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Not Just a Tale of Two Cities. Settlements in a Northern Coastal Area of the Tunisian Sahel (Late 7th – Late 8th c.)

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by *Susan T. Stevens*

Introduction

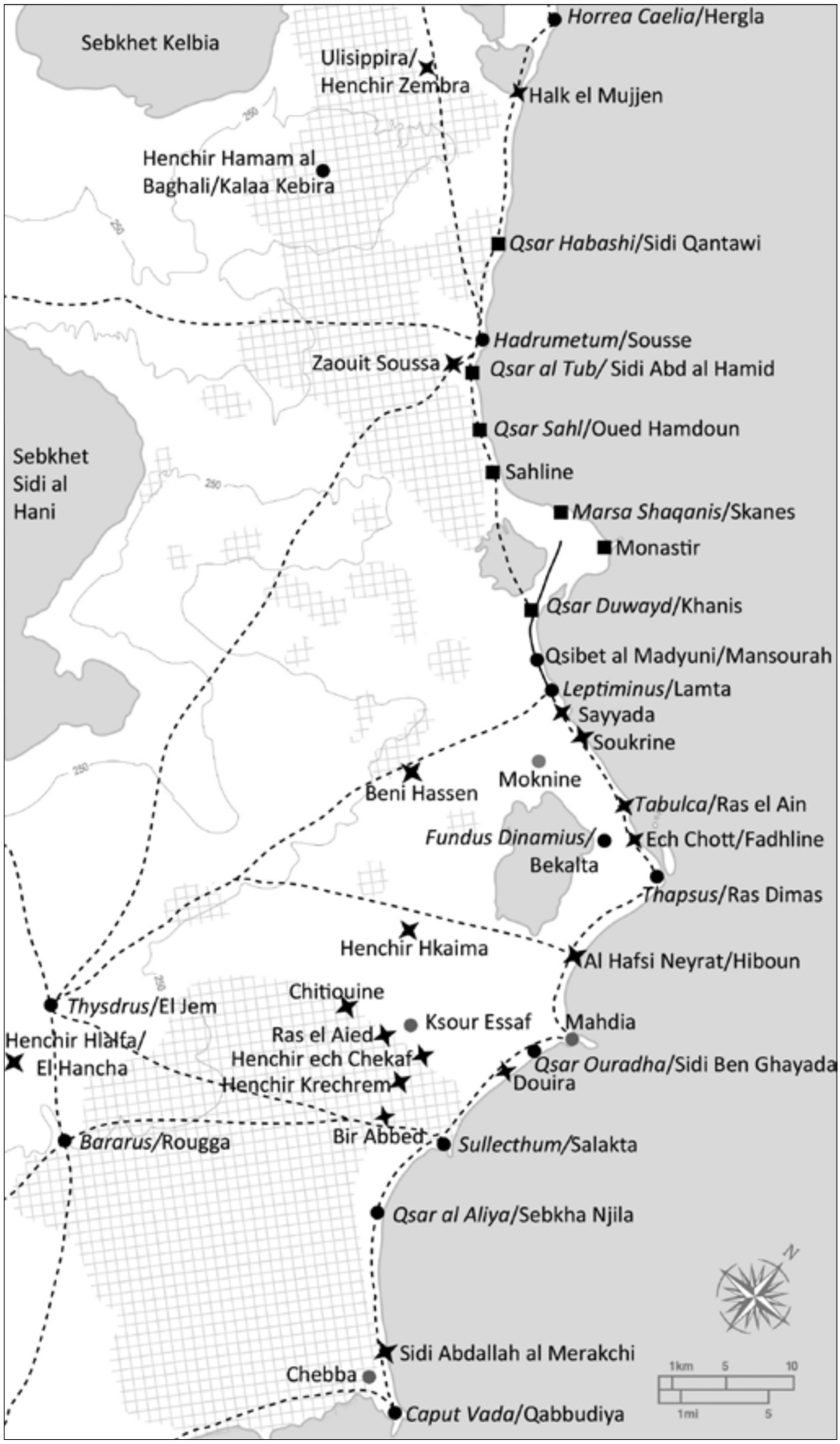
The purpose of this study is to apply current hypotheses about the condition of cities, towns and other settlements from the late 7th to the late 8th c. in North Africa as a whole, to the limited, varied, and uneven archaeological and historical evidence in a small coastal zone of the Tunisian Sahel. This is a period, neither strictly ancient nor strictly medieval, that has been traditionally understood as a rupture in the fabric of ancient North Africa characterized by urban abandonment and agricultural decline[1]. It can now be more accurately characterized as a transitional period between the Byzantine (mid-6th through the mid-7th c.) and the early Ifrīqiyan Maghrib (late 8th through the early 10th c.), intractable because of the lack of contemporary textual and recognizable, datable, archaeological evidence[2].

Urban and rural decline is well, if sporadically, attested in the late 6th c. by excavation and survey in the provinces of Proconsularis and Byzacena, and the abandonment of cities may have accelerated in the transitional period of the 7th and 8th c. This trend, however, seems to have occurred at different times and rates in different regions. While Northern Tunisia, especially Carthage and its hinterland, suffered a dramatic decline in the Late Byzantine and transitional period, this may not have been the case in other regions. Michel Bonifay has consistently warned that the history of ceramic production in 6th- and 7th-c. North Africa (and its distribution) may, but does not necessarily, reflect a regional economic downturn resulting from the social instability, and political and military upheavals of the historical record[3].

Paul-Louis Cambuzat's study of the Early Medieval cities of the Tell argues that many ancient cities and towns not only survived but prospered in this transitional period. Because the ancient urban network underpinned the economic prosperity and social stability of the region surviving cities, like *Thunes* (Tunis) in northern Tunisia, *Hadrumetum* (Sousse) in the Sahel, and *Thubunae* (Tobna) in the Tell, among others, developed under the Aghlabids into the engines of Islamicization and Arabization[4]. As Corisande Fenwick has noted, the ancient cities that prospered in the transitional period, now including Tocra, Sbeitla, and Volubilis, were linked by major Roman roads, equipped with way stations for travellers, and often protected by the defensive system of Byzantine forts manned by Arab garrisons during the transitional period[5]. Mark Handley's survey of the limited but persistent textual and material evidence for the survival of early Christian communities in Early Medieval cities and towns in North Africa, is a tonic to the traditional perception that the Christian church and its communities in Africa disappeared in the 7th c. The existence of an 11th-c. bishop of *Gummi*/Mahdia and two early 11th-c. clerical funerary epitaphs from Kairouan, if not directly applicable to the transitional period in the north coastal Sahel, are a welcome corroboration of the assumptions underlying this study[6].

The region under investigation here is a narrow coastal zone in the northern reaches of the Byzantine province of Byzacena, an area of the northern Tunisian Sahel that stretches approximately 120 kilometres from *Horrea Caelia*/Hergla in the north to *Caput Vada*/Qabudiyya in the south and extends inland some thirty kilometres[7] (fig. 1). Within this zone are supra-tidal maritime marshes (slikke, schorre, *sebkha*) surrounded by dunes that were at the same time rich resources and moving barriers between the coast and the interior[8]. The region is characterized by dry agricultural land on a low coastal plain marked by surviving Roman centuriation

1 A notable exception is Thébert –Biget 1990, 575–602.
2 See Leone 2007; Leone – Mattingly 2009. Fenwick 2013 provides a current assessment of the state of research.
3 Bonifay 2004, 477–485.
4 Cambuzat 1986, I 118–221.
5 Cambuzat 1986, I 72–75. 92–98; Fenwick 2013, 14–16.
6 Handley 2004, 302–310.
7 Following Djelloul 1999a. For different definitions of the Sahel and its regions see Mahfoudh 1999a, 152 f.; Mrabet – Boujarra 1999, 84; Djelloul 2011, I 512.
8 For the region's geomorphology see Oueslati 1995; Mrabet – Boujarra 1999, 95 f.; Slim et al. 2004, 41 f.



