

## BOOK REVIEWS

*RUS AFRICUM. TERRA ACQUA OLIO NELL' AFRICA SETTENTRIONALE. SCAVO E RICOGNIZIONE NEI DINTORNI DI DOUGGA (ALTO TELL TUNISINO), MOSTRA PALAZZO THUN, TORRE MIRANA, TRENTO 23 NOVEMBRE 2000–7 GENNAIO 2001.* By M. de Vos (ed.) *Università degli Studi di Trento/Institut National du Patrimoine de Tunis, Trento 2000. ISBN 88-8443-003-8, pp. 104 + numerous pages of colour and black-and-white illustrations; 7 folding maps and plans. L.It. 35,000.*

Considering the fertility of the North African countryside and the exceptional state of preservation of remains there, relatively little field survey work has been done there by comparison with other parts of the circum-Mediterranean world. The survey projects in Libya, Tunisia and Algeria which have been published in any detail can be counted on the fingers of one hand—the UNESCO Libyan Valleys Survey,<sup>1</sup> Segermes<sup>2</sup> and Kasserine,<sup>3</sup> with Philippe Leveau's one-man survey around Cherchel.<sup>4</sup> A brief notice has appeared about a survey near Carthage,<sup>5</sup> and there are short preliminary reports of recent work on Jerba,<sup>6</sup> and around Leptiminus;<sup>7</sup> but this represents almost the sum total for field survey work in Libya and the Maghreb outside Morocco. Almost the sum total: *Rus Africum*, the accompanying volume to a photographic exhibition in Trento in 2000, presents a first summary of some of the principal findings of a survey project undertaken in the Tunisian Tell, under the direction of Mariette de Vos between 1994 and 1999. The study zone lies around the spectacularly preserved ancient city of Thugga (modern Dougga) in the fertile uplands of northern Tunisia, in an area where the standing remains of rural sites have been known since the late nineteenth century, but hardly recorded; it is also the region which produced a series of important inscriptions relating to the legal rights of agricultural tenants on imperial estates, and the findspot of one of these, Aïn Wassel, was among the rural sites excavated by the project. The project therefore represented an opportunity of great significance for studying the rural landscape of the fertile agricultural uplands of North Africa, and for setting the well-known epigraphic material in its wider archaeological context.

The text gives background on the project's aims and methodology and the nature of the study area (pp. 9-20), the survey results (pp. 20-35)—rural sites and cisterns, agriculture, olive presses and factories, the aqueduct of Thugga, land ownership and imperial estates (all by M. de Vos). There follows a report on the excavation at Aïn Wassel (pp. 36-8, by M. de Vos and B. Maurina), the pottery from the excavation (38-57, by A. Ciotola and B. Maurina), the pottery from the survey (58-77, by A. Ciotola), and an initial report on the coins from the

excavation and survey (78-80, by S. Abram). A list of sites (81-84) and bibliography (85-93) are also provided. The second half of the volume is taken up with the exhibition photographs, in colour and black-and-white, which are of high quality. The many colour photographs of structures and the landscape are a particular delight.

The description of the Dougga aqueduct is the first detailed treatment of this structure since its description (with very few illustrations) by Louis Carton in 1896,<sup>8</sup> and comprehension of the monument is greatly improved by the inclusion of accurate plans, photographs and drawings of several of the seven arcaded bridges which carry the aqueduct across valleys. We now have another well illustrated and documented North African aqueduct to set alongside studies of the Cherchel and Carthage aqueducts.<sup>9</sup> The illustrations show rusticated masonry arcades of a style comparable with the Djebel Toudscha arcade of the Saldæ aqueduct (completed AD 152) or the Oued Mellah arcade of Cherchel (first- or second-century AD); outside Africa, comparable masonry styles are evident at Segovia (original construction undated; restored under Nerva) and the Pont du Gard (now dated in the middle two quarters of the first century AD). As the Dougga aqueduct was completed in AD 184/187, it is clear that attempts to date aqueducts by construction styles are unreliable—still more so any suggestion that rusticated masonry work in the provinces is any reflection of Claudian fashions in Italy.

