From Africa to Ifrīqiya: Settlement and Society in Early Medieval North Africa (650–800)

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ABSTRACT North Africa is rarely mentioned in scholarship on the medieval Mediterranean. This paper demonstrates the potential of archaeology for understanding the impact of the Arab conquests on settlement and society in seventh- and eighthcentury North Africa. Despite difficulties in dating early medieval occupation, synthesis of the available evidence reveals that the Arab conquest was not catastrophic for settled life. Mapping the distribution of urban sites across North Africa shows that the majority of Byzantine towns were not abandoned but remained significant centres. The rural evidence is less clear, but suggests a relatively busy countryside of estates, farms and fortified villages. The paper then presents three detailed case-studies of the towns of Tocra, Sbeïtla and Volubilis in the early medieval period, before considering more broadly the evidence for fortifications, religious buildings (churches and mosques), housing and production in towns. It concludes with some preliminary observations on the nature of Arab rule in North Africa from the perspective of the archaeological evidence.

Keywords: Archaeology – sites; Africa – towns; Africa – archaeology; Morocco – archaeology; Tocra, Libya; Sbeïtla, Tunisia; Volubilis; Morocco

Introduction¹

North Africa has played little part in recent scholarship on the Arab conquests and subsequent transformation of the early medieval Mediterranean.² It would be unfair to cast the blame on scholars of the broader Mediterranean when scholars of North Africa have only recently turned their attention to the fifth to ninth centuries, the so-called "siècles obscurs" or "dark ages". In the past two decades, a wealth of new archaeological data has emerged for Late Antique and medieval North Africa, leading to a boom in research on subjects ranging from Late Antique urbanism to

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¹ Place names are given in the form most commonly used in modern scholarship (e.g. Volubilis rather than Walīla, Kairouan rather than Qayrawān); where appropriate the Latin or Arabic name is given in parentheses.

² There are some notable exceptions – for example, Michael McCormick, Origins of the European Economy: Communications and Commerce, A.D. 300–900 (Cambridge: Cambridge University Press, 2001); Chris Wickham, Framing the Middle Ages (Oxford: Oxford University Press, 2005).

Islamic secondary state formation.³ However, the question of the impact of the Arab conquests on North Africa has yet to be revisited in light of the new evidence. This article therefore outlines the potential of archaeological data for understanding settlement and society in early medieval North Africa, and offers some preliminary observations on the nature of Arab rule.

The Arab conquest of North Africa was more protracted than in other regions.⁴ Only in 79/698, more than half a century after the first Arab raids in 21/642, did Byzantine Carthage fall and Africa officially become the Umayyad province of Ifrīqiya and thus part of Dār al-Islām. Traditionally, these events were thought to mark a catastrophic rupture between classical and medieval North Africa, bringing about a rapid dissolution of urban life, and a period of decline in agriculture, industry and trade. Despite an important attempt to explode this model by Yvon Thébert and Jean-Louis Biget in 1990, North Africa has yet to see the sustained critique that has characterised the last two decades of scholarship in the early Islamic East or Islamic Spain.⁵ This lack of explicit discussion has meant that the traditional model of the Arab conquests remains influential. Drawing on archaeological evidence, scholars argue that rural and urban decline commenced in most regions by the late sixth century and intensified in the seventh century, whether from weak Byzantine state control, plague, earthquakes, nomadic incursions, or other catastrophes. After 700, archaeologists find few indicators of urban occupation and almost no rural sites. The seventh and eighth centuries are thus typically seen as a moment of crisis for North Africa: the prosperous Roman landscape of towns, villas, estates and oil-producing farms replaced by an impoverished and depopulated late Byzantine and early medieval landscape of fortified and quasi-urban settlements.

There are some problems with this reading of the archaeological evidence. Often, the arguments cited in support of radical decline tend to be circular. The Arab conquests marked the end of the ancient world; therefore any structures or objects that look classical – such as ceramics, mosaics or certain types of masonry – must pre-date 650 or 700 CE (depending on whether one takes the battle at Sbeïtla in 26/647 or the fall of Carthage in 79/698 as the "end"). In

³ See, for example, Anna Leone, *Changing Townscapes in North Africa from Late Antiquity to the Arab Conquest* (Bari: Edipuglia, 2007); James L. Boone, J. Emlen Myers and Charles L. Redman, "Archaeological and Historical Approaches to Complex Societies: The Islamic States of Medieval Morocco", *American Anthropologist* 92/3 (1990): 630–646; Patrice Cressier, "Urbanisation, arabisation, islamisation au Maroc du Nord: Quelques remarques depuis l'archéologie", in *Peuplement et arabisation au Maghreb occidental*, ed. Jordi Aguadé, Patrice Cressier and Ángeles Vincente (Madrid: Casa de Velázquez, 1998): 27–38.

⁴ For an excellent overview of the Arab conquests of Africa, see Michael Brett, "The Arab Conquest and the Rise of Islam in North Africa", in *The Cambridge History of Africa*, Volume II, *c. 500 BC – AD 1050*, ed. J.D. Fage (Cambridge: Cambridge University Press, 1978), pp. 490–555; more recently, see the full account of the Byzantine and Arab conflicts by Walter Kaegi, *Muslim Expansion and Byzantine Collapse in North Africa* (Cambridge: Cambridge University Press, 2010). On the early Arab administration, see Hichem Djaït, "L'Afrique arabe au VIIIe siècle", *Annales. Histoire, Sciences Sociales* 28/3 (1973): 601–621. ⁵ Yvon Thébert and Jean-Louis Biget, "L'Afrique après la disparition de la cité classique : Cohérence et ruptures dans l'histoire maghrébine", in *L'Afrique dans l'Occident romain: Actes du colloque de Rome, 3–5 décembre 1987* [CEFR CXXXIV] (Rome, 1990), pp. 575–602. Emphasising continuity in urban life, trade levels and rural prosperity into the fourteenth century, they argue that a catastrophic rupture caused by the Arab conquest in the seventh century is a myth. Whilst Thébert and Biget's relocation of urban and rural transformation to the fourth–sixth centuries is widely accepted, their argument for continuity into the medieval period has been largely overlooked.

turn, the lack of evidence for the eighth century is used as proof that classical Africa had come to an end. Many scholars do not try to explain the "end" of classical Africa, but 650/700 is frequently used as a convenient chronological end-point. Recent archaeological research suggests that the boundary between classical and medieval North Africa cannot be so clearly drawn. One way to get around the problem is to move from considering the "afterlife" of earlier Roman buildings and forms of urban and rural organisation to viewing the transitional period on its own terms. Thus, rather than trying to identify when Roman Africa disappeared, we might ask "what was the nature of society in late seventh- and eighth-century Africa?"

The North African evidence and its limitations

In order to begin to answer this question, we need to consider what constraints the evidence places on our interpretations; that is, what can and cannot be said of North Africa in this period. The history of scholarship as well as the evidence itself raises specific problems for the seventh and eighth centuries that scholars of the wider Mediterranean may be unaware of. For example, in the Islamic east and European west, the eighth century is a time when societies become materially visible again, yet, in North Africa, it is almost impossible to identify eighth-century activity. This section therefore outlines some of the issues faced by scholars of North Africa, and their implications.

The scarcity and poor quality of surviving evidence for Africa between the fifth and ninth centuries presents a major problem. A traditional focus on Roman archaeology resulted in Late Antique and medieval layers being destroyed, often without being recorded, until relatively recently. The scale of destruction is perhaps unmatched in the Mediterranean. Renato Bartoccini described his technique for clearing Sabratha in the 1920s as follows: "the excavation here was conducted according to the principle that I like to call 'wildfire'".⁶ By this he meant that huge swathes of Sabratha's monumental core were rapidly cleared down to their early Roman levels. Unsurprisingly, he recorded few traces of Late Antique or medieval occupation, although subsequent excavations indicate that there was indeed Late Antique and early medieval activity at Sabratha.⁷ Almost all of the major excavated sites in North Africa were stripped down to their early imperial levels through this "wildfire" method, making it difficult, though not impossible, to reconstruct any sense of the later history of these sites.⁸ Elsewhere, the critical evidence lies below modern cities: the major centres of early Islamic Africa such as Kairouan (Qavrawān), Béja (Roman Vaga), Sousse (Roman Hadrumetum), Tunis (Roman Thuna) and Tripoli (Roman Oea) have all been occupied continuously since Antiquity. Almost nothing is known about their history before the *ribat*s and mosques built from the ninth century onwards.

⁶ "Lo scavo è qui condotto secondo il sistema che io amo chiamare della 'macchia d'olio'". R. Bartoccini, Guida di Sabratha (Rome: Società Editrice d'Arte Illustrata, 1927), p. 17.

⁷ See, for example, Philip M. Kenrick, *Excavations at Sabratha 1948–1951* (London: Society for the Promotion of Roman Studies, 1986).

⁸ Leone, *Changing Townscapes*, and Enrico Cirelli, "Leptis Magna in età islamica: Fonti scritte e archeologiche", *Archeologia Medievale* 28 (2001): 423–440, demonstrate the value of re-examining old excavation reports and archival records.