1 Map of Northern Coastal Sahel Region

facing onto a resource-rich shallow sea overlying a broad coastal shelf[9]. Indeed, the density of ancient rural settlements in the Sahel region as a whole, although of undetermined date, almost equals that of Cap Bon. Sadok Ben Baaziz's selective preliminary survey of 1315 ancient rural sites included well over half (688) located in the coastal zone under study here, in the regions of Sidi Bou Ali in the north, Sousse in the central and Mahdia in the south coastal Sahel[10]. The survey found that a higher density of rural sites, especially large properties, hamlets and villages (1–5 hectares), characterized the northern and southern coastal Sahel zone, where urban centres were relatively few. By contrast, where cities dominated the coastal zone in the central Sahel the density of rural sites was lower, and a majority of these were small (1000–5000 m^2). One indication of the coastal zone's overall prosperity is the 8–9% of rural sites in the Sidi Bou Ali, Sousse and Mahdia regions that had baths and mosaic decoration. There were more than twice the number of kilns at seven rural sites in the Mahdia region than at all sites in the Sousse and Sidi Bou Ali regions put together. While artisanal production of pottery on rural sites was a notable feature of the southern coastal zone, this activity was even more pronounced in the southern inland sites of the survey: twenty-one pottery kilns were reported at sites in the el Hencha area. In the regions of Sidi Bou Ali, Sousse and Mahdia, one quarter to one third of sites had cisterns and storage basins that suggested arboriculture. Direct evidence of oleoculture specifically was limited but most obvious at sites in the Sidi Bou Ali sector, where thirty-five oil production facilities and thirty-one counterweights were detected. However, the abundance of baths may also be taken as an indirect indicator of oleoculture, since the detritus of olive trees was used to fuel them[11]. To this bare outline may be added Corippus's snapshots of country life in Byzantine Byzacena with its market towns (*castella, vici*) and villages (*loci*). These were surrounded by gardens of fresh produce, grain fields ploughed by oxen, and olive and other orchards that produced commodities for local consumption. While surplus goods were available to Byzantine troops, their availability is likely to have been too unpredictable and their quantity too limited to replace the staple goods regularly provided to the troops by ship[12]. To this picture Ibn Hawqal adds a description of the countryside around Susa as flourishing in his day (mid-10th c.) as it was «in earlier times when many rural domains produced abundant harvests, and substantial and varied sources of revenue»[13].

The northern half of this coastal zone, from *Horrea Caelia*/Hergla to *Thapsus*/*Qsar Tabsa*/Ras Dimas, corresponds to the Early Medieval *kura* of Susa, the maritime ‹hinterland› of the Ifrīqiyan capital of Qayrawan (Kairouan). In the Aghlabid period, this territory was characterized by walled cities, port towns, and monumental *ribatat*. With the development of Mahdia as the Fatimid capital, the southern part of Susa's territory was incorporated into the *kura* of Mahdia, which extended from Tabulba in the north to Salakta in the south[14].

This coastal zone includes *Hadrumetum*/Sousse and *Leptiminus*/Lamta, the two ancient cities of the title, which had similar profiles in the Byzantine period. Though reduced in size and population from their mid-Roman periods, and denucleated and partially abandoned in an urban pattern widely-recognized in Late Antiquity, they were bustling commercial ports in the Late Byzantine period[15]. The archaeological history of ancient *Hadrumetum,* let alone that of the transitional period, however, can only be deduced from highly fragmented evidence because of the burgeoning modern city of Sousse that occupies the site[16]. In the 9th c., a busy military and commercial harbour was the economic engine of the thriving Aghlabid city of Susa, the outlines of which have been extrapolated from the careful study of a handful of well-preserved Ifrīqiyan monuments[17]. Ancient *Leptiminus*, by contrast, seems to have devolved into a village, Lamta, with a population, protected by an Aghlabid fort that subsisted on agriculture and fishing. Also in contrast to *Hadrumetum*, the development and history of ancient *Leptiminus* is well documented by archaeological fieldwork, both urban and rural surveys, and research and rescue excavations, thoroughly published and carefully interpreted[18]. The limitation of the *Leptiminus* evidence for current purposes is that the medieval pottery has not been systematically studied or presented.

Between the ancient urban poles of *Hadrumetum* and *Leptiminus* and Ifrīqiyan fortified cities, towns, and *ribatat* were ancient settlements and estates large and small, *qusur* and *manzil,* villages and hamlets. Often

9 Saumagne 1929; Saumagne 1952; Caillemer – Chevallier 1959; Trousset 1977; Peyras 1999; Trousset 1999.

10 Regions 49, 57 and 54 of the Carte Nationale des sites archéologiques et des monuments historiques: Ben Younes – Ben Baaziz 1998; Annabi 2000.

11 Ben Baaziz 1999.

12 Corippus, *Johannis* 1, 331; 2, 200–204; 3, 453; 6, 53–55; 7, 238 and Proc. BV 3, 17, 3; Durliat 1999, 60–65.

13 Ibn Hawqal, *Kitāb Ṣūrat al-ʾArd* 73.

14 Djelloul 2011, I 131. 154.

15 Pentz 2002, 43; Leone 2007, 281–287.

16 Foucher 1964; Djelloul 2006, 14–34.

17 Lézine 1956; Lézine, 1970; Djelloul 1999b, 63–74; Djelloul 2006, 35–66. For a reconsideration of traditional dating see Mahfuz (Mafoudh) 2003, 223–242.

18 Ben Lazreg – Mattingly 1992; Stirling et al. 2001; Stone et al. 2011.

anonymous and sometimes undated sites have revealed the imprint of churches and other buildings, fortifications, jetties and other structures. A few settlements survive in oral traditions, as toponyms in Arabic sources, or on lists of bishops at church councils[19]. These have almost disappeared from the historical and archaeological record, in part because they have been isolated in different threads of scholarship, ancient or medieval, urban or rural, historical or archaeological, Latin and Greek or Arabic, Christian or Muslim.

Néji Djelloul has emphasized that the traditional notion that the coastal Maghrib was a ravaged and depopulated landscape in this transitional period, characterized by silted-up and abandoned ports, is not well supported by the current evidence, even if that evidence is intermittent, circumstantial and sharply divided in date and character between Byzantine and early Ifrīqiyan[20]. His historical-geographic gazetteer of Early Medieval maritime settlements with forts or castles, and fortified villages within the coastal zone is indispensable to the Early Medieval history, particularly of the lesser sites of the coastal Sahel[21]. The textual evidence for this landscape is at the same time sparse and complicated; while Djelloul generally interprets *qusur* as a fortified villages or estates, *ribatat* as forts with oratories and *qasaba* as castles or defensive circuits, these terms are quite variable in meaning. Medieval authors and modern scholars employ them interchangeably for medieval fortifications of different types, even when describing the same standing structures[22]. Djelloul's study highlights not only a variety of smaller, non-urban sites in the coastal area, but also their extraordinary density. Indeed, it is easy to see, although difficult to prove, in Djelloul's active Early Medieval rural landscape, a reflection of the ancient one.

Indeed, the density of ancient coastal sites is one the most striking results of Hédi Slim, Pol Trousset, Roland Paskoff and Ameur Oueslati's magisterial geoarchaeological and historical survey of sites on the Tunisian littoral endangered to a greater or lesser degree by coastal erosion. The coastal survey includes thirty-five sites in the current region of study alone, even though the environs of modern Sousse were excluded[23]. The survey makes clear the varied economy of these settlements included stone quarrying, fishing, fish farming and the manufacture of *salsamenta*[24]. Looking beyond the ancient exploitation of the land, it rebalances the image of Byzacena as the exporter, above all, of olive oil[25]. Michel Bonifay, Claudio Capelli, Thierry Martin, Maurice Picon and Lucy Vallauri's assessment of the coastal survey pottery is invaluable in offering at least broad chronological outlines for virtually every site[26]. The notable result of the pottery study is the predominance of 6th- and 7th-c. sites, both those with a long history that extended into the Byzantine period, and a surprising number that began then. These Byzantine phases and new Byzantine sites suggest a booming trade with the parts of the Mediterranean controlled by Constantinople[27]. The coastal survey's greatest limitations for present purposes are that Islamic sherds were officially retrieved at just two of the thirty-five sites in the region under study and the survey's narrow focus on ancient sites immediately on the littoral. Thirteen more inland sites in the coastal zone are featured in François Baratte, Fathi Bejaoui, Noël Duval, Sarah Berraho, Isabelle Gui and Hélène Jacquest's compendium of known churches in Tunisia, *Basiliques chrétiennes d'Afrique du Nord II*[28]. Both new discoveries and lesser known Christian buildings, although often only roughly dated, add dramatically to the texture of the coastal zone in Late Antiquity. Finally, but perhaps most importantly, *The Barrington Atlas of the Greek and Roman World* makes it possible to put all of these settlements in their particular ancient coastal landscape, then as now, imprinted with Roman roads and centuriation[29].

The current study focuses on sites in a small part of the ancient urban network laid out in the Barrington Atlas, particularly those linked together by the great coastal road from *Pupput* in the north to *Taparura* (Sfax) and beyond in the south, and located at its points of intersection with roads leading to the settlements and cities in the interior. It proceeds on the assumption that some of these roads, but surely not all, were crucial for communication and trade with cities in the early Ifrīqiyan period. *Hadrumetum*/Sousse must have survived in large part because of its crucial location at an intersection with the road to Kairouan, while *Leptiminus*/Lamta's failure to thrive may have been due in part to its location on an intersection that was less important in the early Ifrīqiyan period. Between these two potential models for understanding continuity and rupture in the transition-

19 Vonderheyden 1927; de Mas Latrie 1964, 1–6.
20 Djelloul 2011, 481. 589.
21 Djelloul 1999a and Djelloul 1999b now updated and expanded, geographically and chronologically, with maps and illustrations in Djelloul 2011, I 131–176. See also Djelloul 1999c.
22 On these and other terms, see Djelloul 2011, II 537. 578–595.
23 Slim et al. 2004, 140–163 (Sites 123-87), with discussion and photographs at 37–57.
24 Ben Lazreg et al. 1995; Trousset 1995; Trousset 1998; Slim et al. 2004, 255–297.
25 Mattingly 1996, 226–247; Slim et al 2004, 277.
26 Bonifay et al. 2002/2003, 126.
27 Bonifay et al. 2002/2003, 128–132.
28 Baratte et al. 2014.
29 Talbert – Bagnall 2000, esp. 32–33, and commentary by B. Hitchner (CD-Rom). See also Talbert 2010.

al period are many other sites on that coastal road and at other intersections.