A notable accomplishment of the survey's work along the Dougga aqueduct is the identification of an inverted siphon carried on the third aqueduct bridge at Aïn Krogia. Carton had illustrated some stone pipeline blocks from this area,<sup>10</sup> although it is unclear from his account whether these belonged to the Dougga aqueduct or to a separate rural aqueduct at Bled Zehna. Whatever the origin of Carton's blocks, the new survey has established that the Aïn Krogia bridge, 29.5 m high on three tiers of arcades, carried a stone pipeline inverted siphon 27 m deep to take the water across a valley c. 46.5 m deep. Foldout 4 gives a fine restored elevation and axonometric drawing. The new data show clearly the scale of the engineering project involved in the construction of this aqueduct, underlining the prosperity of Dougga at this date; it is hardly surprising, therefore, that the aqueduct is one of the few monuments to have been built collectively by the town from municipal funds, rather than by private euergetism.

The source of Dougga's wealth was primarily agricultural, and the survey has identified 186 farm and villa sites ('fattorie') and 12 villages ('agglomerati rurali') in the countryside around the town, 123 of which have remains of olive presses. Photographs, plans, elevations and axonometric reconstructions are given for one of these (site 205), whose walls still stand in part c. 5.8 m high;

## BOOK REVIEWS

essentially a large stone barn with tiled roof, housing two lever presses. The sheer number of oil press elements recorded in total (including 119 counter-weight blocks) should facilitate the refinement of regional typologies, when the data are presented in detail in the final publication.

The rural settlement of Aïn Wassel was partially excavated in the hope of shedding light on the nature of settlements occupied by the tenants of imperial estates, who were granted tax exemption on the yields from lands previously uncultivated or abandoned for ten years, under the *Lex Hadriana de rudibus agris*, of which five inscriptions had been found in the Medjerda valley region, including one at Aïn Wassel itself. In fact, the excavated remains, which included an olive press, dated principally from the fifth-seventh centuries. However, new evidence for the Hadrianic law was found in a chance discovery by the survey; a sixth and previously unknown copy of the law found at Lella Drebbliia, which allows the completion of some lacunae in the other copies.

The broader results of the survey, in terms of site distribution and settlement trends, are presented in very preliminary fashion. Here there are some problems of methodology and interpretation, relating to site definition and the dating of supposedly pre-Roman sites. Because of the high level of 'background noise' the criterion adopted for identifying a site was a minimum density of four sherds per m<sup>2</sup>, or the presence of standing remains. But the pot density threshold seems arbitrary and over-mechanistic; theoretically, a spread of 3,500 potsherds over a 30 × 30 m area would not qualify as a site, although this seems a pretty dense concentration, higher than that encountered, say, on many sites in Italy. Furthermore, 54 of the sites discovered had standing remains but no pottery (and they did not all belong to aceramic prehistoric periods); if so many sites with standing remains cannot even begin to reach the four sherds/m<sup>2</sup> threshold, what is the real value of such a cut-off for the artefact scatters? Although this approach makes it almost certain that all sites identified really do represent concentrated activity and not simply manuring scatters, it does leave open the likelihood that sites at the smaller end of the scale, or which were occupied for shorter periods, may not have been counted. An alternative approach would be to regard a distinct change in pottery density as indicative of a site; the key factor is that a site should stand out from the background noise, whatever the level of that noise. A scatter of one sherd every 2 m<sup>2</sup> may still be significant if the surrounding density of background noise is virtually zero. Clearly this approach is much more subjective and relies more on the judgement of the survey team; but it is time we stopped pretending that survey archaeology is a precise science.

More worrying is the use that has been made of the pottery referred to as 'impasto preromano'.