Archaeological research over the last thirty years has begun to improve this state of affairs. The intensity of work varies markedly by country, with important ramifications for the study of seventh- and eighth-century Africa. Libya provides the most comprehensive evidence for the transition period, thanks to a series of multiperiod field-surveys conducted in coastal, pre-desert and Saharan regions, and targeted excavations of late phases at the coastal cities of Ptolemais, Leptis Magna, Sabratha, Tocra and Berenice.⁹ In Tunisia, the Byzantine period is well studied in both urban and rural settings, particularly in northern and central Tunisia, and recent archaeological work has drawn attention to complex medieval histories on many Roman urban sites. However, the major centres of early medieval Tunisia are poorly understood. The same is true of rural sites, with the exception of those on the island of Jerba.¹⁰ Almost no archaeological work has been conducted on early medieval Algeria, with the exception of excavations at Sétif and Cherchel in the 1980s.¹¹ The early medieval period is perhaps best understood in Morocco, where work at Volubilis, al-Basra and Sijilmasa has shed light on urbanism, the emergence of early Berber/Arab splinter states and long-distance trade.¹² Field-survev has proved a particularly successful means of identifying sites of the ninth-twelfth centuries, though less so for the fourth-eighth centuries, which remain poorly understood in Morocco.¹³ These divergent patterns in regional research have created geographical gaps in our knowledge, in particular relating to Algeria, eastern Morocco, and the pre-desert and Saharan oases west of the Fazzān in southwest Libya.

Perhaps the greatest difficulty that archaeologists face in North Africa is how to recognise seventh- and eighth-century occupation when they encounter it. Ceramic finewares are the primary dating tool: African Red Slip Ware (ARS) for the second-seventh centuries, and Islamic glazed wares for the ninth-twentieth centuries. ARS has a well-established chronology, and it is often possible to date a form quite precisely, and thus an occupation layer or site. By contrast, the chronology of medieval ceramics is poorly understood, and sites are often dated quite simply to a long Islamic, medieval or Arab period spanning the eighth to nineteenth century, rarely broken down into smaller chronological units. Knowledge of seventh-ninth century ceramics in particular, remains limited and regionally specific. The lack of firm ceramic chronologies means that medieval structures are often dated on the basis of stylistic criteria, typically masonry, architecture, or

⁹ For a good overview and the relevant bibliography see A. King "Islamic Archaeology in Libya, 1969– 1989", *Libyan* Studies 20 (1989): 193–207. On medieval Tripolitania, see Isabella Sjöström, *Tripolitania in Transition: Late Roman to Early Islamic Settlement* (Aldershot: Variorum, 1995).

¹⁰ An Island through Time: Jerba Studies I, ed. Elizabeth Fentress, Ali Drine and Renata Holod [Journal of Roman Archaeology Supplementary Series 71] (Portsmouth, RI: Journal of Roman Archaeology, 2009). The second volume on medieval Jerba is in preparation.

¹¹ Anissa Mohamedi and Elizabeth Fentress, *Fouilles de Sétif (1977–84)* (Algiers: Agence Nationale d'Archéologie et de Protéction des Sites et Monuments Historiques, 1991); T.W. Potter, *Towns in Late Antiquity: Iol Caesarea and its Context* (Exeter: Department of Prehistoric and Romano-British Antiquities, 1995).

¹² For an overview of the Moroccan material, see James L. Boone and Nancy L. Benco, "Islamic Settlement in North Africa and the Iberian Peninsula", *Annual Review of Anthropology* 28 (1999): 51–71.

¹³ Patrice Cressier, "Le développement urbain des côtes septentrionales du Maroc au Moyen Âge: Frontière intérieure et frontière extérieure", in *Frontière et peuplement dans le monde Méditerranéen au Moyen Âge*, ed. Jean-Michel Poisson (Paris, 1992): 173–187.

plan. Coins, glass and radiocarbon dating could provide alternative means of dating, but have been under-utilised in North Africa.¹⁴

Fortunately, archaeologists are beginning to establish chronologies for medieval ceramics as well as to refine our existing ceramic chronologies. It is becoming clear that certain ARS and amphora forms continued to be produced well after the Arab conquests.¹⁵ Similarly, the same coarseware types remained in use on many sites for centuries, making it difficult to distinguish between late Roman and early medieval coarsewares.¹⁶ In addition, a number of excavations have begun to produce typologies for early medieval ceramics.¹⁷ These developments suggest that established chronologies for published sites need to be revisited as they have been for sites in the Islamic East.¹⁸

Difficulties in dating forms aside, there are problems with relying upon finewares alone to chart the presence or absence of early medieval occupation. Finewares typically make up only 6–10% of total ceramic assemblages.¹⁹ The remainder of any assemblage consists of amphorae, coarseware and handmade ceramics, which are less well studied in North Africa and thus difficult to date. Absence of fineware on a site does not therefore necessarily reflect a genuine absence of settlement or occupation, but more likely reflects supply and consumption patterns.²⁰ This is particularly relevant for the post-Roman periods, when an accepted decline in import levels of ARS across the Mediterranean from the sixth century and the reversion of many regions to more domestic modes of ceramic production makes rural and even urban populations much less visible archaeologically.²¹

The preliminary results of the Dougga project in northern Tunisia suggest that this is true for North Africa. As part of a survey of Dougga's hinterland, excavations

¹⁴ Radiocarbon dating has been used with particular success in the Libyan Sahara to date medieval occupation from organic material conserved in mud-bricks. See D.J. Mattingly, D.N. Edwards and J.N. Dore, "Radiocarbon Dates from Fazzan, Southern Libya", *Libyan Studies* 32 (2002): 9–19.

¹⁵ For the most recent chronologies of ARS, see Michel Bonifay, *Etudes sur la céramique romaine tardive d'Afrique* (Oxford: Archaeopress, 2004).

¹⁶ J.A. Riley, "The Coarse Pottery from Berenice", in *Excavations at Sidi Khebrish, Benghazi (Berenice)*, ed. J.A. Lloyd (Tripoli: Libya Antiqua Supplement, 1979), 2: pp 91–467, esp. 268, suggests that the same cookware types were in use in Cyrenaica from the late Roman period to the twelfth century.

¹⁷ For the most recent work on medieval pottery, see La Céramique maghrébine du haut Moyen Âge (VIIIe-Xe siècle): État des recherches, problèmes et perspectives, ed. Patrice Cressier and Elizabeth Fentress [Collection de l'École Française de Rome CCCCXLVI] (Rome: École Française de Rome, 2011); supplemented by Nancy L. Benco, The Early Medieval Pottery Industry at al-Basra, Morocco (Oxford: British Archaeological Press, 1987); G. Vitelli, Islamic Carthage: The Archaeological, Historical and Ceramic Evidence (Tunis: CEDAC, 1981).

¹⁸ e.g. Jodi Magness, *The Archaeology of the Early Islamic Settlement in Palestine* (Winona Lake, Indiana: Eisenbrauns, 2003).

¹⁹ For Carthage, see M.P. Fulford and D.P.S. Peacock, *Excavations at Carthage 1.2. The Avenue du President Habib Bourguiba, Salammbo* (Sheffield: Department of Prehistory and Archaeology, 1984), pp. 253– 254, 273–275.

²⁰ Martin Millett, "Pottery: Population or Supply Patterns? The Ager Tarraconensis Approach", in *Roman Landscapes: Archaeological Survey in the Mediterranean Region*, ed. G. Barker and J.A. Lloyd (London: British School at Rome, 1991), pp 18–26.

²¹ On the decline of ARS imports, see E.W.B. Fentress and P. Perkins, "Counting African Red Slip Ware", *L'Africa Romana* 5 (1988): 205–214; E. Fentress, S. Fontana, R.B. Hitchner and P. Perkins, "Accounting for ARS: Fineware and Sites in Sicily and Africa", in *Side by Side Survey: Comparative Regional Studies in the Mediterranean World*, ed. S. Alcock and J. Cherry (Oxford: Oxbow, 2004), pp. 147–162; on the shift to domestic mode of production, see for example, J. Moreland, "Wilderness, Wasteland, Depopulation and the End of the Roman Empire?" *Accordia Research Papers* 4 (1994): 89–110.

were conducted at the sixth-seventh century site of Aïn Wassal, producing a coarseware chronology that was then used to date sites found in the survey. In the seventh century, sites dated on the basis of coarseware alone outnumbered ARS three to one.²² At Dougga, then, from the sixth century onwards, there was a greater dependence on locally produced ceramics than on ARS. This greater dependence on local wares was not matched by a fall in site numbers, which remained more-or-less constant from the Vandal period to the Byzantine period. Had the Dougga survey relied on the presence/absence of finewares to date sites, they would have observed an apparent decline and substantial drop in site numbers. This cautionary case suggests that, until local ceramic chronologies are understood better, we may be severely underestimating Late Antique and early medieval occupation in North Africa, particularly in the seventh and eighth centuries.

Explicitly acknowledging some of the difficulties with the North African data not only indicates where to target future research, but also provides a starting point from which to write informed histories of the early medieval period. Whilst the patchy nature of the available archaeological evidence makes it difficult to build a clear picture of settlement change, dating remains the biggest obstacle. As our discussion unfolds, it will be useful to bear in mind the oft-cited maxim "absence of evidence is not evidence of absence". The remainder of this article surveys some of the fragmentary data that we can assemble for early medieval North Africa, focussing particularly on better-studied Tunisia and Libya, though integrating Moroccan and Algerian evidence where appropriate.

Mapping medieval settlement

Perhaps the most basic question to ask concerns the distribution of urban and rural settlements across the landscape. Our inability to date eighth century occupation has hampered attempts to reconstruct early medieval settlement patterns. The situation has begun to improve as archaeologists become better at interpreting later occupation layers, especially on urban sites. The most systematic work of this nature has been conducted in Cyrenaica, where archaeology reveals that urban life continued much as before.²³ For example, at the inland site of Barqa, the first town that the Arabs reached, soundings showed that early medieval levels overlaid Roman levels, with no evidence of abandonment or destruction. Elsewhere in North Africa, ninth- and tenth-century ceramics are often found in levels above the latest datable seventhcentury wares with no sign of abandonment or destruction layers, suggesting a certain consistency of demographic occupation. This is not the case everywhere: some sites do seem to be abandoned, as at Uchi Maius (Tunisia), where the old forum has a deep layer of colluvium between occupation of the sixth-seventh centuries, and housing of the tenth-twelfth centuries.²⁴ Whilst it is difficult to establish the nature

²² Mariette De Vos, *Rus Africum: terra, acqua, olio nell'Africa settentrionale* (Trento: Università degli Studi di Trento, 2000), pp. 65–66, 71. See the critique of Andrew Wilson, who suggests that the project may be under-estimating Late Antique and Byzantine occupation with their assumption that handmade pottery is pre-Roman: Andrew Wilson, "Review of M. de Vos (ed.), *Rus Africum: terra, acqua, olio nell'Africa settentrionale*", *Libyan Studies* 32 (2001): 186–188.