I argue, although direct evidence of 8th-c. settlements is lacking, those sites where both Late Byzantine and Early Medieval activity are attested may have survived and perhaps even thrived in the transitional period. Together, the coastal survey, Djelloul's gazetteer, *Basiliques chrétiennes II*, and the *Barrington Atlas* help to identify thirteen sites in the zone (including Sousse and Lamta) that suggest a continuum of activities and concerns from the 6th through the early 10th c.[30]. This methodology is admittedly a blunt instrument, and surely does not exhaust all the possibilities for transitional-period settlements in the region, especially in the inland areas between the maritime marshes and the roughly north-south line inland of Sebkhet Kelbia, Sebkhet Sidi el Hani and Sebkhet El Jem (just off the bottom-left corner of fig. 1). On the suspicion that these thirteen sites are likely to be the tip of the iceberg, I discuss briefly here twenty-five other sites gleaned from the same sources, those clearly active in the Byzantine (18) or Early Medieval (7 sites) periods, but not both[31], because they may eventually prove to have either survived beyond the Byzantine period or had Byzantine antecedents for which there is not yet any evidence.

Sites active in the Byzantine and early Ifrīqiyan periods

The coastal survey collected pottery from a large factory of salted fish products north of the centre of the Roman town of *Horrea Caelia* suggesting activity from the high empire well into the 7th c. (fig. 1). Pottery from the centre of the town including the port, indicates activity especially from 450 into the Byzantine period. Near the southern entrance of the Roman town where lime kilns encroached on an earlier necropolis with *cupula* tombs, survey pottery points to activity from 550–650[32]. A Byzantine church was built *de novo* in the town's southern *suburbium*, perhaps among farms, and subsequently was surrounded by a cemetery[33]. Thus, Byzantine *Horrea Caelia* gives the impression of consisting in productive activities concentrated in two areas of the old town, at the fish products factory in the north and at the port in the centre. At the same time, cemeteries and limekilns in the southern parts of the old town suggest abandonment and dismantling while the more distant southern suburbs of the old town may have developed into loosely linked settlements. In fact, the medieval village of Hergla grew up north of ancient *Horrea Caelia*, in the vicinity of the warehouses that gave the town its Roman name. The warehouse complex was out of use by Late Antiquity, and other parts of that quarter show signs of abandonment: an adjacent block of houses became a late cemetery with amphora burials. The medieval village developed around a 50 × 50 m. 9th-c. fort with semi-circular towers at its corners and in its curtain walls[34]. Southwest and inland of *Horrea Caelia* is a site at Henchir Hamam al Baghali/Kalaa Kebira revealed in 2014 to have a substantial Roman bath complex and a fine Late Byzantine baptismal font. The 10th- and 11th-c. ceramics recovered from the site indicate its possible survival through the transition to the Early Ifrīqiyan period[35].

Some thirty kilometres south of *Horrea Caelia* was *Hadrumetum*, rechristened *Justinianopolis* in the Byzantine period when it served as the headquarters of the *dux Byzacenae*, and a city better known in the Byzantine period from historical sources than from archaeological evidence[36]. As the orientation of the adjacent region's Roman centuriation clearly indicates, the city had been and probably continued to be the hub of northern Byzacena's agricultural and maritime economy in the Byzantine period[37]. While many notables from *Hadrumetum* had fled to Constantinople by the 540s because of the Moorish raids, Justinian fortified what is presumed to have been the Roman city centre with a defensive circuit, of which the standing medieval wall preserves some foundations and is presumed to follow its course[38]. The

30 The 13 sites are marked on fig. 1 with a black dot (roughly north to south): *Horrea Caelia*/Hergla, Henchir Hamam al Baghali/Kalaa Kebira, *Hadrumetum*/Sousse, Qsibat al-Madyuni/Mansourah, *Leptiminus*/Lamta, *Thapsus*/*Qsar Tabsa*/Ras Dimas, *Fundus Dinamius*/Bekalta, *Qasr Quradha*/Sidi Ben Ghayada, *Sullecthum*/Salakta, *Thysdrus*/El Jem, *Rougga*/Bararus, *Qasr al-Aliya*/ Sebkha Njila, *Caput Vada*/Qabbudiya.

31 18 Byzantine sites are marked on fig. 1 with a star (roughly north to south): Halk el-Mujjen, *Ulisippira*/Henchir el Zembra, Zaouit Soussa, Beni Hassen, Sayyada, Port Soukrine, *Tabulca*/ Tabulba/Ras el Ain, Ech Chott/Fadhline, Henchir Hkaïma, Al-Hafsi-Neyrat/ Hiboun, Douira, Chitiouine, Ras el Aied, Henchir ech Chekaf, Henchir Krechrem, Bir Abbed, Henchir Hlalfa/El Hancha, Sidi Abdallah el Merakchi). Seven Ifriqiyan/Early Medieval sites are marked on fig. 1 with a black square (roughly north to south): *Qsar Habashi*, *Qsar al Tub*, *Qsar Sahl*, Sahline, *Marsa Shaqanis*/Skanés, Monastir, *Qsar Duwayd*/Khanes.

32 Slim et al. 2004, 160–163 (Sites 121-123). 225. 269; Bonifay – Trousset 2000.

33 Ghalia 1998, 9–15; Bonifay – Trousset 2000; Baratte et al. 2014, 216–218.

34 Djelloul 1999a, 128 f.; Bonifay – Trousset 2000; Djelloul 2011, I 137–139. See also Carton 1906a.

35 Baratte et al. 2014, 426.

36 E. g. Proc. aed. 6, 6, 1–7.

37 Foucher 1964, 125–130. 319–327; Trousset 1977, 188.

38 Proc. aed. 6, 6, 6; Pringle 2001, II 199 f.; Conant 2010, 352.

argument that the ancient harbour of *Hadrumetum* had silted up by the 4th or 5th c., based on the statement in *Studiasmus maris magni* that the city was without a harbour, depends entirely on a late date for that text, which now seems unlikely[39]. Certainly, the ancient port quarter and its harbour were likely to have been revitalized in the Byzantine period as a base for the Greek fleet. The ancient mole lay outside the city proper, and is still visible about 500 m north of the medieval wall[40].

The dating and interpretation of the Byzantine city's Christian monuments and mosaics is largely conjectural. Each of the three catacomb complexes in the suburbs may have been out of use by the 5th c.[41]. The four archaeologically attested churches of the city are assumed to be 4th- or 5th-c. in origin, though they may have continued in use through the Byzantine period. The only church dated to the 6th c. by its Justinianic architectural ornament was the one situated under the ribat. Another was a cemetery church with tomb mosaics near the arsenal. Two other potential churches were discovered: one southwest of the Kasbah (though its mosaics, now in the Sousse museum, are not definitively Christian in character), the other in the southern part of the city, surrounded by burials[42]. A few Christian mosaics and terracotta tiles from the city also date securely to the Byzantine 6th c. and perhaps later[43]. A monastery at *Hadrumetum* attested around 525 is likely to have survived into the Byzantine period, though its remains are not identified on the ground[44]. Although the city's bishop Primasius, who led the African opposition during the Three Chapters Controversy, was the last bishop attested in conciliar records, sources indicate that a Christian community still existed under the leadership of a bishop in the 10th c.[45]. Amphora evidence suggests that the city's economy, perhaps after a slump in the Vandal century was vigorous in the Byzantine period, a fact that may have motivated Mu'awiya Ben Hudayj's 665 naval raid on the city[46].

In 670 'Uqba ben Nafi, the first governor of Ifrīqiya, is reported to have destroyed the Byzantine city and sent tens of thousands of its inhabitants into slavery after a two-month siege[47]. Lézine concluded that while the ancient urban site was partially abandoned for a century thereafter, the construction of a fort in the late 8th c. suggests that a commercial settlement had probably had already existed around the port before its construction. Designed as temporary refuge for civilian inhabitants and for a resident garrison of no more than fifty, the fort was independent and utilitarian in character. Its reuse of earlier foundations, recycled construction materials, both ashlar blocks and architectural ornament for the entry gate and an irregular 37.70 × 38.90 m plan suggest a hasty or at least pragmatic construction. The late 8th-c. date of the fort is based on good archaeological evidence for the building's two phases of construction and is confirmed by architectural echoes of Ummayad and Abbasid forts in Syria and Iran, though its plan and its materials, may also reflect the influence of standing Byzantine forts in Africa[48]. The fort became a ribat in its second phase, with the addition of a watchtower in 821, when it was integrated into the coastal defences for the inland capital of Qayrawan that included the ribats at Hergla to the north and at Monastir to the south[49].