Handmade pottery is common throughout North Africa, and is notoriously difficult to date;<sup>11</sup> handmade bonfire-cooked pottery of the first century BC may be visually indistinguishable from domestic production of 50 years ago. Yet the survey seems to have considered that all handmade 'impasto' pottery is pre-Roman (p. 58), and to have used it as dating evidence. Accordingly we are told that there are allegedly 64 pre-Roman sites (p. 58; p. 20 gives the figure as 63); black-glossed wares occurred on 7 sites (only 9 fragments in total!), glazed impasto on 14 sites, and unglazed impasto on 29 sites. Presumably the remaining sites (at least 14) were dated by the presence either of structural remains (dolmens etc.) or of pre-Roman amphorae not mentioned here. We are not told to what extent the two different impasto wares are found with each other or with certainly pre-Roman evidence on the same sites, but unless black-glossed wares or other definitely pre-Roman material were found on the impasto sites, there is no justification for viewing these sites as necessarily pre-Roman. Some indication that the picture is not straightforward may be found in Table 2, showing occupation of sites by period; numerous sites claimed as pre-Roman show a gap between pre-Roman and mid- or late-Roman occupation, but then continue into the Byzantine or medieval periods. Why the gap in the early Roman period? Or do some of the impasto wares from these sites really also date from the Roman, Byzantine, medieval or later periods? The excavation at Aïn Wassel may even provide some evidence to support this latter possibility; a sherd of 'impasto preromano' is considered residual in a sixth-/seventh-century AD context, although no other residual material is noted, and surface pottery all dated from the second-seventh centuries (p. 36).

The authors are clearly aware of the problems of identifying pre- and post-Roman pottery (59, 66), and Ciotola admits that it is impossible to distinguish 'impasto preromano' from later production (41), which makes it all the more curious that these caveats are not incorporated into the analysis of site dating. Until more evidence is presented, the brief analysis of settlement trends (p. 20) must remain suspect; many of the 'pre-Roman' sites (at least 22, and possibly up to 43) may in fact need to be redistributed among the later periods – including the early Islamic and post medieval periods. It is to be hoped the final publication will address these questions.

The numismatic report (pp. 78-80) tries to push the evidence of 22 coins too far in hypothesising economic trends over time from such a small sample – a quarter of a page of discussion of the nature of monetary circulation in the Dougga region in the Byzantine period is based on a single coin (80).

I have dwelt on these problems largely in the hope that the authors can be encouraged to address them in the final report; none of them outweighs the

## BOOK REVIEWS

utility of having a well illustrated publication of remains from the African countryside. Most of the few North African surveys previously carried out have been in the more arid Sahel or the pre-desert; this work in the Tunisian Tell gives a foretaste of the rich data to be expected from survey in the somewhat better watered regions of Roman Africa. The authors are to be congratulated on swift preliminary publication in such a richly illustrated format, and we look forward to the final report.