²³ For bibliography see King, "Islamic Archaeology".

²⁴ S. Gelichi and M. Milanese, "The Transformation of the Ancient Towns in Central Tunisia during the Islamic Period: The Example of Uchi Maius", *Al-Masāq* 14/1 (2002): 33–45.

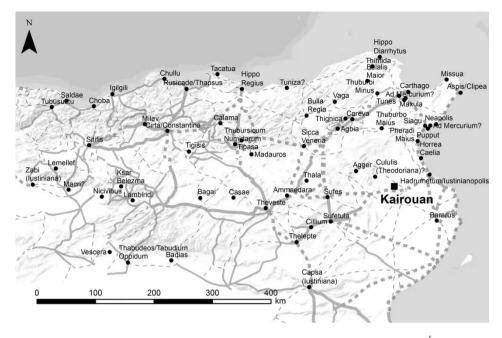


Figure 1. Map of early medieval towns in North Africa, based on Cambuzat, L'Évolution.

of this urban occupation from the fragmentary archaeological evidence, mapping this information gives a crude approximation of urban sites occupied in the early medieval period. Figure 1 combines archaeological evidence for eighth or ninth century occupation with the textual evidence for eighth-century cities collated by Paul-Louis Cambuzat in his rather neglected book, *L'Évolution des cités du Tell en Ifrīķiya du VIIe au XIe siècle.*²⁵

Some interesting patterns emerge from this exercise. First, it is clear that the majority of Byzantine towns were not destroyed or abandoned in the aftermath of the Arab conquests. Rather, many remained significant centres well into the medie-val period. Second, with the exception of Kairouan, few sites seem to have been founded *ex nihilo* in this period.²⁶ Third, almost all of the cities that Cambuzat has identified in later texts have Byzantine-built fortresses that housed an Arab garrison. Archaeology provides evidence of sites without a fortress that were occupied in the early medieval period (e.g. Sbeïtla), but it is clear that most eighth-century sites were fortified in some manner. Finally, the location of eighth-century towns suggests that pre-existing communication networks and trade routes linking towns to one another endured. Taken together, these factors indicate that the urban, communication and military networks of the Byzantine period underpinned that of the early medieval period, much as in the Umayyad provinces in the east.

These networks, however, were transformed in important ways. Several cities gained new significance as administrative, military or trade hubs, often at the

²⁵ Paul-Louis Cambuzat, L'Évolution des cités du Tell en Ifrīķiya du VIIe au XIe siècle (Algiers: Offices des Publications Universitaires, 1986).

²⁶ City foundations seem to be a particular phenomenon of the ninth and tenth centuries, particularly under the Idrīsids, Aghlabids and Fāțimids; see Cambuzat, *L'Évolution*.

expense of others: Béja in northern Tunisia, Tunis on the coast, Tripolis in coastal Libya, Gafsa on the desert fringe and Kairouan, the newly founded inland capital of Ifrīqiya. Carthage, the capital of Punic, Roman and Byzantine Africa, was perhaps the biggest loser. Other cities too became less important and seem to be abandoned or reduced to very little by the eighth century. In other cases still, it is worth emphasising that urban abandonment occurred well before the Arab conquests, as at Meninx on the island of Jerba, which disappeared in the late sixth century.

There seem to be strong regional variations, in particular a divergent trend between northern Tunisia and the remainder of North Africa. Cities in the former seem to have suffered disproportionately after the Arab conquest: archaeological evidence suggesting eighth century abandonment or fragmentation largely comes from sites in the north, such as Uchi Maius, Chemtou and Carthage. It is unclear how much of this is a product of the patchwork nature of urban archaeology and how much it reflects the ancient reality. Some central areas of Carthage continued to be occupied at least into the eighth century, although by no means on the scale of the Byzantine city.²⁷ However, it would not be unreasonable to connect a retraction of urban settlement in northern Tunisia with the fifty-odd years of Arab-Byzantine fighting around Carthage.

Mapping rural settlement

Much less is known about the North African countryside in this period, despite a large number of rural field-surveys conducted in Tunisia and Libya (Figure 2). Anna Leone and David Mattingly have comprehensively analysed the Late Antique rural survey evidence, and found that site numbers in northern Tunisia (Carthage, Dougga, Segermes) did not decrease until at least the late sixth century.²⁸ They suggest that site numbers drop off earlier elsewhere: from the fourth century in Tripolitania (UNESCO Libyan Valleys Survey, Leptis Magna) and the end of the fifth or early sixth century in southern Tunisia (Kasserine, Jerba). It is difficult to follow these trends through into the eighth century and beyond, as only a handful of surveys (Leptis Magna, Jerba, UNESCO Libyan Valleys Survey) have systematically recorded the presence of medieval occupation, and they found it difficult to identify eighthcentury activity.²⁹ By the ninth century, it is easier to identify sites again with ceramics, and rural settlement seems to have boomed on the island of Jerba and around Leptis Magna (Lebda).³⁰ Elsewhere, little can be said about the post-seventh-century countryside.

²⁷ See Vitelli, Islamic Carthage, 15–17, 24–39, and below.

²⁸ Anna Leone and David Mattingly, "Vandal, Byzantine and Arab Rural Landscapes in North Africa", in Landscapes of Change: Rural Evolutions in Late Antiquity and the Early Middle Ages, ed. Neil Christie (Aldershot: Ashgate, 2004), pp. 135–162. I have incorporated into my discussion more recently published surveys as well as the early medieval data.

²⁹ The Fazzān project in the Libyan Sahara also recorded medieval occupation, but is outside the remit of this article for reasons of space. See *The Archaeology of Fazzān: Volume 1*, ed. D.J. Mattingly (London: Society of Libyan Studies, 2003). Volume 4, currently in preparation, will publish the excavations of the ancient and medieval town of Jerma.

³⁰ Massimiliano Munzi, "Il territorio di Leptis Magna: Insediamenti rurali, strutture productive e rapporta con la città", in *Leptis Magna: Una città e le sue iscrizioni in epoca tardoantica*, ed. Ignazio Tantillo and Francesca Bigi (Cassino: Edizioni dell'Università degli Studi di Cassino, 2010), pp. 45–80, esp. 77–80.

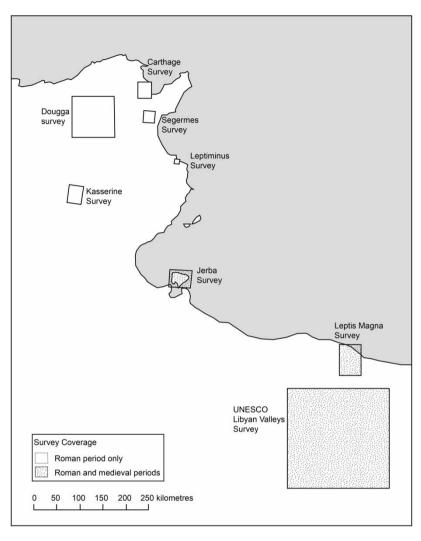


Figure 2. Map showing the location of survey projects in Tunisia and Libya.

As argued above, there are good reasons for thinking that using finewares to date sites underestimates how many sites were occupied. This is not to suggest that rural life was static, nor to deny that some regions did experience a decline in rural settlement. The Jerba survey used coarsewares and amphorae, as well as finewares, to date sites and observed a decline in site numbers in their Late Antique II period (500–700), followed by a surge in site numbers in their Early Medieval I period (700–1050).³¹ Other regions, such as northern Tunisia, seem to have been flourishing at least into the seventh century, but in the absence of data on the medieval period, it is impossible to say much about the eighth-century landscape. Importantly, though, the latest projects (Jerba, Leptis Magna, Dougga) show that survey data can detect changing landholding patterns in Late Antiquity and the early

medieval period, if close attention is paid to amphorae and coarsewares as well as finewares.

Charting the rise and fall of site numbers over time does not tell the whole story. There were also important shifts in settlement hierarchy in this period. Many areas saw increased nucleation of settlement: people appear to have lived collectively in agglomerated settlements, rather than in farms or villas scattered across the landscape. This trend first appears in Tripolitania, where there is a shift from open farms to qusur (fortified structures, commonly referred to as "qsour" or "ksour" in the secondary literature) in the fourth/fifth century. Although there is an overall decline in site numbers, it is unlikely to have corresponded with a major fall in population. Many qusur had associated settlements, and would have housed significantly larger populations than even the largest of the open farms of the early Roman period. Entire wādīs seem to have been managed to some extent by the *qusūr*-dwellers by the sixth/seventh century, as in the Wādī Umm al-Kharāb.³² The Late Antique qusūr fit well into a tribal framework, in which local groups controlled agriculture and presumably trans-Saharan trade.³³ This was no egalitarian tribal system; the plans of the $qusu \bar{u}r$ and surrounding settlement suggest a clear hierarchy between qusur-dwellers and those living in simple huts and buildings outside.