The city's medieval defensive structures are sequenced and dated to the 9th c. The medieval city wall, enclosing a 32-hectare area, was begun by Ziyadat Allah I (201/819–223/838) and completed by mid-century[50]. Certainly, the importance of the low-lying ribat was quickly overshadowed by the Khalaf tower and the *qasaba* on the southwestern heights of the city. The Byzantine harbour of *Justinianopolis* was probably reconstituted as an Aghlabid naval base, from which the Arab raids set out against Sardinia in 821 and Sicily in 827. Quays for tying up boats were found under houses against the north rampart of the city, presumed to be one of the limits of the arsenal basin entered through the Bab el Bhar. Other evidence of the city's rapid growth in the first half of the 9th c. includes the construction of the Buftata oratory in 838 some distance southwest of the ribat and the large, fortress-like great mosque built adjacent to the

39 E. g. Foucher 1964, 320 and Djelloul 2006, 16; *Anonymi, Studiamus maris magni* 116. Uggeri 1996, 277–286 dates the text to the later 1st c. BCE-mid-1st c. CE.

40 Foucher 1964, 320 suggests that the Byzantine harbour was not the same as the ancient harbour, but lay closer to the modern one.

41 Foucher 1964, 120; Trousset 2000; Djelloul 2006, 32.

42 Baratte et al. 2014, 220 f.

43 Lézine 1956, 10 f. and Lézine 1970, 23–28; Djelloul 2006, 34. E. g. Mosaic of Theodolos: Duval 1995, 288–291; Ben-Abed-Ben-Khader et al. 2003, fig. 393.

44 Diehl 1896, I 427.

45 T. Lewicki (Lewicki 1958, 424), cited by M. Handley (Handley 2004, 304 n. 86), who surveys the written evidence for the survival of North African Christian communities in the early Ifriqiyan period. E. g. Gummi/Mahdia? 11th c. dispute between bishops of Carthage and Gummi (305). Early 11th c. Christian epitaphs from Kairouan for Firmo the lector and Petrus the senior (307).

46 Kaegi 2010, 180–182.

47 Djelloul 1999b, 53–60.

48 Lézine 1956, 20–27; Djelloul 1999c, 41; Pringle 2001, I 168 f.

49 Lézine 1956, 20–21; Lézine 1970, 29-30. Pringle 2001, I 168 is not convinced that the early fort at Sousse preceded the Ribat at Monastir.

50 Cambuzat 1986, I 95 f.; Djelloul 1999c, 42; Djelloul 2006, 40–47; Djelloul 2011, I 132–137.

ribat in 851[51]. The es-Sofra cistern in the centre of the town, an ancient cistern measuring 100 × 80 Roman feet, built in Byzantine style but distinctively refashioned in the Early Medieval period, may indicate that the Aghlabid city was supplied with spring water, perhaps carried by a repurposed ancient aqueduct[52]. Finally, glazed pottery collected during the restoration of the ribat and Early Medieval ramparts of Sousse was 9th to 11th c. in date and manufactured in Qayrawan. The most striking pieces for present purposes were dated from the early Aghlabid period through the 10th-c. Their decoration combined Abbasid and local pre-Islamic motifs, including geometric and vegetal patterns, and birds and animals familiar from the African-Christian mosaic repertoire. This adaptation of ancient motifs to new media represents neither continuity nor rupture: rather, it may serve as a useful model for the complex and idiosyncratic process of simultaneous persistence and rapid transformation of ancient elements in early Ifrīqiya. The décor of early Aghlabid, and early 10th-c. ceramics from Sousse suggests a mix of Abbasid and local artisanal traditions, perhaps especially the motifs of Christian mosaics[53].

By the mid-9th-c. Susa was a busy commercial port, thriving in part because of a burgeoning population of Arabs, Turks, Iraqis, Persians, Syrians, Berbers, Christians, and Jews, including merchants, traders and ship owners. Ibn Hawqal described Susa as a well-fortified and prosperous sea port, agreeable for its markets, caravanserais and baths[54]. During the 10th c. Susa was Ifrīqiya's northern port, famous for the fabrics manufactured there, while Sfax served as the outlet for the olive oil produced in its region. Although by this time Susa's long-distance trade generally passed through Mahdiyya, the city remained a regional entrepôt with close ties to Egypt[55]. The Geniza archive attests to a lively trade during the 10th and early 11th c. between Tunisia, Sicily, and Egypt – the Arab hubs of trans-Mediterranean trade. Tunisia exported olive oil especially, but also soap, wax, honey, cotton, saffron, figs, corals, felt and hides/leather, and imported especially flax and indigo from Egypt, but also rice and sugar among many other commodities[56]. The documents' snapshots of Early Medieval trade, while mostly foreign to ancient long-distance amphora-borne trade, suggest what regionally-traded commodities and networks might have looked like in antiquity that are now archaeologically invisible.

Just south of Monastir and north of *Leptiminus* / Lamta is Qsibat al-Madyuni/Mansourah. Coastal survey pottery around the remains of a cistern, possibly of a rural establishment (Mansourah Est) was exclusively Byzantine in date while that around the remains of a well or silo and a cemetery employing 4th- to 5th-c. medium-sized cylindrical amphoras (Mansourah West) included other pottery dated to the Byzantine period. The Leptiminus rural survey notes that Qsibat al-Madyuni (S59/R516) grew in size in through the 6th and 7th c., and continued into the medieval period[57]. Finally, the toponym *qsibat* (little *qsar* or small *qasaba*) also associates Qsibat al-Madyuni with the *manzil* of the Aghlabid aristocracy, and the village's tradition of fishing from a port associated with the ribat system[58].

Leptiminus/Lamta is located twelve kilometres south of Monastir. Coastal survey pottery of the first through the 7th c. is attested near the port of *Leptiminus*, especially Byzantine amphoras, both locally and regionally manufactured Keay 61 and Keay 62, and Late Roman 1 and Late Roman 2 imported from the eastern Mediterranean. Just one kilometre south of the ancient city is Lamta, a village sheltering in the lee of its Aghlabid ribat, its toponym suggesting that it was the successor of the ancient city[59].

In the mid-Roman period (2nd–4th c.) *Leptiminus* was an urban centre that thrived chiefly on the production and shipping of olive oil and fish products in locally made amphoras. In addition to its jetty and port facilities, it was provided with all the usual urban amenities, a street grid, aqueducts, baths, a forum, temples, and an amphitheatre[60]. If it is correct to assume that certain amphora types were associated with specific products, and that pitched amphoras contained fish sauce or wine, and unpitched ones olive oil[61], one of the most striking results of the study of amphoras from the urban survey was the roughly equal balance of olive oil in unpitched Africana I series amphoras and salted fish products in the pitched Africana II series in mid-Roman Leptiminus. In fact, Pliny the elder singled out *Leptiminus* for the excellence of its *garum*. The best explanation for *Leptiminus*'s export specialization in fish sauce may be geographic: fish products, given the ready availability of salt

51 Lézine 1970, 35–55; Djelloul 1999c, 43; Djelloul 2006, 50–66.

52 Wilson 2003, 129; Djelloul 2006, 48 f.; Ibn Hawqal, *Kitāb Ṣūrat al-'Ard* 72. On Aghlabid adaptations of Roman and Byzantine water installations at Bir el Adine see Solignac 1953, though Mahfuz (Mahfoudh) 2003, 103–131 disputes the Aghlabid date of some installations.

53 Louhichi 2003, 673–677.

54 Djelloul 2006, 35; Djelloul 2011, I 134; Ibn Hawqal, *Kitāb Ṣūrat al-'Ard* 72.

55 Goitein 1999, 210–212.

56 Goitein 1999, 60. 105–125. 153.

57 Stone et al. 2011, 182–184 with fig. 5.43.

58 Djelloul 1999a, 135 f.; Slim et al. 2004, 155 (Sites 111–112). 225; Djelloul 2011, I 149.

59 Slim et al 2004, 154 f. (Site 110). 224; Djelloul 2011, I 150 f.; II 567 f.

60 Stone et al. 2011, 121–204, esp. 135–165.

61 Bonifay 2007, 19–25.

from Sebkhet Moknine and Sebkhet Monastir, were manufactured and bottled in the immediate vicinity of the port, whereas only a limited amount of olive oil would have been produced from local groves east of Sebkha Sidi el Hani, which effectively cut *Leptiminus* off from the main roads to the olive producing region of the steppes[62].

