PETIT, LUCAS PIETER, Settlement Dynamics in the Middle Jordan Valley during Iron Age II. British Archaeological Reports International Series 2033. Oxford: Archaeopress, 2009. 270 Seiten mit 203 Abb. Broschur. ISBN 978-1-4073-0610-0.

This study of settlement dynamics in the Middle Jordan Valley during Iron Age II is one of four sub-projects dealing with various aspects of the Middle Jordan Valley. The others are *Cultural Landscape Study* (E. Kaptjin), *Physical Landscape and Geoarchaeological Study* (F. Hourani) and *Botanical Landscape Study* (E. Grootveld). The entire project is coordinated by G. van der Kooij, of the University of Leiden (the Netherlands), and O. al-Ghul, of Yarmouk University, Irbid (Jordan).

Chapter 1 informs the reader about the project administration, the terminology used throughout the publication, and the geography and topography of the region and the investigated sites. The study comprises some 72 km^2 in the Central Jordan Valley from the Wadi Rajib to the north, the Transjordanian foothills to the east, the Wadi Zerqa to the south and the Jordan River to the west. The research area is illustrated in one of the numerous figures, although a larger map would have facilitated the identification of the sites mentioned in the study. The author rightly highlights the difficulties of excavating tells, with their complicated stratigraphy on sloping areas, and - as a result – the frequent contradictory interpretations by other scholars, based on differing views of stratigraphic associations. He emphasises that much attention will be devoted to deposition history and less to architectural outlook. The latter is a logical consequence of the quite limited areas opened in the excavated settlements.

The purpose of the settlement study, which covers the Iron Age II, viz. roughly 1000-539 BCE, is according to the author to "find parallels or divergences, for the chronology and quality/intensity of use of Tell Deir ᶜAlla, in order to understand the human occupation and use in the Middle Jordan Valley ...". A previous survey had located 17 settlement mounds, of which three were chosen for limited excavation: Tell Damiyah, Tell al-ᶜAdliyyeh and Tell ᶜAmmata. Excavation and survey strategies are presented. This chapter provides a well-chosen introduction to the study.

Chapter 2 informs the reader about living conditions in the investigated area, and its geology, geomorphology, water supply and climatic fluctuations. The level of the Dead Sea as a mirror of annual precipitation is discussed and illustrated in Figure 2.4, which shows fluctuations between roughly 405 m down to 410 m below sea level during 1200-400 BCE. Nevertheless, in the text the author states that his paleoclimatic excursion starts in the late 11th century BCE and that "in one century the level of the Dead Sea rose considerably ....but was never higher than 388 m below sea level". This statement is not reflected in the figure. It is, nevertheless, admirable that diachronic climatic conditions get the attention they deserve in a publication of this kind.

Chapter 3 deals with a convenient description of the patterns of settlement, survival and abandonment whereas Chapter 4 discusses Early Iron Age chronology - nowadays a much debated topic (cf. *inter alia* FINKELSTEIN *et al*. 2011, MAZAR 2011). The author highlights the pitfalls when dealing with "historical" sources such as the Old Testament. He also points to the well-known inability of radiocarbon dating to go below sub-century accuracy levels. The present reviewer agrees with the evident conclusion of the author that radiocarbon samples from "coarse strata" are of limited value and that only short-lived samples from a refined stratigraphy should be considered in a discussion of absolute chronology. It is, however, somewhat surprising that the author, who not only takes on the laudable task of producing a refined stratigraphy in his own excavations but also tries - using climatic and seismic data - to refine the chronology of Tell Deir ᶜAlla, on which the entire area of investigation depends, does not present any radiocarbon dates from his own excavations. The refinement of the chronology by radiocarbon dating is only mentioned on p. 221 but no data are presented in detail. One would have wished to see a discussion of the reliability of the absolute chronological methods that were used to establish the diachronic climatic and seismic data on which the refinement of the chronology of Tell Deir ᶜAlla is based. The author compares the chronology of Tell Deir ᶜAlla with that of Tell es-Sa'idiyeh (in Fig. 4.1) which demonstrates that there is hardly any synchronic development between the two settlements: this is highly surprising because they are situated only 12 km from each other (cf. VAN DER KOOIJ 2001). Chapter 5 includes a summary of the identification, excavation history and chronology of Tell Deir ᶜAlla, the occupation of which stretches from around 1600 BCE to after 400 BCE.