On Jerba, a drop in site numbers in the sixth century also comes with a shift to agglomerated settlements. Nucleated settlements - 'villages' - are constructed in some quantity on new sites or on former villas, whereas other types of sites, such as villas and farms, and even the town of Meninx, are progressively abandoned. Elizabeth Fentress suggests that the predominance of agglomerated sites in the sixth and seventh centuries indicates the emergence of an egalitarian settlement pattern, dominated by small groups rather than rich landowners.³⁴ A similar surge in nucleated settlement (often fortified) at the expense of villas and smaller farms can be detected at Kasserine by the sixth century.³⁵ In northern Tunisia, by contrast, small farms continue to exist in some quantity alongside larger sites (Carthage, Dougga, Segermes) into the seventh century, as they had done throughout the Roman period, perhaps reflecting the continuity of large estates in this region. In the seventh century, therefore, the countryside in Tripolitania and central Tunisia was dominated by agglomerated settlements, often fortified in some manner. In northern Tunisia, a mixed settlement hierarchy of small and large farms, villages and towns seems to have endured for longer.

Further changes seem to have occurred in the eighth century, though the details are far from clear. By this time, it is apparent that the nature of rural settlement was substantially different from the villa and estate landscape of Roman Africa, and was dominated by nucleated settlements, such as villages or settlements centred on a fortified *qaşr*, usually, though not always in the same places as before. On Jerba between 700 and 1050, the number of sites doubled, and small sites (farms?) often clustered

³² G.W.W. Barker, "UNESCO Libyan Valleys Survey XXIII: The 1989 Season", *Libyan Studies* 22 (1991): 31–60, esp. pp. 46–51.

³³ D.J. Mattingly, *Tripolitania* (London: B.T. Batsford Limited, 1995), pp. 202–213; *Farming the Desert: The UNESCO Libyan Valleys Archaeological Survey*, ed. Graeme Barker (London: Society of Libyan Studies, 1996), pp. 338–342.

³⁴ Fentress, Drine and Holod, An Island through time, 209.

 ³⁵ R.B. Hitchner, "The Kasserine Archaeological Survey 1982–1986", Antiquités Africaines 24 (1988): 7–
 41; *idem*, "The Kasserine Archaeological Survey 1987", Antiquités Africaines 26 (1990): 231–259.

in groups now covered the landscape.³⁶ Jerba may be a special case because of its isolation. However, Tripolitania too seems to see a significant increase in the density of rural settlement in the late eighth and ninth centuries, particularly in the coastal area near Leptis Magna.³⁷ Settlement here is very different from that of Jerba, and is characterised by the emergence of fortified villages and tower-granary structures, many newly founded.³⁸ The situation in the Libyan pre-desert is more difficult to assess. The UNESCO Libyan Valleys Survey did not record medieval ceramics, but many of the Late Antique *qusir* and settlements were occupied for several centuries after the Arab conquests.³⁹ Indeed, Isabella Sjöstrom has calculated that, of a total of 482 settlements found in the survey, 130 were established in the Roman period and were occupied at least until the eleventh century, and an additional 80 settlements were established in the Islamic period, broadly defined.⁴⁰

Ninth-century texts provide additional insight into the organisation of the countryside. Mohamed Talbi has noted a landholding pattern of large landed estates in the north formed by land grants to the Arab conquerors and their Berber allies in the early eighth century, and medium and small-sized estates in the Sahel and province of Tripoli. Thus Abū l-Mughīra, qādī of Ifrīqiya (99-123/717-741), owned two estates called Qasr Mughīra and Qaryat al-Mughīriyyīn each of which included a hamlet or village, left to him by his father, who had participated in the conquest.⁴¹ Presumably these estates were held by the state, church, or local elites under the Byzantines, and subsequently confiscated by the Arabs as part of the conquest booty. This landholding pattern does appear to be borne out in the limited archaeological evidence we have. The settlement pattern in northern Tunisia appears to be dominated by large estates until at least the seventh century, and it would not be surprising if this landholding pattern continued into the medieval period with the seizure of already-existing estates by the Arabs. The qusur/fortified villages in the pattern around Leptis Magna and in the pre-desert might well be considered as small estates, though the continuity of local building techniques suggests that these estates remained in the hands of local elites. The landscape of small farms on Jerba seems less likely to reflect an estate-based landowning pattern.

The archaeological evidence for a relatively busy countryside of estates, farms and fortified villages in the ninth century testifies to an agrarian wealth that is hard to explain if agriculture had completely collapsed in the seventh or eighth century. A ninth-century anecdote is revealing. Ibn 'Abd al-Hakam recounts that after the defeat and death of the Byzantine exarch Gregory at Sbeïtla in 26/647, the Arabs demanded a huge ransom. To their amazement, a heap of gold coins began to pile up in front of their leader's tent. He asked a local how his people were able to

³⁶ The volume on medieval Jerba is forthcoming, but the site gazetteer is published online at http://www. sas.upenn.edu/jerba/index.php?page = WebGIS (accessed 13 July 2012). I am grateful to Elizabeth Fentress for discussing the medieval data with me before publication.

³⁷ Munzi, "Leptis Magna", 77-80.

³⁸ Enrico Cirelli, "Villagi e granai fortificati della Tripolitania nel IX secolo d.C.", *L'Africa Romana* 15 (2004): 377–394.

³⁹Barker, *Farming the Desert*.

⁴⁰ Sjöstrom, *Tripolitania in Transition*, 114. See Barker, *Farming the Desert*, II, for information on the sites.
⁴¹ Mohamed Talbi, "Law and Economy in Ifriqiya (Tunisia) in the Third Islamic Century: Agriculture and the Role of Slaves in the Country's Economy", in *The Islamic Middle East*, 700-1900: Studies in Economic and Social History, ed. A.L. Udovitch (Princeton: The Darwin Press, 1981), pp. 209–249, esp. 211.

pay this amount. The man scratched the surface of the ground and produced an olive stone. "The Rūm", he replied, "have no olives themselves, and therefore they come to us to buy the oil, which we sell to them. This is the source of our wealth".⁴² Although the story is unlikely to be true, this and other ninth- and tenth-century texts recounting both Africa's past and present agricultural wealth suggest relatively high levels of local oil production in the seventh and ninth centuries, at least in the main olive-growing regions of central Tunisia. The situation in the eighth century is less clear: it seems likely that most olive groves survived, but were perhaps less intensively exploited without the impetus of large-scale export trade to other areas of the Mediterranean.⁴³

Urban landscapes in transition

Against a background of what appears to be a relatively thriving urban-network and countryside, there are clear structural changes in African cities from 600, including a neglect of public spaces, less expenditure on monumental building (except churches and forts), increasing industrial activity in town centres, intra-mural burial, and the abandonment of parts of the urban area.⁴⁴ These trends are often thought to have accelerated after the Arab conquest, with many sites abandoned or reduced to small scattered zones of habitation within the ruins of the Roman town. We have seen that most urban sites were not abandoned, but in what state did they survive? This is a difficult question: the archaeological evidence is so fragmentary that it is difficult to reconstruct the broader urban landscape. Three particularly well-studied sites – Tocra in Libya, Sbeïtla in Tunisia and Volubilis in Morocco – provide some sense of urban diversity in the early medieval period.

Tocra

Excavations at Tocra (Taucheira) provide a glimpse of a coastal Cyrenaican town after the Arab conquests (Figure 3). Here, the Byzantines hurriedly erected a fortress in the town near the eastern gate, probably in 21/642.⁴⁵ Tocra was captured soon afterwards in 23/644, when the fortress continued to be occupied, presumably now by a garrison of Arab troops. Inside, are two phases of occupation consisting of roughly constructed buildings centred on two courtyards, and a bath complex. Whilst Barri Jones identified the second phase of construction as Byzantine and dated to 22/643, one year after the construction of the fortress, it seems more plausible that the second phase of construction post-dates the Arab capture of Tocra.⁴⁶ The baths, in particular, with the two plunge baths either side of the furnace and the use of stone uprights instead of the usual Roman brick *pilae*, are very similar

⁴² Ibn 'Abd al-Hakam, *Conquête de l'Afrique du Nord et de l'Espagne*, trans. Albert Gateau (Algiers: Éditions Carbonel, 1942), pp. 46–49.

⁴³ Wickham, *Framing*, esp. 720–794, argues for a major decline in large-scale interregional export trade in the eighth century Mediterranean.

⁴⁴ Leone, Townscapes, esp. 237-238.

⁴⁵ R.G. Goodchild, "Byzantines, Berbers and Arabs in 7th-century Libya", *Antiquity* 41 (1967): 114–124;
D. Smith and J. Crow, "The Hellenistic and Byzantine Defences of Tocra (Taucheira)", *Libyan Studies* 29 (1998): 35–82.

⁴⁶ G.D.B. Jones, "Excavations at Tocra and Euhesperides. Cyrenaica 1968–1969", *Libyan Studies* 14 (1983): 109–121.

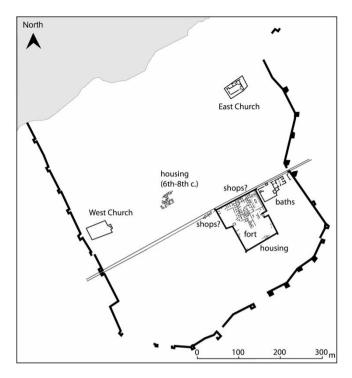


Figure 3. Plan of early medieval Tocra (Taucheira), after Smith and Crow, "The Hellenistic Defences", with additions from Buzaian, "Excavations at Tocra".

to the late eighth-century baths at Volubilis.⁴⁷ Housing dated to the eighth-tenth century was built up against the southern façade of the fortress, and other evidence of early medieval occupation has been found in the centre of Tocra dating from the sixth to the eighth centuries and perhaps later.⁴⁸ In both areas, houses are relatively humble, with roughly coursed rubble and mud brick walls, and beaten earth floors, but they are by no means ephemeral. The houses consist of rectangular rooms organised around courtyards, and seem to have been used for a mixture of domestic and commercial activities. The street-plan is somewhat irregular, with winding streets and alleys that lead into the houses. There is also some evidence of buildings for public use: the baths outside the fortress were remodelled on a smaller scale but continued in use, as is attested by a Kufic inscription praising Allah on the main doorstep into the atrium.⁴⁹ In many ways, then, urban life at Tocra seems to have continued much as in the Byzantine period.