Leptiminus was smaller and less prosperous overall in Late Antiquity (5th–7th c.) than it had been in the mid-Roman period, because of an economic decline in the Vandal period, when both fine wares and amphoras are thin on the ground in the urban survey. When Procopius described *Leptiminus* as a city in 533 in the same sentence as *Hadrumetum*, its urban fabric was probably discontinuous, its inhabitants concentrated into four neighbourhoods[63]. *Leptiminus*'s appearance may, in fact, have been typical of North African cities of the period. Its urban core had shrunk to the shore in the vicinity of the port, protected by a fort or fortified enclosure. It had two known churches, one at the northwestern edge of the city. Nearby was a bath complex converted to industrial use and a second Christian church and cemetery: if the latter were the episcopal basilica, it may have remained in service at least until the mid-7th c.[64]. Two other parts of *Leptiminus* probably inhabited in Late Antiquity were also associated with industrial activity, around the forum in the former urban core, and in the suburbium around the East baths. The fourth active area of *Leptiminus*, perhaps the most interesting for present purposes, was a possible new settlement in the distant eastern suburbium on the Dharet Slama/Jebel Lahmar ridge, signalled by the presence of 5th- and 6th-c. cemeteries and 5th- and 6th-c. burials in 2nd- to 4th-c. cemeteries. While its more salubrious climate and the availability of spring water probably played a part in the selection of the site, the new settlement may have been motivated chiefly by the relative safety from seaborne attacks provided by its distance from the shore and its elevation[65].

While the date of *Leptiminus*'s Late Antique fort or fortified Byzantine enclosure is uncertain, its function is likely to have been the protection of the population and operations of the ancient port. While its construction underscores the vulnerability of this and other maritime settlements to seaborne attacks that must have wreaked havoc on the region's economy, its main goal may have been to restart the profitable business of producing and bottling amphora-borne products for export[66]. The fortified enclosure was likely to have been responsible for the economic rebound of *Leptiminus* and its port in the Byzantine period. Mid-6th-c. to early 7th-c. fine ware forms, produced at kilns in *Leptiminus*'s peri-urban area, are again represented in the urban survey, and amphora production resumed, continuing into the 640s though relocated to and concentrated in the near suburbium of the East baths[67]. However, the Byzantine economic recovery was comparatively weak and short-lived. Group 4 (Byzantine) amphora rims represent only 16.11% of amphora rims collected in the urban survey, and the port seems to have been out of use by the late 7th c. The balance between olive oil and fish sauce production maintained in the Roman period was lost to Byzantine *Leptiminus*. Since pitched Keay 62 and Keay 8A rims are 12.13% of the sample and Keay 61, the potentially unpitched carriers of olive oil, only 2.54%[68], approximately four times as much fish sauce appears to have been produced and shipped than olive oil. The production of these amphoras in the Byzantine period at urban and coastal Leptiminus is unusual, but not unparalleled[69].

While the ancient city site of *Leptiminus* was probably abandoned (or partially abandoned) in the later 7th c., the new Dharat Slama settlement may have continued. Its location a distance east of the ancient city core but closer to medieval Lamta, suggests a tentative but tantalizing link between the ancient and medieval settlements. Indeed, two burials in the east necropolis (Site 304), although uncertain in date, are distinctive in funerary ritual, and later than the 5th- and 6th-c. burials. These may signal an Early Medieval successor settlement[70].

Foremost among Lamta's maritime attributes is the small Aghlabid fort built in 859, although probably only completed by the end of the century, on a small headland about one kilometre south east of *Leptiminus*'s old urban core. It seems to have been designed to protect local inhabitants from seaborne incursions[71]. The fort, forming part of the line of coastal defences for the capital at Qayrawan, was meant to communicate with Monastir to the northwest and Tabulba to the southeast[72]. In the mid-12th c. Al-Idrisi, while reporting on the wheat and barley fields and orchards from Mahdia to Monastir, and

62 Stone et al. 2011, 249; Plin. nat. 31, 93–94.
63 Proc. BV 3, 17, 8.
64 Baratte et al. 2014, 223–225. Leptiminus' bishop Criscentius was a signatory of the 646 Council of Byzacena (Maier 1973, 160 f.). A monastery is reported in the diocese of *Leptiminus* ca. 525 (Diehl 1896, I 427).
65 Stone et al. 2011, 277 f. 190 fig. 5.47; 200.
66 Stone et al. 277 f.
67 Peacock et al. 1989, 196 f.; Stirling et al. 2001, 53–55. 76 f.; Bonifay 2004, 484.
68 Stone et al. 2011, 248 Table 6.4.
69 Cf. *Neapolis*/Nabeul: Slim et al. 2002, 178–182; Bonifay 2004, 483.
70 Ben Lazreg et al. 2006, 354.
71 Rammah 2002, 186. 191.
72 Hassen 2004, 155; Stone et al. 2011, 19.

the high quality of olive oil exported all over Ifrīqiya and the east, mentions Lamta only as the site of a *qsar*, later reported as a *ribat* housing holy men, one of whom abandoned the luxuries of Monastir's Qsar al-Kebir in favour of the simpler life at *Qsar Lamta*[73].

Little is known of the Byzantine successor of Roman *Thapsus* on Ras Dimas. While no bishop from the city is attested after the Vandal period, abundant coastal survey pottery spans the Late Punic through Byzantine periods and some Islamic glazed wares attest to occupation of the site in the Medieval period[74]. On the coast a part of the ancient port area facing the island of Dzira included a Late Roman cemetery in which six Muslim burials of uncertain but probably Early Medieval date were found[75]. The medieval fortified settlement of *Qsar Tabsa* (an Arabization of *Thapsus*) or *Qasr al-Dimas* occupied the centre of ancient *Thapsus* and made use of its ancient port[76]. Some four kilometres inland in the hinterland of *Thapsus/Qsar Tabsa* is Bekalta, where a church (actually at al-Gaala between Bekalta and Tabulba) probably served the estate of a certain Dinamius. In the second half of the 6th or early 7th c., the basilica was provided with a fine polylobed mosaic baptismal font, now displayed in the Sousse Museum[77]. Bekalta was the site of another Early Medieval *qsar*, perhaps built by Abadites in the 8th-9th c., which may have arisen from a Byzantine fortified estate[78].

Just southeast of Mahdia the site of Sidi Ben Ghayada/*Qasr Quradha* consists of the submerged remains of an ancient quarry, and the cistern or basin of a building now located in a cemetery around a marabout. Survey pottery suggests activity both in the Byzantine and in the Early Islamic periods[79]. On the coast about twelve kilometres from Mahdia is the ancient port of *Sullecthum*/Salakta. The town and its hinterland were the source of olive oil, fish products, and perhaps wine and other commodities, exported across the Mediterranean in locally made amphoras well into the 7th c. On either side of the port's mole are ruins associated with the production of salted fish and other port installations[80]. The coastal survey pottery from the town attests to its occupation from the Roman through Byzantine periods, but equally notable in the port were sherds of Byzantine wine amphoras imported from the Aegean and Cilicia that suggested trade with areas of the Mediterranean controlled by Constantinople[81]. Survey pottery of the 6th-7th c. from inside the remains of a rampart (approximately 150 × 100 m) northeast of the harbour opposite the ancient mole suggests it was of Byzantine date. Its course probably reflected both the informal defence its residents erected against the Vandals, and a city, probably like *Hadrumetum,* reduced in size and population from its Roman predecessor[82]. The abandonment of amphora production at *Sullecthum*'s urban and coastal kilns in the first half of the 5th c. was succeeded by new production sites on estates Bir Abbed, Henchir Krechrem, Henchir ech Chekaf, Ras el Aied and Chitouine in the centuriated rolling hills of the town's near hinterland. Production here may have begun as early as the mid-5th c. and certainly extended through the 6th and 7th c., perhaps even into the 8th. It included Keay 61 and Keay 62 amphoras, which suggests that a less centralized delivery system was in effect in the Byzantine period, in which products were made and bottled locally, then sent to the coast for shipping[83]. While the assumption of the Sahel amphora survey was that the product of rural sites away from the coast was olive oil, it seems more likely now that while unpitched Keay 61s may have carried comestible olive oil, a goodly percentage of amphoras, particularly pitched Keay 62s, probably contained wine rather than *salsamenta*, and perhaps a variety of other products, preserves, olives or non-comestible olive oil[84]. The kilns in the hinterland of *Sullecthum* also produced African Red Slip ware from the late 6th, through the mid-7th c. Both the amphora-borne products and the fine wares of the peri-urban area probably shipped out of the port of *Sullecthum*[85]. While the fate of these estates in the Early Medieval period is unknown, their agricultural productivity may well have continued. Djelloul identifies the nearby medieval village of Ksour Essaf, perhaps a fortified market centre for these estates, as linked to ancient *Sullecthum*. Although no medieval pottery was recovered from the site of the Byzantine fortifications at *Sullecthum*, the rampart or parts of it may be

73 Abu Abd Allah Muhammad al-Idrisi al-Qurtubi al Hasani al-Sabti, *Kitab nuzhat al-mushtaq fi'khtiraq al- 'afaq* 126; Idris 1936, 296.