### Notes

- <sup>1</sup> Barker, G. W. W. (ed.), *Farming the desert. The UNESCO Libyan Valleys Archaeological Survey*, vol. 1, Paris, Tripoli and London (1996); Mattingly, D. J. (ed.), *Farming the desert. The UNESCO Libyan Valleys Archaeological Survey*, vol. 2, *Gazetteer and pottery*, Paris, Tripoli and London (1996).
- <sup>2</sup> Dietz, S., Ladjimi Sebaï, L. and Ben Hassan, H. (eds), *Africa Proconsularis: Regional studies in the Segermes Valley of Northern Tunisia*, 2 vols, Aarhus (1995).
- <sup>3</sup> Hitchner, R. B. 'The Kasserine archaeological survey, 1982-1986', *Antiquités africaines* 24 (1988): 7-41; Hitchner, R. B., 'The organisation of rural settlement in the Cillium-Thelepte region', in A. Mastino (ed.) *L'Africa Romana 6. Atti del VI convegno di studio, Sassari, 16-18 dicembre 1988* vol. 1, 387-402. Sassari (1989); Hitchner, R. B., 'The Kasserine archaeological survey—1987', *Antiquités africaines* 26 (1990): 231-59.
- <sup>4</sup> Leveau, P., *Caesarea de Maurétanie: une ville romaine et ses campagnes* (Collection de l'École Française de Rome 70), Rome (1984).
- <sup>5</sup> Greene, J. A., 'Carthage survey', in D. R. Keller and D. W. Rupp (eds), *Archaeological Survey in the Mediterranean Area* (BAR International Series 155): 197-99. Oxford (1983).
- <sup>6</sup> Fentress, E. W. B., 'The Jerba Survey: settlement in the Punic and Roman periods', in M. Khanoussi, P. Ruggeri and C. Vismara (eds), *L'Africa romana. Atti del XIII Convegno di studio, Djerba, 10-13 dicembre 1998*, Roma (2000), vol. 1: 73-85.
- <sup>7</sup> Stone, D. L., Stirling, L. M. and Ben Lazreg, N., 'Suburban land-use and ceramic production around Leptiminus: interim report', *Journal of Roman Archaeology* (1998) 11: 304-17.
- <sup>8</sup> Carton, L., 'Études sur les travaux hydrauliques des romains en Tunisie', *Revue Tunisienne* 3.12 (Octobre 1896): 530-64, at 548-60.
- <sup>9</sup> Leveau, P. and Paillet, J.-L., *L'alimentation en eau de Caesarea de Maurétanie et l'aqueduc de Cherchell*, Paris (1976); Rakob, F., 'Das Quellenheiligtum in Zaghouan und die römische Wasserleitung nach Karthago', *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung* 81 (1974): 41-89.
- <sup>10</sup> Carton, n. 8: 544-5.
- <sup>11</sup> Cf. Hulin, this volume.

Institute of Archaeology,  
Oxford

ANDREW WILSON

**DIFFICULT AND DANGEROUS ROADS.** By Jamie Bruce-Lockhart and John Wright (eds). London 2000. ISBN 1-900209-06 3, xiv, pp. 365, appendices 6, maps 16, plates 15.

Published by Sickie Moon Books, *Difficult and Dangerous Roads* is a recently discovered diary of Hugh Clapperton, an English naval lieutenant who crossed the Sahara to Bornu in the early nineteenth century. The diaries confirm his and his fellow travellers' place amongst Africa's great European explorers. The mission, promoted by both the Admiralty and African Association, was active from March 1822 to February 1825. Of its four original members only two survived—Clapperton and the mission's leader Dixon Denham. From the outset, there was a sharply felt rivalry between the two ambitious lieutenants, which ultimately led to the suppression of this diary. It is a missing piece of their story as well as the detailed record of Clapperton's own expedition to the trading oasis of Ghat and the surrounding Fezzan region. As a thirty-three year old naval lieutenant, he was already an experienced officer and cartographer and familiar with the hardships of exploration having surveyed Lake Huron in the Canadian frontier.

The diaries' discoverer and editor, Jamie Bruce-Lockhart found the manuscripts in a South African library and brought them to the attention of the Society for Libyan Studies which supported their publication. They are a vivid, first-hand account of travel in Libya and the Central Sahara. Through Clapperton's journal entries, we encounter the sights, sounds, smells, exhaustion, frustrations of weeks on end of travel.

Bruce-Lockhart's introductory notes and appendices provide details of both Hugh Clapperton, the expedition and the nature of the editing process of the diaries. In the editor's estimation, Clapperton's journals while naïve in preparation and style nevertheless are a spontaneous record, which lands the modern reader in the very heart of early nineteenth-century Fezzan. The nature of the manuscript has been preserved with its spelling, spaces and scant punctuation. Detailed footnotes show the care with which the editors approached their task. The notes complement the text by utilising a wide range of sources and are either explanatory or comparative in drawing the reader's attention to other travellers' experiences.

The reader would be well advised to read carefully the editors' introductions to clarify the context of the diaries. The entries represent three separate journals: time spent in the Fezzan (May to October 1822); the initial southward Saharan journey (November 1822 to February 1823); and the journey from Kano to Sokoto and the final northward return (February 1824 to January 1825).

John Wright has provided an excellent historical overview of the region as well as the contemporary