Sbeïtla

If Tocra is a clear example of urban continuity, Sbeïtla (Sufetula) in central Tunisia is often regarded as the paradigmatic example of urban fragmentation. Pioneering

⁴⁷ The similarity in plan has been observed by Elizabeth Fentress, who discusses this in her forthcoming publication of the medieval bathhouse at Volubilis.

⁴⁸ Ahmed Buzaian, "Excavations at Tocra (1985-1922)", *Libyan Studies* 31 (2000): 59–102.

⁴⁹ G.D.B. Jones, "The Byzantine Bath-house at Tocra: A Summary Report", *Libyan Studies* 15 (1984): 107–111.

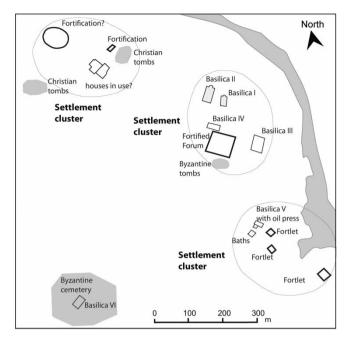


Figure 4a. Plan of Sbeïtla in the late Byzantine period modified from Duval, L'urbanisme.

analysis in the 1960s by Noël Duval produced a picture of a city reduced by the seventh century to a series of small inhabited nuclei consisting of fortified complex(es), a church and a production site, surviving in this fragmented state until at least the ninth century.⁵⁰ This idea of urban fragmentation and ruralisation has proved influential, with some scholars suggesting that a similar pattern of scattered settlement within the ruins of earlier cities may be observed elsewhere. Recent excavations at Sbeïtla suggest that this model may be in part an archaeological construct. Figure 4b shows the suggested reconstruction of seventh-ninth century Sbeïtla based on archaeological research conducted in the 1960s and earlier. It is striking that the identified clusters of Byzantine occupation align with the limits of excavation. Excavations in the 1990s revealed further Byzantine and early medieval occupation outside these clusters (Figure 4b), though systematic sampling of unexcavated sectors is needed to demonstrate the full extent of seventh-ninth-century occupation.⁵¹ It is clear, however, that the central part of the site around the forum and the south-west area remained occupied into at least the ninth century.

While we may not comprehend the full extent of seventh–ninth century Sbeïtla, it is possible to make some tentative observations about the nature of early medieval occupation there. Unusually, it was not fortified with a town wall in the Byzantine

⁵⁰ Noël Duval, "L'urbanisme de Sufetula-Sbeïtla en Tunisie", *ANRW* 2/2 (1982): 596–632; *idem*, "Sufetula: l'histoire d'une ville romaine de la Haute-Steppe à la lumière des recherches récents", in *L'Afrique dans l'Occident romain (Ier siècle av. J.C.- IVe siècle ap. J.C.)*, (Rome 1990), pp. 495–526, esp. 512–513.

⁵¹ For the results of the 1990s excavations, see Fathi Béjaoui, "Nouvelle données archéologiques à Sbeïtla", *Africa* 14 (1996): 37–64; *idem*, "Une nouvelle église d'époque byzantine à Sbeïtla", *L'Africa Romana* 12/3 (1998): 1172–1183.

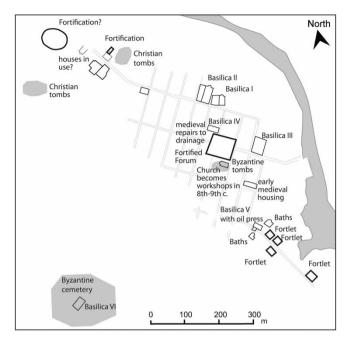


Figure 4b. Plan of early medieval Sbeïtla, integrating excavations reported in Béjaoui "Nouvelles données", and "Une nouvelle église".

period, though a wall was erected around the forum, and the amphitheatre and "temple anonyme" in the north-west of the town may have also been fortified.⁵² Other fortified dwellings or "fortlets" have been excavated in the south-west corner of the site, and were occupied in the seventh-ninth centuries. These typically contained an internal well, cisterns, and stabling and were reached by outside stairs on the first storey. There are also signs of continuity of urban life in the centre. Around the forum area, many houses continued to be occupied into the ninth century, albeit with the floor levels and thresholds raised from those of earlier levels.⁵³ Some of the drainage system not only continued in use but was repaired in the post-conquest period.⁵⁴ Formerly religious or public spaces were given over to residential or industrial purposes. Thus a church was transformed into a series of subdivided rooms, perhaps serving as workshops since slag and kilns were found in the area.⁵⁵ Other churches (Basilicas I, IV and V) seem to have continued in use after 650, and in the case of the latter two, until the tenth–eleventh centuries.⁵⁶ Sbeïtla was thus a very different place by the ninth century from what it had been in the sixth or even seventh century, but still a thriving settlement.

⁵² Noël Duval and François Baratte, *Les ruines de Sufetula-Sbeïtla* (Tunis: Société Tunisienne de Diffusion, 1973), pp. 64, 73. The absence of fortifications is particularly surprising given the significant role the city played in the first/seventh century as a military base for the Byzantine army and later as the seat of the renegade exarch Gregory, who was killed by the Arabs in 26/647 somewhere outside the city.

⁵³ Béjaoui, "Nouvelle données", 41–43.

⁵⁴ *Ibid.*, 43.

⁵⁵ Béjaoui, "Une nouvelle église".

⁵⁶ Duval, "Urbanisme", 625; *idem*, "L'église V (des Saints-Gervais-Protais-et-Tryphon) à Sbeitla (Sufetula), Tunisie", *Mélanges de l'Ecole française de Rome. Antiquité* 111/2 (1999): 927–989.

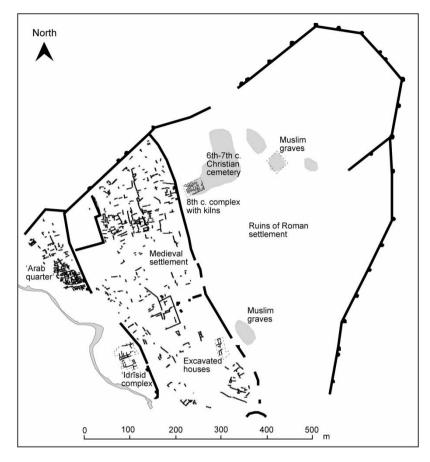


Figure 5. Plan of early medieval Volubilis, after Fentress and Limane, "Volubilis", with additions from Akérraz, "L'enceinte" and "Niveaux islamiques".

Volubilis

The best evidence for eighth-century urbanism currently comes from Volubilis (Figure 5) in Morocco, on the far western frontier of Umayyad/^cAbbāsid control. Long before the Arabs reached Morocco, the city was restricted to the western third of the original Roman settlement, protected by the addition of a new rampart running north-south.⁵⁷ This reduced city was still some 18 hectares and an important settlement in the eighth century. Coins were minted there in both the Umayyad and ⁶Abbāsid periods, some inscribed simply with the city's new name "Walīla".⁵⁸ Within the walled early medieval settlement itself, three houses have been excavated; these seem to have been constructed in the seventh century, and replaced by similar units over time, before being abandoned by the

⁵⁷ Aomar Akerraz, "Note sur l'enceinte tardive de Volubilis", Bullétin Archéologique du Comité des Travaux Historiques, 19B (1985): 429–436.

⁵⁸ Daniel Eustache, "Monnaies musulmanes trouvées à Volubilis", *Hespéris* 43 (1956): 133–195; *idem*, "Monnaies musulmanes trouvées dans la Maison du Compas, Volubilis", *Bulletin d'Archéologie Marocaine* 6 (1966): 349–364.

tenth century. Each was composed of a single small rectangular building, subdivided into domestic space and stabling/workrooms, with storage silos outside.⁵⁹ To their west lay a road with carefully constructed drainage channels on either side, which seems to be contemporary.⁶⁰ It is not clear whether this simple housing is typical, or reflects the peripheral location of the trench on the southern edge of the settlement.

To the east of the medieval settlement, the walled sector of the Roman city (including the forum area) was given over to burials and industrial activity from the sixth century onwards. Thus a sixth seventh-century Christian cemetery was found around the Arch of Caracalla and in the ruins of earlier Roman houses.⁶¹ A later cemetery, with skeletons laid out in accordance with Muslim funerary rites, lay to the east; further Muslim graves have been found in the eastern and southern quarters of the old town.⁶² This enclosed zone was also used for industrial purposes. Immediately outside the sixth-century wall, a series of rooms and pottery kilns were built in the shell of a Roman house in the eighth century, either as individual units or arranged around a central courtyard.

On the other side of the settlement, outside the walls and near the $wad\bar{d}i$, is the socalled "Arab quarter". This may be the location of an early Arab settlement, perhaps a garrison of soldiers. The plan of this area is unclear, but aside from a mysterious central tower built out of spoliated Roman blocks and containing two graves, the zone contained densely packed housing.⁶³ Eustache notes that excavations in the 1950s uncovered a building with at least twelve columns and five doors on one of its façades, and suggests that it was some sort of public building, perhaps even a mosque.⁶⁴ Later scholars do not mention this structure, and the excavations remain unpublished. Large amounts of Islamic coins were found in this area, including two coin hoards: the first contained 236 silver *dirhams*, minted in the Middle East, Ifrīqiya and al-Andalus and dating between 79/698 and 125/743, and the second silver *dirhams* minted by the Umayyads in Spain.⁶⁵ A large eighth–ninth-century complex consisting of a small bathhouse, a collective granary, and three very substantial buildings with large courtyards and orthogonal

⁵⁹ Elizabeth Fentress and Hassan Limane, "Excavations in Medieval Settlements at Volubilis, 2000–2004", *Cuadernos de Madīnat al-Zahrā*' 7 (2010): 105–122.