74 Maier 1973, 214; Bonifay et al. 2002/2003, 199; Slim et al. 2004, 152 f. (Site 105).

75 Younes 1999; N. Ben Lazreg personal comment.

76 Djelloul 1999a, 143; Djelloul 2011, I 165–167.

77 Ben Lazreg – Duval 1995; Ben Lazreg 2003, 494 f.; Duval 2006, 150. 157; Baratte et al. 2014, 227 f.

78 Djelloul 1999a, 147–149; Djelloul 2011, I 68.

79 Slim et al. 2004, 150–152 (Sites 101-104) fig. 104.

80 Proc. BV 3, 16, 9–11; Slim et al. 2004, 145–147 (Sites 94–95).

81 Bonifay et al. 2002/2003, 165. 169.

82 Pringle 2001, II 301.

83 Peacock et al. 1989, 199–201, updated by Bonifay 2004, 480–482.

84 Stone et al. 2011, 217 f.; Bonifay 2007, 19 (though the discussion is focussed mostly on the earlier period).

85 Bonifay 2004, 482 f. suggests these are peri-urban rather than rural estates. Map on 486 shows the Byzantine period (580–650) production centres of ARS in the hinterlands of *Sullecthum* and *Leptiminus*.

identified with the medieval settlement of *Qsar Salakta*, which had a ribat at its centre and a port that was in use until the 12th c.[86].

Well west, some 25 kilometres inland of Salakta, are two well-known ancient cities, *Thysdrus*/El Jem and *Bararus*/Rougga, connected to each other and to *Sullecthum* by road. Famous for its Roman amphitheatre and neighbourhoods of elite houses, the city of *Thysdrus* in Late Antiquity may have been concentrated in the western part of the site. A 6th-c. hoard of gold coins suggests an unsettled environment in the Byzantine period when the amphitheatre was converted into a fort. A five-aisled church of unknown date was reportedly found in the late 19th c., its location now lost. A Christian community in the Byzantine period is attested by a substantial collection of terracotta tiles and bishops present at all the African church councils through the 646 Council of Byzacena[87]. The city and its fort, embroiled in resistance to the Arab conquest, is presumed to have been depopulated by the late 7th c., eclipsed by Sbeitla and Kairouan. There is no evidence of an Early Medieval settlement at the site before the 13th-c. community of Ajam is attested[88]. However, given the site's strategic importance, it seems intrinsically unlikely that the fort would have been ungarrisoned in the transitional and early Ifrīqiyan period. Furthermore Bararus, thirteen kilometres southeast of El Jem is well attested as a town in both the Byzantine and early Ifrīqiyan periods. A poorly understood five-aisled church of uncertain period is attested there, and like *El Jem* the city undoubtedly suffered during the first Muslim invasions, its insecurity attested by a hoard of Byzantine gold coins. The settlement survived, however, and came to be known as Rougga, named for its remarkable Roman hydraulic system, fed by a deep well[89].

The site of Sebkha Njila/*Qasr al-Aliya* is marked by an ancient quarry located where the rocky cliffs beginning at *Sullecthum*/Salakta meet the beaches that extend south along the coast to Chebba. The site includes the remains of a large villa and perhaps a baptistery. Byzantine occupation (550–650) was clearly attested here in the form of sherds of Christian lamps and Byzantine amphoras, though no earlier pottery was found. Eleven meters above the sea are the remains of a fort (80 × 80 m) with round towers 3.7 m in diameter, of which the construction method is Fatimo-zirid[90]. However, since Early Islamic sherds of the late 7th to the late 9th c. are attested, though fewer than the Byzantine ones, the strong possibility of an Aghlabid predecessor fort remains[91].

Just down the coast from Sebkha Njila/*Qasr al-Aliya* is the low, narrow promontory of Ras Qabbudiya, the easternmost point of Tunisia's coast and the beginning of the high shallows, well-known from antiquity for the excellent fishing that characterizes the coast of the lesser Syrtes. Historical sources record that *Caput Vada* was fortified by Belisarius after he landed there at the outset of his African campaign in 533, and that it became a flourishing Byzantine city thereafter. The ruins of this city, reportedly scattered over 10 hectares in 1906, have since disappeared under modern industrial development[92]. Indeed, though no datable pottery was found in the course of the coastal survey, a Byzantine occupation of the site was confirmed by a hoard of Byzantine coins dating to the reign of Maurice Tiberius (582–602)[93]. The present 9.65 × 9.25 m Turkish lighthouse (Bordj/Tour Khadija/Khedija) at Qabbudiya on the promontory was constructed on the remains of a watchtower of an Aghlabid *ribat*, designed to guard an anchorage at the north end of the high shallows[94]. In addition to the watchtower at the northeast corner, the square (67 × 67 m) *qasaba* originally had round towers at its other three corners and in its west and south curtain walls. Visible under the ruins of a modern tuna processing plant built over the north curtain wall of the *ribat* were the remains of a bath building and a fisherman's village, all now eroded away by the sea[95]. The Early Medieval watchtower in turn, and perhaps other parts of the *ribat*, may have been built on a ruined Byzantine fortification or town wall[96]. Qabbudiya, an Arabization of the Byzantine city's name *Caput Vada*, was famous in the 9th and 10th c. for its fresh fish, captured in traditional fixed fisheries[97]. From the medieval period the area around Chebba was known for its *qusur*, fortified settlements that produced olive oil and perhaps cereals, which may have originated in the Roman villas rich in mosaics, and their Byzantine successors, in the coastal zone[98].

86 Pringle 2001, I 103; Abū 'Ubayd 'Abd Allāh ibn 'Abd al-'Azīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 198, 1 (de Slane 1965, 171; Djelloul 1999a, 151; Djelloul 2011, I 68–70).
87 Maier 1973, 80. 266.
88 Slim 1995.
89 Guéry – Trousset 1991; Baratte et al. 2014, Guéry 1983.
90 Djelloul 2011, I 170 f.; Bahri 2003; Baratte et al. 2014, 229 f.
91 Slim et al. 2004, 144 (site 90). 224; Bonifay et al. 2002/2003, 187.
92 Corippus Joh. I, 369 ff.; Hannezo 1906; Pringle 2001, II 192.
93 Slim 1989; Trousset 1993.
94 Trousset 1993; Pringle 2001, II 192.
95 Carton 1906b, 133–134.
96 Trousset 1993, 1774. Contra Pringle 2001, II 192.
97 Trousset 1998, 25–27; Abu Abd Allah Muhammad al-Idrisi al-Qurtubi al Hasani al-Sabti, *Kitab nuzhat al-mushtaq fi'khtiraq al- 'afaq* 126.
98 Djelloul 2011, I 174–176; Djelloul 1999a, 158 f.; Abū 'Ubayd 'Abd Allāh ibn 'Abd al-'Azīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 198, 1.

Byzantine sites without evidence of Early Medieval activity

Just south of *Horrea Caelia* was North Halk el Mujjen, perhaps a reference to the mullet caught in the vicinity, a site attested in traces of walls and lime kilns: its pottery suggests a long occupation with a notable Byzantine activity from 550–650[99] (fig. 1). Southwest of *Horrea Caelia* on the inland road between *Hadrumetum* and *Thurburbo Maius* and northwest of Sidi Bou Ali (*Suk Ilan*) is the site of Henchir el Zembra, identified with ancient *Ulisipirra*. Though little is known about the site apart from its extant Roman amphitheatre, it included a church with funerary mosaics, perhaps of the 5th c., to which a mosaic-covered, inscribed, four-lobed baptismal font was added in the Byzantine 6th c.[100]. The city's Christian community, if not this church, is attested into the mid-7th c. by its bishop, Donatus, a signatory of the 646 Council of Byzacena[101]. A few kilometres southwest of Sousse is the site of Zaouit Soussa where a triconch church was excavated that had at least one Byzantine phase, judging by the similarities of its mosaics with those at the basilica at Hergla. One annex mosaic, perhaps for a funerary chapel, depicted a doe and stag drinking from the four rivers of paradise[102].

Thirteen kilometres southwest of Lamta is the poorly understood site of Beni Hassen from which the mosaics of a church and baptistery were recovered including tomb mosaics (one for a certain Cresconia), a donor inscription and an inscription naming the four rivers of paradise that might have accompanied an image of them[103]. Just down the coast from Lamta were a cluster of Byzantine sites. At the port of Sayyada coastal survey pottery indicates activity only in the Byzantine period. At Henchir Soukrine, a few kilometres south of Lamta, a well-preserved 6th- and 7th-c. church overlooked an ancient jetty, while survey pottery from Port Soukrine indicated activity only in the Byzantine period[104]. Nearby at Ras el Ain/Tabulba (Kadima), the purported site of late Roman *Tubulca*, survey pottery was of clear and exclusively Byzantine date. Nearby was Ech Chott/Fadhline with archaeological layers and remains of a wall foundation with a series of floors and a cistern that suggest a long ancient occupation ending in the Byzantine period[105].

