean cultures, but especially Anatolia. He does not discuss the use of wood in the floors at Alaça Hüyük, but all other occurrences are dealt with. While roofing spans are referred to there is no analysis of what widths were possible; wood often has a structural role in monumental structures and the text may have benefit from some civil engineering analysis.

The stone chapter is lengthy. Again, a wide geographical range of examples are referenced. Wright discusses the use of stone in walls, columns, roofing especially vaults and domes, and foundations. There is an appended note on rock cut structures such as those at Petra and Egyptian tombs.

Brick is treated geographically and chronologically, beginning with the Neolithic and ending in late (pre-Islamic) Iran. The description benefits from this systematic approach. The Roman concrete discussion deals with the systems used to construct vaults and domes, and the different structural behaviour of concrete. The concluding chapter is a useful overview tentatively tracing the progressive development of building techniques from the Neolithic until Roman times.

The overall feeling from this book is that there is currently a lack of real knowledge about basic ancient building practices. Wright has pulled together what we know, but as he acknowledges, it is still sketchy. The literature on ancient literacy is vast, but there is comparatively little on numeracy and other basic building skills. There is also an increasing amount of writing on the significance

of certain architectural forms in the landscape, but very little about the knowledge and skill base of the ancient builders and engineers responsible for the structures. Nor do we know very much about the social organisation of building project teams and the ways building and design expertise were made available and transmitted. These matters are not peripheral to our assessment of ancient societies with the capacity to design and construct monumental structures.

Each chapter has its own bibliography and there is a comprehensive index. Referencing is inconsistently formatted and there is an incomplete list of abbreviations in the text volume. These matters are trivial when considered against the grandeur of these monumental volumes. The *Ancient Building Technology* series by Mick Wright will be the baseline for the study of ancient architecture for many years to come.

Paul Lawrence, *The Books of Moses Revisited*, Eugene, OR: Wipf & Stock, 2011, 172 pp + xv, ISBN 978 1 61 097417 2, US\$ 22.

Reviewed by Christopher J. Davey

Paul Lawrence has worked for some time with Professor Kenneth Kitchen on a multi-volume work entitled *Treaty, Law and Covenant in the Ancient Near East*, which contains the original texts and translations of every known ancient treaty, ninety-seven in all, together with an analysis of them. This book is a harbinger of that larger work which is now in the hands of a publisher; it foreshadows some of the conclusions and it references the texts from the forthcoming volumes.

In addition to the material relating to ancient treaties Lawrence argues that the Pentateuch should be considered in the light of other late second millennium BC features such as Egyptian loan words and legal framework. He also discusses the epic poems about Sinuhe and Gilgamesh, and Homer's *Illiad* and *Odyssey*. Lawrence's argument is basically that the Documentary Hypothesis as an explanation for the formation of the Pentateuch is no longer tenable in the light of the large amount of evidence that has come to light since it was proposed by Julius Wellhausen between 1876 and 1883.

Lawrence's first chapter introduces the Documentary Hypothesis and what we know about Moses from the biblical story. A racy history of the second millennium BC is provided in the second chapter. Genesis is then discussed, proposing a structure based on the phrase translated as 'These are the generations of...', and noting the contextual data for the treaty structure in the four reported treaties, the Egyptian loan words in the story of Joseph and the appropriateness of the slave price mentioned in relation to Joseph.

The meat of the book is found in the following four chapters where Exodus 20 to the end of Leviticus and

Deuteronomy are analysed as treaties and their structure, terminology and content are considered in relation to possible contemporary treaty documents. It is concluded that it is the treaty material from the second millennium BC, rather than the first millennium, that is relevant. Pentateuch book divisions are seen as a result of later scroll lengths.

The penultimate chapter deals with the epics of Sinuhe, Gilgamesh and Homer and attempts to show that in transmission and in some respects, content, the Pentateuch as a second millennium BC document is not unique. This subject area is vast involving second and third millennium BC Mesopotamian, Egyptian and Greek literary texts and their transmission. The treatment of the subject here, while reasonable, clearly does not have the same comprehensive and rigorous analysis underpinning it as do the preceding four chapters.

The conclusion states that 'there is no compelling reason to reject the traditional view, that Moses was the 'author' of the Pentateuch or substantial portions of it..' (p 123). Indeed if Moses did not write the Pentateuch, someone like him must have done so. Egyptian education, Semitic background, a knowledge of second millennium BC international treaties and politics and experience with early alphabets are all evident in the text.

Many biblical scholars will no doubt be dismissive about the Pentateuch in a second millennium BC context. What is at stake here is not so much its authenticity, but rather its context and meaning. Unfortunately, the number of scholars who can effectively engage in this discussion is small. The linguistic prerequisites preclude all but a handful, and the situation is not likely to improve as the educational establishments teaching Akkadian, Sumerian and Hittite diminish.

There are also a couple of methodological issues militating against contextual studies such as this. Many colleges see the Bible as 'authoritative' studying it in isolation and in so doing they lose much of its meaning. Others adopt a modernist approach seeking to be scientific. However in this post-modernist, post-processual, world there is a realisation that empirical certainty is an illusion and that all evidence should be considered. Following this methodology much of the ancient Near Eastern data discussed by Lawrence are in fact source material, while the biblical text is an artefact that we seek to understand.

Paul Lawrence's book itself is meant for the general reader as it does not assume prior knowledge of the history of the debate and the ancient world or the documents themselves. It has tables of chronology, lists of treaties, maps, indexes and a useful bibliography. Although the text appears disjointed with many quotes, tables and footnotes, there are regular introductory and summary paragraphs enabling the reader to stay abreast of the argument. Unlike detailed earlier works such as Ken Kitchen's *On the Reliability of the Old Testament*, this book is a manageable length and is priced for the non-specialist.