⁶⁰ A silver dirham of Idrīs I (r. 171-4/788–791) was found on its surface, providing a terminus postquem for its construction. See Fentress and Limane, "Volubilis", 110.

⁶¹ Excavations of the Maison du Compas, where Christian burials were found, produced a variety of 'Abbāsid bronze coins minted between 155/772 and 172/789; see Eustache, "Maison du Compas". Interestingly, a series of otherwise unknown individuals (e.g. al-Rashīd ibn Kadīm, 'Abd al-Wahhab and Muḥammad ibn Khalīfa) are commemorated on these coins and this has prompted some debate. Eustache argues that these individuals were 'Abbāsid generals, but more recently El-Harrif has suggested that they may in fact be the otherwise unknown leaders of an independent Berber city-state in the region that preceded the Idrīsid state. See F.Z. El-Harrif, "Monnaies islamiques trouvées à Volubilis: Liberté locale et pouvoir abbaside", *Actes de Ières journées nationales d'Archéologie et du patrimoine, Rabat, 1-4 juillet 1998*, volume 3 (Rabat: Société Marocaine d'Archéologie et Mu Patrimoine, 2001), pp.142–159.

⁶² Aomar Akerraz, "Recherches sur les niveaux islamique de Volubilis", in *Genèse de la ville islamique en al-Andalus et au Maghreb occidental*, ed. P. Cressier and M. García-Arenal (Madrid: Casa de Velázquez-CSIC, 1998), pp. 295–304.

⁶³ Fentress and Limane, "Volubilis", 115, suggest the tower is not a Roman mauseoleum as often argued, but was built for either funerary or defensive purposes, and later used, or reused, for burial.

⁶⁴ Eustache, "Monnaies", 134, n. 2.

⁶⁵ Eustache, "Monnaies". He does not specify the dates of the Spanish dirhams. A gold dinar of similar date, and about 600 Islamic bronze coins were also reported in this area.

plans, also lay outside the town walls. Interpreted as a public and administrative complex, similar to the $d\bar{a}r \ al-im\bar{a}ra$ or governor's palace, the excavators suggest that Idrīs I established it in the 170s/790s as a headquarters for his newly formed state.⁶⁶ Volubilis then provides an example of a flourishing early medieval city, with Arab settlements placed outside the walls of the existing city.

Urban townscapes

There are several common features of townscapes worth outlining, which shed light on the nature of the Arab conquest and its impact on daily life. Many early medieval settlements were not drastically reduced in size from the Byzantine period. In all three of the case studies, eighth-century settlement size and density of occupation was much the same as in the seventh century. The same is true of Leptis Magna, the former provincial capital of Tripolitania, where Cirelli has convincingly demonstrated that ninth-century Lebda was approximately the size of the Byzantine settlement.⁶⁷ Elsewhere, the patchy nature of urban archaeology makes the situation less clear. However, it is possible to make some preliminary observations about military and religious buildings (churches and mosques), domestic life and urban production.

Fortifications and intramural fortresses were a defining feature of early medieval cities in North Africa.⁶⁸ Byzantine fortresses were appropriated to house Arab garrisons, and presumably both ensured and symbolised Umayyad/Abbāsid state power. Firm archaeological evidence for the Arab takeover of forts comes from Tocra in Cyrenaica; less securely dated instances of this phenomenon are recognisable in later additions and repairs to Byzantine fortresses, as at Ksar Lemsa, Haïdra, Béja, Djaloula, Zana, Tigsis, Ksar Belezma, Bagaï and Tobna, for example. Town walls were also maintained in good repair. The incoming Arab troops also built new forts. Initially there seems to have been little need to build new fortifications, the only known early eighth-century example was found at Belalis Maior (Henchir el-Faouar), which overlies a Byzantine basilica and has been dated by a coin to between 90/709 and 99/717.69 By the end of the eighth century, however, *ribāts* were built in some quantity along the Tunisian coastline, and the frontier system looked rather different from that of the Byzantines. The Arab army therefore based their defensive system on the Byzantine one, but adapted it to their needs, modifying existing fortifications and building new ones where required.

At several sites, there is also evidence of other forms of monumental building in the eighth century. At Ptolemais, a small trefoil-shaped building of monumental character, with an early Kufic inscription on a paving slab, was built above a Late

⁶⁶ Fentress and Limane, "Volubilis".

⁶⁷ Cirelli, "Leptis Magna", 428–433.

⁶⁸ On Byzantine fortresses and their role in the city, see Denys Pringle, *The Defence of Byzantine Africa from Justinian to the Arab Conquest* (Oxford: British Archaeological Reports, 1981).

⁶⁹ It has an entrance arrangement similar to that of the *ribāț* at Sousse, dated to the last quarter of the eighth century. See A. Mahjoubi, "Henchir el-Faouar", *Africa* 2 (1967–1968): 293–300. On Sousse, see A. Lézine, *Le Ribat de Sousse* (Tunis: La Rapide, 1956), p. x, pl. XV. No other examples of eighth-century forts have been identified, though the ashlar masonry technique and plans of Byzantine fortifica-tions are very similar to those of *ribāț*s; indeed, the ninth-century *ribāț*s of Lemta and Bordj Younga were once incorrectly identified as Byzantine.

Antique olive oil-pressing installation.⁷⁰ At Carthage, the basilica-planned building, basin and mosaic at the Rotonde de l'Odéon has recently been re-dated to the late eighth century.⁷¹ If this dating is correct, it demonstrates that North African monumental building and mosaic traditions continued into the eighth century. A small medieval building with columns and a trapezoidal plan known as the "bâtiment à colonnes", has also been uncovered inside the citadel at Haïdra, and is tentatively interpreted as an early mosque,⁷² though no date is given. Whatever the function of these buildings, they do indicate continued investment in monumental buildings and civic life.

There is limited firm archaeological evidence for mosques in this period, though they would have been built in many towns soon after the conquest. As well as the mosque identified in Haïdra's citadel, further mosques or prayer rooms have been identified inside the fortresses of Belalis Maior, Bagaï, Tobna and perhaps the "Arab quarter" at Volubilis.⁷³ There is little documentary or archaeological evidence for mosque construction in the towns proper before the Aghlabid period outside the provincial capitals of Kairouan and Tunis.⁷⁴ Whilst there is no archaeological evidence for the seventh- or eighth-century phases of these mosques, later sources tell us that a mosque was first built at Kairouan in 50/670, and subsequently remodelled several times in the seventh and eighth centuries. The Zaytūna mosque at Tunis was founded in 116/731, perhaps on the site of an earlier mosque. Initially, then, it seems possible that mosques were largely confined to fortresses, presumably for the Arab garrison troops, and to the provincial capitals, where we might expect large numbers of incoming Arabs to live. It is not until the start of the ninth century that archaeology and texts provide evidence of large-scale foundations of mosques across the Idrīsid, Rustamid and Aghlabid territories.

Christianity remained a major religion in North Africa for centuries and churches must have been a dominant element in the urban landscape, though it has proven difficult to establish this archaeologically.⁷⁵ This lack of evidence may derive from

⁷⁰ J.B. Ward-Perkins, J.H. Little and D.J. Mattingly, "Town Houses at Ptolemais, Cyrenaica: A Summary Report of Survey and Excavation Work in 1971, 1978-1979", Libyan Studies 17 (1986): 109-153, pp. 145–148. ⁷¹ B. Caron and C. Lavoie, "Les recherches canadiennes dans le quartier de la 'rotonde de l'odéon' à

Carthage: Un ensemble paléochrétien des IV^e-V^e siècles ou une phase d'occupation et de construction du VIII^e siècle?", Antiquité Tardive 10 (2002): 249-261. It should be noted that the excavator dates the complex to the fourth-fifth centuries: see Pierre Senay, Carthage. 11, La basilique dite "triconque" de l'aedes memoriae: Fouilles 1994-2000, (Montréal: Presses de l'Université du Québec, 2000), esp. pp. 115–141.

⁷² F. Baratte, "Recherches franco-tunisiennes sur la citadelle byzantine d'Ammaedara (Haïdra)", Comptes-rendus des Séances de l'Académie des Inscriptions et Belles-Lettres 140/1 (1996): 125-154, esp pp. 151-153. 73 Georges Marçais, L'architecture musulmane d'occident (Paris: Arts et Métiers Graphiques, 1954),

pp. 29–30. ⁷⁴ See Marçais, *Architecture*, 9-22.