A ceramic deposit on the beach at Al Hafsi-Neyrat/Hiboun, north of Mahdia, suggested that fishing activity in late Roman and Vandal times extended through the Byzantine period. Southwest of Hiboun, some ten kilometres northwest of Ksour Essaf, is the site of Henchir Hkaima which yielded a mosaic baptismal font of Byzantine date[106]. Further south in the hinterland of *Sullecthum,* probably on ancient rural estates were five Byzantine amphora production sites, Henchir Krechrem, Henchir ech Chekaf, Ras Aïed, Chtiouine, and Bir Abbad[107]. Well inland of these sites at Henchir Hlalfa/El Hancha, between El Jem and Bararus, was a square baptistery with a cruciform font, behind the northwestern apse of a basilica discovered in 2003. The building's Byzantine phase included a counter apse with a richly-decorated mosaic surrounded by tombs[108]. On the coast north of Chebba is Sidi Abdallah el Merakchi a site that included a well-preserved Roman bath complex, the pottery from which suggested it was in use into the mid-7th c.[109].

Early Ifrīqiyan sites without evidence of Byzantine antecedents

Three Early Medieval *qusur* are clustered around Sousse (fig. 1). *Qsar Habashi/* Sidi Qantawi**,** today part of Hammam Sousse some twenty kilometres north of Sousse, was a medieval fortified settlement around a fort, probably built by Ibrahim II (261/875–290/903), and said to include spolia from a Maltese church dismantled in 256H/870 by the Aghlabid prince Habashi ibn ʿUmar. Al-Bakri confirms the presence of a port here in the later 11th c. associated with the Qsar ibn ʿUmar el Aghlabi[110]. The mid-9th-c. Aghlabid fort of *Qsar al-Tub* is identified with Sidi Abd al-Hamid, located five kilometres south of Sousse among its ancient hydraulic installations[111]. Although it included a small anchorage, its primary role in the Early Middle Ages was to defend neighbouring hamlets and keep watch on the coastal Sousse-Sfax road.

99 Slim et al. 2004, 159 f. (Site 120). 225. 269.
100 Duval – Beschaouch 1996–1998; Djelloul 1999a, 127; Baratte et al. 2014, 219 f.
101 Maier 1973, 232.
102 Baratte et al. 2014, 222 f. The mosaic is now in the Sousse museum.
103 Baratte et al. 2014, 229.
104 Bejaoui 1988; Bejaoui 1992; Slim et al. 2004, 153 (Sites 108–109); Baratte et al. 2014, 225–227.
105 Djelloul 1999a, 140; Slim et al. 2004, 153 (Sites 106–107).
106 Baratte et al. 2014, 229 f.
107 Slim et al. 2004, 152 (Site 104); Peacock et al. 1989, 183–189.
108 Baratte et al. 2014, 230 f.
109 Slim et al. 2004, 149 f. (Sites 98-99). 141–143 (Site 88).
110 Cambuzat 1986, I 96 n. 2; Djelloul 2011, I 139 f.; Djelloul 1999a, 130 f.; Abū ʿUbayd ʿAbd Allāh ibn ʿAbd al-ʿAzīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 197, 2.
111 Mahfoudh 1999b; Djelloul 2011, I 140 f.

What began as a small fort grew into settlement with its own *qasaba*, the ruins of which are still visible in the vicinity of the marabout of Sidi Abd al-Hamid. Just south of *Qsar al-Tub*, on a sandy tell on the coast was *Qsar Sahl/Qsar al-Djadid* at Oued Hamdoun, which separated the territory of Sousse from that of Monastir. The fort was founded by a North African lawyer from Qayrawan, Sahl ibn Abd Allah al-Qibriyani in the 9th c.[112].

Some kilometres further south of Sousse but still north of Monastir on the coast road is Sahline, an area Aghlabid princes used for hunting and where salt flats were exploited in the Early Middle Ages[113]. On the northwestern outskirts of Monastir was *Marsa Shaqanis*/Skanés which once had a *qsar* or *ribat*, though now only traces of a bridge of medieval date are visible[114]. In the 10th c. Ibn Hawqal described *Shaquanis,* one among many unnamed fortified posts between Monastir and Mahdia, as a strong fortress in a community that lived from fishing. Noting that *Shaquanis* was less venerated than the ribat of Monastir as an institution devoted to the defence of Islam and Ifrīqiya, he reported that its community was nonetheless supported by the numerous *waqfs* of Ifrīqiya and other donations[115]. Al-Bakri calls the site *Khafanes*, and described it as a port where boats could overwinter, protected by the largest of Monastir's ribats. Al-Idrisi placed *Shaquanis/Khafanes* eight miles south of Susa, and four miles north of *Qsar Ibn al-Ja'ad,* a fort located two miles north of central Monastir[116].

The Early Medieval town of Monastir proper, while often identified with the Roman town of *Ruspina*, offers no evidence of occupation in the Byzantine period[117]. Its famous surviving ribat, the earliest in Ifrīqiya of the watchtower type, is dated by inscription to 796. It is both smaller and more regular in plan (32.80 × 32.80 m) than Sousse's fort of the same period, though its earliest phases are still poorly understood because of a patchwork of later additions and restorations[118]. The Aghlabid settlement included within its wall the *Qsar al-Kebir* with its early ribat, a mosque, the *Dhuayib/Sidi Dhuib* ribat or *qsar,* built in 854: the latter is probably different from *Qsar al-Masri*, of which no trace remains. The *Qsar ibn al-Ja'd* was constructed in 871 by Ibn al Ja'd, a lawyer from Qaywaran on al-Ghadamsi island, connected to the mainland by a bridge perhaps dating to as early as the Roman period. Recent excavations indicate that the single-storied *Qsar ibn al-Ja'd* was 22.5 × 22.5 m with round towers at the corners and rectangular ones containing cisterns on opposite curtain walls. It overlay the remains of Roman villas with mosaics that may have gone out of use in the 6th c., when a cemetery occupied the site. Al-Bakri noted that the port of Monastir was protected by this, the largest of Monastir's three ribats[119]. At Khanis, six kilometres south of Monastir, the remains of an old oratory are surrounded by a huge cemetery with an oral tradition suggesting that it was a *qsar* associated with Monastir, probably the site of *Qsar al Duwayd*[120].

Conclusions

The thirteen sites surveyed above as potentially continuously inhabited from the Byzantine through the Early Medieval period are mostly ancient port cities and population centres where fortifications assured the security of naval and commercial shipping. A concern for security may likewise have driven the growth, a few kilometres from the coast, of the fortified medieval villages of Bekalta, Ksour Essaf, Tabulba and Chebba, noted by Djelloul as linked to the ancient towns of *Thapsus*, *Sullecthum*, *Tabulca* and *Caput Vada* on the coast. Though the nature of this link is not entirely clear, the ancient towns were not abandoned in the Early Medieval period in favour of the inland settlement, rather, the coastal sites seem to have been transformed from ancient towns into small fortified harbours. Furthermore, the fortified medieval villages of Bekalta, Ksour Essaf and Chebba, rather than being new medieval settlements, may have originated as Byzantine estates in the hinterland of the Byzantine coastal towns.

Thus, while the ancient towns and their hinterlands may have been mutually supportive in antiquity, their Early Medieval successors may have been more autonomous and parochial, with settlements inland focussed on agriculture and those on the coast on fishing and

112 Djelloul 2011, I 141 f.

113 Djelloul 1999a, 131–133; Djelloul 1999c, 38 f.; Djelloul 2011, I 148.

114 Lézine 1970, 29–34; Djelloul 1999c, 48; Djelloul 2011, I 142 f. The only pottery at Sebkha Skanes was late Roman: Bonifay et al. 2002/2003, 200; Slim et al. 2004, 157 (Site 117).

115 Ibn Hawqal, *Kitāb Ṣūrat al-'Ard* 73.

116 Abū 'Ubayd 'Abd Allāh ibn 'Abd al-'Azīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 197, 3–4; Abu Abd Allah Muhammad al-Idrisi al-Qurtubi al Hasani al-Sabti, *Kitab nuzhat al-mushtaq fi'khtiraq al- 'afaq* 126. See below n. 119.

117 Djelloul 2011, 143–147, at 143 notes that ancient *Ruspina* lies 4 km south of Monastir at Hinshir al-Tinnir. see Kallala 1988, 525–533.

118 Lézine 1956, 29–41.

119 Djelloul 1999c, 49 f.; Rammah 2002, 187. 190; Djelloul 2011, I 147; Abū 'Ubayd 'Abd Allāh ibn 'Abd al-'Azīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 197, 4.