The following Chapters 6-8 constitute the bulk of the publication, namely, the report on the soundings during the years 2004-06 at the three chosen sites: Tell Damiyah, Tell al-ᶜAdliyyeh and Tell ᶜAmmata. The excavations are well-documented: the plans, sections and photographs are of good quality. It

would, however, have been advantageous to have the list describing the relevant loci, which is in an Appendix at the end of the publication, included in the text to which they belong according to site and strata. There are numerous and ambitious references, but a check of some of them showed that page and/or figure numbers are not always correct. The object drawings are of good quality, whereas the object descriptions could have been more thorough and should have included the description of the production techniques and the fabrics.

Chapters 9 and 10 report on the previous and new archaeological surveys in the Middle Jordan Valley. The plans of the new surveys of 14 settlements in the chosen area are easily comprehensible and clear. Chapters 11-13 deal with the study of published literature on Iron Age settlements in the western hill countries, viz. Cisjordan north of the Dead Sea, the Jezreel and Jordan Valley, and the eastern hill countries. The author undertook the difficult and challenging task of describing, dating and synchronising numerous sites on which - in many cases - only preliminary reports are published.

Conclusions are presented in Chapters 14 and 15. Chapter 14 evaluates the damage done to the ancient settlements. It is fairly depressing to read about extensive bulldozing, military trenches, levelling activities and looting, which have damaged or even totally destroyed many of the ancient settlements: some of the previously recorded settlements are in fact no longer in existence. The author states rightly that the need for economic progress has outvoted the importance of material cultural heritage, and that the insufficiently financed Department of Antiquities of Jordan cannot stand up against economic interests. It is highly laudable that the author draws attention to these sad facts.

Finally, in Chapter 15, the synchronisation of the investigated Iron Age II settlements in the Middle Jordan Valley with Tell Deir ᶜAlla is presented. The author states frankly that the ceramic assemblage encountered at the three excavated sites is limited and fragmentary. He continues that, after correlating the pottery assemblage from the excavated sites with each other and with Tell Deir ᶜAlla, the refinement of the chronology was achieved with the aid of radiocarbon samples (further information missing), presumed earthquakes and paleoclimatic data. Problems with contamination of various loci are highlighted that make - at least partly - any synchronisation between the four sites somewhat speculative. The author refers to other publications where Iron Age I is labelled as the "Dark Ages". This generalising term (although the author does not explicitly use it) should - in the reviewer's opinion - be avoided because this description is not in accordance with, for instance, the latest findings from Iron Age I at Tall Abu al-Kharaz, a major site just 25 km to the north of Tell Deir ᶜAlla, where a thriving society with imported objects and well-constructed architecture has been exposed in recent seasons (FISCHER *et al.* in press). The author refers to a likely earthquake around 950 BCE which caused a major destruction followed by abandonment of many sites. He prefers the earthquake theory to an assumption of general destruction caused by Pharaoh Sheshonq I. The author concludes that the Middle Jordan Valley was inhabited during Iron Age II by one and the same group of people who had returned to the valley after periods of abatement. Agriculturalists and pastoralists lived intermittently in the Jordan Valley during this period, depending on the climatic conditions.

The present volume represents an ambitious work, based on a thorough study of a limited area. Despite some shortcomings, this volume is a valuable contribution to the understanding of the people and their culture living in the Jordan Valley during Iron Age II and should be taken into account by all dealing with this period and area.

Gothenburg PETER M. FISCHER

Bibliography

FINKELSTEIN, I./PIASETZKY, E.
2011 The Iron Age Chronology Debate: Is the Gap Narrowing?, Near Eastern Archaeology 74:1, 50-54.

FISCHER, P.M./R. FELDBACHER
in press Tall Abu al-Kharaz. The Swedish Jordan Expedition 2010: Thirteenth Season Preliminary Excavation Report, Annual of the Department of Antiquities of Jordan.

KOOIJ, G. VAN DER
2001 The Vicissitudes of Life at Dayr 'Alla during the First Millennium BC, Seen in a Wider Context, Studies in the History and Archaeology of Jordan VII, 295-303.

MAZAR, A.
2011 The Iron Age Chronology Debate: Is the Gap Narrowing? Another Viewpoint, Near Eastern Archaeology 74:2, 105-109