⁷⁵ For the documentary evidence, see Mohamed Talbi, "Le christianisme maghrébin de la conquête musulmane à sa disparition, une tentative d'explication", in Conversion and Continuity: Indigenous Communities in Islamic Lands, ed. M. Gervers and R.J. Bikhazi (Toronto: Pontifical Institute of Mediaeval Studies, 1990), pp. 313-354; E. Savage, A Gateway to Hell, a Gateway to Paradise: The North African Response to the Arab Conquest [Studies in Late Antiquity and Early Islam VII] (Princeton: Darwin Press, 1997). It should be noted that Savage wrongly assumes that all African Christians were Donatists. For the epigraphic evidence (from the eleventh century) see A. Mahjoubi, "Nouveau témoinage épigraphique sur la comunauté chrètienne de Kairouan au Xe siècle", Africa 1 (1966): 85-103; R. Bartoccini and D. Mazzoleni, "Le iscrizioni del cimitero di En-Ngila", Rivista di Archeologia Cristiana 53 (1977): 157-197.

a tendency to assume that Christianity came to an end with the Arab conquests, and to date church abandonment to that time.⁷⁶ Some churches certainly did retain their Christian function for centuries after the conquest, as at Sbeïtla, where Basilicas IV and V seem to have continued in use until the tenth-eleventh centuries.⁷⁷ Elsewhere Christian graves near churches have been dated to the early medieval period (e.g. Mactar, Sabratha). Christians did not simply continue to use existing churches, but may even have built new ones. Thus, in the late eighth century, Qustas (Constans) was granted permission to build a church in Kairouan.⁷⁸ The majority of churches, however, were repurposed at some point, such as the church at Belalis Maior, transformed into an oil pressing facility, or the church at Berenice, which, after being damaged in the early medieval period, was given over to residences and light industry.⁷⁹ The church at Tipasa was transformed into a market at some point in the medieval period.⁸⁰ Others still were dismantled for their materials, though tenth-eleventh-century judicial texts suggest that this was only supposed to happen to abandoned churches. Some churches may have been transformed into mosques, as in the case of the Zaytūna mosque at Tunis, which tradition holds was built in the early eighth century on the remains of a Christian basilica, a legend supported by the discovery below the minaret of an earlier Roman building with a capital with a Byzantine cross.⁸¹ This example aside, there is no secure archaeological evidence for the direct conversion of churches into mosques, though it is often suggested for the Ibādī controlled areas of North Africa, especially the Jebel Nafūsa.⁸² The re-use of churches presumably reflects a gradual decline over time in the size of Christian communities: at Sbeïtla, for example, while there is evidence for the continued use of some churches into the tenth century, others were given over to secular purposes at some point after the Arab conquest.

Urban plans also provide some insight into the nature of the interactions between incoming Arabs and the local town-dwellers. At Volubilis, we saw that eighth-century Arab settlements were placed outside the walls of the earlier towns, following a pattern established in the Eastern Mediterranean at sites such as 'Ammān and Ayla.⁸³ At Volubilis, at least, the spatial division between the two communities seems to have been mirrored in different housing, eating and consumption practices. The Idrīsids and Rustamids established similar extramural settlements at Tlemcen (Pomaria) and Tahert in the late eighth century. Whether this pattern existed in Ifrīqiya proper, or was limited to the far western

 ⁷⁶ Mark. A. Handley, "Disputing the End of African Christianity", in *Vandals, Romans and Berbers*, ed. A. H. Merrills (Aldershot: Ashgate, 2004), pp. 291–310.

⁷⁷ Duval, "Urbanisme", 625.

⁷⁸ B. el Baccouche and M. el-Aroussi el-Metoui (eds), 'Abd Allah ibn Abi 'Abd Allah al-Mâlikî, Kitàb Riyàd al-Nufus, volume 1 (Beirut 1981), p. 476, cited in Talbi, 'Christianisme', 319.

⁷⁹ J.A. Lloyd, *Excavations at Sidi Khrebish Benghazi (Berenice)* (Tripoli, Libya Antiqua Supplement 5, 1977), pp. 187–194.

⁸⁰ Church III, in Isabelle Gui, Noël Duval and Jean-Pierre Caillet, *Basiliques chrétiennes d'Afrique du* Nord. I. Inventaire des monuments de l'Algérie (Paris: Institut d'Études Augustiniennes, 1992), p. 25.

⁸¹ Paul Gauckler, "Les thermes de Gebamund à Tunis", *Compte-rendus des Séances de l'Academie des Inscriptions et Belle-Lettres*, 51 (1907): 790–795, esp. p. 794.

⁸² V. Prevost, "Les dernières communautés chrétiennes autochtones d'Afrique du Nord", *Revue de l'Histoire des Religions* 224/4 (2007): 461–483; René Basset, "Les sanctuaires du Djebel Nefousa", *Cahiers de Tunisie* 29 (1981): 372–373. Note the caution of J.W. Allan, "Some Mosques of the Jebel Nafusa", *Libya Antiqua* 9–10 (1972–1973): 147–170, esp. pp. 168–169.

⁸³ Fentress and Limane, "Volubilis", 115.

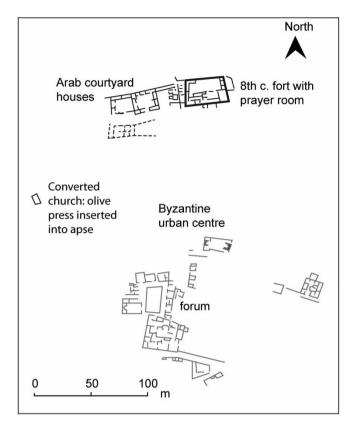


Figure 6. Plan of Belalis Maior, adapted from Mahjoubi, Henchir el-Faouar, Pl. 1. and Google Earth imagery.

frontier, is far from clear. However, three large eighth-century houses with long narrow rooms set around a courtyard were found around the eighth-century fort at Belalis Maior (Figure 6), very similar in size and plan to the later tenth-century houses at Sétif.⁸⁴ Elizabeth Fentress has suggested that this type of court-yard plan is Arab in origin, on the basis of its similarity with sixth-century Arab housing from Umm al-Jimāl.⁸⁵ The orderly arrangement of these houses and the fort on the northern edge of the town is striking, and suggests that here, as at Volubilis, an Arab settlement was built on the outskirts of an already existing town.

If it seems likely that incoming Arabs lived separately from the North Africans, in garrisons or extra-mural settlements, it is possible to say a little more about where North Africans were living in towns. In general, there is a marked continuity in urban housing as we saw at Sbeïtla and Tocra, which suggests continuity in demographic population and domestic practice. From the mid-sixth century onwards, housing became simpler and often subdivides earlier residential or public structures,

⁸⁴ Mahjoubi, *Henchir el-Faouar*, esp. Pl. 1, c. Unfortunately, only the excavation of the fort has been published.

⁸⁵ Elizabeth Fentress, "The House of the Prophet: North African Islamic Housing", Archeologia Medievale 14 (1987): 47–68; Bert de Vries, Umm el-Jimal: A Frontier Town and its Landscape in Northern Jordan [Journal of Roman Archaeology Supplementary Series XXVI] (Portsmouth, Rhode Island: Journal of Roman Archaeology, 1998), 91–127, esp. Fig. 44.

as at Thuburbo Maius, Belalis Maior, Sabratha, and Dougga, or public spaces as at Rougga, Cherchel, and Utica. There is a great variety in form and size, however. At Volubilis, in the far west, small houses with one or two rooms were found.⁸⁶ Elsewhere, timber post-built structures have been identified, as in the forum areas of Cherchel and Utica.⁸⁷ Houses were not always insubstantial or small-scale constructions. Fortified dwellings, like those at Sbeïtla, occupied between the seventh and ninth centuries, are substantial structures of re-used ashlar blocks, but their plans derive from local building traditions, rather than Arab ones. These sorts of dwellings suggest that at least some city-dwellers were wealthy, an observation supported by the discovery of late seventh-century gold-coin hoards at Rougga, Bulla Regia and Thuburbo Maius.

The transformation of urban production

Anna Leone has identified a surge in urban production activities in North Africa from the fifth century onwards, recognisable archaeologically in kilns and olive presses in urban sites.⁸⁸ This is a phenomenon that continued into the early medieval period. It is difficult to date olive presses more precisely than to the Late Antique/ early medieval period, but there are a few unequivocal examples of presses in use in the early medieval period. At Belalis Maior, a productive quarter was installed around a small Byzantine church, and probably enlarged in the Arab period, when an olive press was installed inside the church. Another olive press was built in the Baths of Julia Memmia at Bulla Regia, during the late Byzantine/early Arab period, and remained in use until the fourteenth century. Similarly at Sbeïtla, an olive press was constructed near the Basilica of Saint Gervasius, Protasius and Tryphon (Basilica V) probably in the seventh century, and the excavators suggest that the press was used until the tenth-eleventh century. At Carthage, an olive screw press was found in the basilica of Carthagenna. Other presses erected in the Byzantine period that probably continued to be used in the Arab period have been found at Mactar, Mustis, Thuburbo Maius, Sabratha, Leptis Magna, Ptolemais and perhaps Asadi.

The location of amphora kilns provides some insight into the organisation of olive oil production. In the sixth century, kiln facilities were built in old public buildings at major ports such as Leptiminus and Carthage, and it is suggested that the kilns were under imperial control and related to taxation.⁸⁹ The practice of bottling the oil at the harbour seems to have continued into the Arab period, where excavations of the Flavian temple inside the Byzantine wall and the harbour at Leptis Magna revealed pottery kilns producing amphorae from the ninth and tenth centuries.⁹⁰

⁸⁶ Fentress and Limane, "Volubilis", 106–110.

⁸⁷ Nabil Kallala, Elizabeth Fentress, Josephine Quinn and Andrew Wilson, "Survey and Excavation at Utica 2010", online interim report (2010), pp. 23–24. http://utica.classics.ox.ac.uk/index.php?id = 20 (accessed 25 April 2012).

⁸⁸ Anna Leone, "Late Antique North Africa: Production and Changing Use of Buildings in Urban Areas", *Al-Masāq* 15/1 (2003): 21–33; Leone, *Townscapes*, 217–236. The bibliography for the presses is given in her Table 14.

⁸⁹ Henry Hurst, "L'ilôt de l'Amīrauté, le port circulaire et l'Avenue Bourguiba", in *Pour sauver Carthage*, ed. Abdelmajid Ennabli (Tunis: Institut National d'Archéologie et d'Art, 1992), pp. 79–96, 88–89.

⁹⁰ Anna Maria Dolciotti, "Una testamonianza materiale di età tarda a Leptis Magna (Libia): La produzione islamica in ceramica commune", *Romulus* 6 (2007): 246–266.

There was, then, both continuity in artisanal production and an export trade for oil or wine by sea. By this point, however, kilns are intermingled with houses suggesting that they are owned by individuals or groups, rather than by the state.

A veritable spolia industry, re-purposing Roman blocks and architectural elements, existed in North Africa for centuries,⁹¹ Public buildings and ruined areas of towns seem to have been mined for their stone and marble for building work. Several lime kilns in Tunisia are dated to the late Byzantine or early medieval period, and were presumably used to recycle building materials as mortar. These are sometimes located in former public spaces, as in the nave of the Church of Alexander at Bulla Regia, the baths at Tignica and the forum at Rougga, but also occasionally in houses in abandoned areas (Maison du Chasse at Bulla Regia) or over cemeteries as at Leptiminus.⁹² The appearance of lime kilns in former public and private structures from the later Byzantine period onwards and the stripping and destruction of the monumental fabric of African cities is often assumed to relate to domestic rather than public building projects.⁹³ It may not be that clear-cut. Al-Bakrī's comment that two columns of porphyry were taken from a church by the Arab general Hassān ibn al-Nu'mān (fl. 77-85/696-704) for Kairouan's Great Mosque suggests that spoliation may have continued uninterrupted.⁹⁴ Certainly, by the latter part of the eighth century, we see systematic spoliation of earlier Roman and Byzantine buildings in order to provide building material for *ribāts* and mosques, in a similar way to the Byzantine re-use of stone and marble for their fortresses and churches. Two Roman columns in the Great Mosque of Kairouan are even inscribed "li-l-masjid", "for the mosque", in an elegant ninthcentury script,⁹⁵ indicating some degree of state control and that this really was quite an organised industry. Excavations at the church of Bir Ftouha give some sense of how comprehensively a building might be dismantled by the late ninth century: no decorative structural elements (column capitals, bases, drums etc.) from the basilica or baptistery were found in situ anywhere in the complex, and even the marble tiles seem to have been lifted from the floors.⁹⁶

If there is some degree of continuity in the types of industrial activity carried out in towns, there seems to be a marked shift in its organisation in the early medieval period. In the sixth and seventh centuries, productive activities within urban settings – whether oil presses, pottery kilns or other artisanal workshops – are often found in connection with churches, or in former public buildings, a phenomenon that Leone convincingly links to taxation and close church control of production under the

95 Marçais, Architecture, 8.

⁹⁶ Bir Ftouha: A Pilgrimage Church Complex at Carthage, ed. Susan T. Stevens, Angela V. Kalinowski and Hans van der Leest [Journal of Roman Archaeology Supplementary Series LIX] (Portsmouth, RI: Journal of Roman Archaeology, 2005), pp. 490–491, 533. It is unclear whether the building was dismantled in order to collect architectural elements for re-use in other buildings, or to be burned for lime.

⁹¹ For spolia in mosques, see Ahmed Saadaoui, "Le remploi dans les mosquées ifrīqiyennes aux époques médiévale et moderne", in *Lieux de cultes: Aires votives, temples, églises, mosquées* (Paris: CNRS Éditions, 2008), pp. 295–304, 296.

⁹² Leone, Townscapes, 217.

⁹³Ibid.

⁹⁴ Al-Bakrī, *Al-Masālik wa-l-mamālik*, volume 2 (Beirut: Dār al-Kutub al-'Ilmiyyah 2003), p. 195. Note that al-Mālikī, *Riyāḍ al-nufīš*, volume 1, (Cairo: Imprimerie Misr, 1951) p. 32, states that the Aghlabid *amīr* Ziyādat Allāh was responsible for removing the porphyry columns in 221/836. It is unclear who to follow here, since nothing is known of the mosque's seventh- or eighth-century plan, although the porphyry columns are still visible in the mosque today.

Byzantines.⁹⁷ By the eighth and ninth centuries, olive presses were still common features of cities but were no longer attached to churches or public structures. Instead, they were connected to residential quarters, or associated with individual dwellings. At Ptolemais, for example, several olive presses were added to House G, probably in the Islamic period.⁹⁸ Ceramic production also now seems to be connected with groups of houses. One of the houses at Cherchel has a pit containing three phases of kilns, probably used for the production of coarse handmade vessels.⁹⁹ At Leptis Magna too, the ninth–tenth-century kilns are intermingled with domestic dwellings. These examples may indicate a shift away from state/church control of production to individuals or collective groups. It is impossible to know whether this shift should be directly associated with the imposition of Arab rule or is related to the collapse of Byzantine authority in the latter half of the seventh century. However, the longevity of this pattern in the medieval period is an indication that the Umayyad and ʿAbbāsid states did not control production in the same way as the Byzantines.

Conclusion

In many ways, the study of the material culture of early Islamic Africa is still in its infancy, and lags behind medieval studies in the Middle East and Europe. Nonetheless, I hope to have demonstrated that by revisiting the archaeological evidence with a critical eye, it is possible to write histories of seventh- and eighth-century Africa after the Arab conquests. In so doing, it is evident that, alongside a certain level of continuity in urban settlement, rural activity and demographic population, there were major transformations. In the countryside, many regions show a shift from a dispersed to a nucleated settlement pattern. The implications of this nucleation vary regionally: some areas appear to become more egalitarian, as on Jerba, whilst elsewhere there seems to be a more hierarchical, even tribal, social organisation, as in the Libyan pre-desert. The northern Tunisian countryside may have changed less, though towns in this area seem to have suffered more from the Arab conquests than other areas. Across North Africa, urban settlement continued, as did urban industrial activities (olive processing, pottery kilns, lime production, spoliation), but there seems to have been a shift away from the state, church or elite control of production that characterised the Byzantine period towards individual or collective control of production.

If there are increasing signs of less hierarchical or tribal societies and a lack of centralised production – often thought to reflect weak state control – what of the nature of Umayyad and 'Abbāsid rule? There are several indications that the Arabs attempted to tightly control their new African territories. First of all, Ifrīqiya was a heavily militarised landscape: most major towns seem to have been garrisoned by a *jund* of Arab troops, who were housed in the Byzantine fortress, or less frequently in a newly constructed fortress.¹⁰⁰ The examples of Volubilis and Belalis Maior suggest that a distinct division was maintained between incoming Arab populations

⁹⁷ Leone, "Production", 28–29.

⁹⁸ Ward-Perkins, Little and Mattingly, "Town Houses at Ptolemais", 125-126.

⁹⁹ Potter, Towns, 65.

¹⁰⁰ An estimated 40,000 Arab troops were assigned to North Africa in the early Abbāsid period. See Hugh Kennedy, *The Armies of the Caliphs: Military and Society in the Early Islamic State* (London: Routledge, 2001), p. 97.

and local populations. A similar phenomenon may be visible in the provisioning of fortresses with mosques, but not the towns themselves. Second, new administrative divisions imposed by the Arabs defined and successfully shaped a new urban hierarchy. New cities became important in the eighth century for political reasons, but can only have succeeded because the caliphate was strong enough to create new towns from very little and turn them into major socio-economic centres. Finally, new coinage and weight standards were issued soon after Carthage fell, suggesting an attempt to control trade and facilitate taxation.¹⁰¹ A major gold mint was established at Kairouan in 79/698, immediately after the fall of Carthage, and quickly began to mint coins, first on Byzantine models, and gradually changing to Arab models by 99/717. Trade was quickly standardised according to Arab weight systems. A Kufic inscription on a 20 $\bar{u}k\bar{v}a$ glass $mithq\bar{a}l$ (weight) found near Tebessa tells us that it was given by Abd al-Raḥmān ibn Ḥabīb, the $am\bar{v}$ at Kairouan, to the local governor of Mīla in 127/745.¹⁰² This weight attests to the central co-ordination of trade and taxation at a provincial level by the $am\bar{v}r$ in Kairouan.

These attempts to integrate North Africa into the caliphate were ultimately unsuccessful. In 121–125/739–743, the Berbers rebelled across North Africa in reaction to increased taxation under the Umayyad dynasty, and within a few decades of 'Abbāsid rule the first splinter Islamic states emerged, with the Rustamids in 144/761 at Tahert and the Idrīsids in 190/789 at Volubilis. Shortly after, the Aghlabids took control of Tunisia and Tripolitania; whilst recognising 'Abbāsid sovereignty, they were to all intents and purposes an independent state. The archaeological evidence for increasing power in the hands of individuals and collectives may well be a reflection of the limitations of Umayyad and 'Abbāsid authority on the ground.

Given the evidence available for North Africa in this period, what is proposed here can be no more than highly provisional. But at the very least, I hope that such speculations will serve to focus attention on the questions of this special issue, and suggest some areas for new research to probe.

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¹⁰¹ We know very little about the levels of taxation. Certainly the majority of taxes collected were used to pay the military and administration costs locally, but under the 'Abbāsids at least, after the caliphate was fiscally centralised, the remainder was sent to Baghdad, a sum that under al-Rashīd (r. 169–193/786–809) was around 13 million dirhams. See Djaït, "L'Afrique arabe".

¹⁰² G. Marçais and E. Lévi-Provencal, "Note sur un poids de verre du VIIIe siècle", *Annales de l'Institut d'Etudes Orientales* III (1937): 6–18. The inscription reads: "In the name of God. Among that which was provided/ by the *amīr* 'Abd al-Raḥmān ibn Ḥabīb / to Masal b. Hammād, *wālī* of Mīla / 20 $\bar{u}k\bar{v}ya$, in the year / hundred and twenty-seven".