120 Djelloul 2011, I 134.

trade. The development of inland villages, perhaps reflecting the relocation of some coastal populations advanced the disintegration of the Roman peri-urban/urban economic networks in the coastal Sahel that was already underway in the Byzantine period. The process perhaps parallels that at *Neapolis*/Nabeul, *Pupput*/Hammamet and *Aradi*/Sidi Jdidi where, because ceramic production became increasingly parochial, Late Byzantine amphoras, for example, had a distinctive local character[121].

An increasing need to secure the most populous areas in the coastal Sahel explains the development of both Byzantine walled cities and Early Medieval fortified settlements clustered around the heavily fortified towns of Sousse and Monastir. The other side of that coin may be that unfortified Byzantine settlements immediately on the shore, like nearly all of those surveyed above that showed no evidence of surviving into the Early Ifrīqiyan period, may have been abandoned because of their insecurity. This is likely to have been the case for ancient *Leptiminus* as well, located as it was on a low-lying, not easily-defensible coast, rather than on a strategic, fortifiable headland like Monastir or *Caput Vada*. But other aspects of *Leptiminus*' failure to thrive in the transitional period suggest reasons why other Byzantine settlements may have been abandoned. The site's Roman jetty did not provide a deep water harbour like *Thapsus* or *Sullecthum* suitable for larger commercial and naval vessels in the Early Medieval period. Indeed, referring to a time before the construction of the Roman jetty, the *Studiasmus maris magni* recorded that landing at *Leptiminus* was very difficult, a condition to which it would have returned after the jetty went out of use[122]. The site was not, like *Hadrumetum* and *Sullecthum*, at the endpoint of an important road still in use in the medieval period, but was mainly connected to other coastal communities by a road that was susceptible to erosion[123]. Perhaps most importantly as a Byzantine commercial city, like its Roman predecessor, *Leptiminus* specialized in commodities for export, pottery, salted fish products, wine and, probably to a much lesser extent, comestible olive oil, for which it had many strong competitors. The city's economy in the Byzantine period, as before, was closely attuned to the needs of a distant imperial administration and dependent upon its trade networks.

By the early 8th c. both the demand for Leptiminus' profitable and specialized products and especially the means to deliver them to the eastern Mediterranean had vanished[124]. The supply of and demand for fresh fish remained in Ifrīqiya, especially the highly prized migratory blue fish (tuna, mackerel and gilt sardines) for which Monastir and Qabbudiya were famous, but also the small shallow-water fish, *daurade* for example, for which Susa was renowned[125]. Although the processing and trade in ancient *salsamenta* declined sharply at the end of the Byzantine period, traces of it remain in the differently preserved fish mentioned in later medieval texts and documents[126]. One document in the Geniza archive records the transport to Qayrawan of a gift of salted tuna, and Al-Bakri noted the preserved fish available in Tunis. In his biography of a Kairouanese holy man Abu Maysara, al-Maliki reveals that he ate a popular condiment called *sayr*, a sauce made from little fish. Another ascetic, et-Trabelsi refused to eat fish caught at Monastir, either fresh or salted, because it was too luxurious[127].

Because of the substantial body of survey and excavation evidence, *Leptiminus*/Lamta and environs have a more nuanced history than any other site in the coastal region. The urban survey indicates that in the medieval period (8th–12th c.) the old urban core and suburbium, after being largely abandoned, had been given over to agricultural use, especially olive cultivation, for which the brackish water from wells that dot the site could provide adequate irrigation. The poor preservation of the monuments of the ancient city, the reuse of ancient elements in the buildings of the medieval village of Lamta, and the band of lime kilns at the eastern edge of the old urban core indicate that the site was also quarried for stone[128]. The location of the medieval village close to the ancient urban core, and its toponym, an Arabization of *Leptiminus*, encourages the conclusion that the village represents a medieval relocation of population, and perhaps an endpoint of ancient *Leptiminus*'s denucleation.

But Lamta may not have been the only successor village of *Leptiminus*. Other candidates are Qsibat al-Madyuni (S59/R516) north of the site of *Leptiminus* and R522, a nameless village site identified by the rural survey that grew in size in through the 6th and 7th c., and continued into the medieval period[129]. Moreover, a description of medieval Lamta as «a land-based village fac-

121 Bonifay 2004, 485.
122 *Studiasmus maris magni* 113.
123 Stone et al. 2011, 205–208. 249 f.
124 Stone et al. 2011, 281 f. On the steep decline of the salted fish industry see Djelloul 1995.
125 Djelloul 1995, 50 f. 57; Djelloul 2011, II 603.
126 Djelloul 2011, II 619.
127 Goitein 1999, 126; Abū ʿUbayd ʿAbd Allāh ibn ʿAbd al-ʿAzīz al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 101; Djelloul 1995, 54: al-Mālikī, *Kitāb riyāḍ an-nufūs fī ṭabaqāt ʿulamāʾ al-Qayrawān wa-Ifrīqiya* (Idris 1969); Idris 1936, 294.
128 Stone et al. 2011, 279 f. fig. 7.5.
129 Stone et al. 2011, 60 fig. 3.6; 182–184 with fig. 5.43; 192–198 with figs. 5.48, 50–52.

ing on the sea», subsisting on a balance of fishing, animal husbandry, agricultural produce and the recuperation of building materials[130], does not fully account for the prominence in medieval sources given to its maritime attributes over any agricultural products. In some medieval sources, the toponym Lamta seems to refer not just to the famous fort and its small adjacent community, but to a variety of features and locales in the region of the fort. In 912, for example, an Arab fleet is reported to have moored at Lamta[131]. Since the village proper lacks any port structure, the reference may be to Sayyada, a port two kilometres south of the Lamta fort. The fishermen from Lamta that al-Maliki reports selling their catch at Monastir, like their modern successors, may have moored their shallow draft fishing craft in the shallows or on Sayyada's quay[132]. The fact that Lamta and Sayyada today retain proudly separate identities, despite being entirely contiguous, surely has its roots in the medieval ribat at Lamta and the ancient quay at Sayyada that, while serving both communities from the Early Medieval period, were central to each village's historic identity. In the 11th c., al-Bakri mentioned Lamta, not as a port of call but for the great deposit of excellent salt for regional export, noting that the *melaha* Lamta was located in the vicinity of the port of Monastir. Thus, rather than referring to a small coastal saltern at Lamta proper, he is probably referring to the sebkha west of Monastir that must also have served the ancient salted fish products industry at *Leptiminus*[133]. Moknine, with its own ancient and medieval history only six kilometres southeast of Lamta, may have adopted and adapted *Leptiminus*'s ancient tradition of ceramic production[134].

The toponym Rusfa may provide insight into the greater Lamta of medieval texts, the broad view of which was not likely to have been particularly sensitive to local identities. As an Arabization of ancient *Ruspe*, the medieval toponym affirms a link between medieval and ancient settlements, though it refers not to a specific village, but to a larger geographic area[135]. Indeed, some medieval toponyms may refer less to a specific medieval settlement with ancient roots than to a local region where the historic inhabitants of abandoned ancient urban centres settled in the Early Medieval period, taking with them traditions of cultivation and production. Lamta and Rusfa, rather than reflecting continuity or discontinuity of an ancient city's area per se, may trace the dispersal of a city's historic population and products. If the ancient population of the city, suburban and rural zones of *Leptiminus* were already disintegrating in the Byzantine period, and had begun to reform into separate settlements, the historic and territorial relationships of medieval Lamta with its neighbours was even more diffuse and perhaps quite differently determined. Thus, ancient *Leptiminus* and its Early Medieval successor settlements can help us understand both how and why other Byzantine cities and settlements might have failed, but more importantly how they might have survived on a human level as their populations migrated into Ifrīqiyan settlements that were at once new and successor sites. In this way *Leptiminus*/Lamta provides a more compelling model than the traditional dichotomy of rupture or continuity of settlement in the transitional period.

The Aghlabid system of ribats and qsars was designed to safeguard the coastal zone, and to provide good ports for Ifrīqiya, but also to expand the profitability of the agricultural hinterland and encourage Arab commerce in the Mediterranean[136]. The economy of this elite system largely coincided with the extent of the ancient Sahel's agro-littoral economy and seems to recall, in fragments and on a small scale, its ancient predecessor, because of the revenue it derived from both olive cultivation and fishing rights[137]. What remained to medieval Lamta, in first the narrow and then in the broader meaning of the toponym, was subsistence shallow-water fishing and salt production, two disintegrated pieces of *Leptiminus*'s ancient export industry of *salsamenta*, now producing fish for the local and regional markets of Monastir, Sousse and Kairouan. This represented a decisive move away from the highly-integrated and consequently vulnerable agro-littoral economy of the ancient Sahel toward fortified commercial-maritime settlements on the coast and pastoral-agricultural settlements in the hinterland[138]. Under the Aghlabid system of ribats and qsars, supported by the wealth and stability of Aghlabid and Fatimid rulers based in the region, the Early Medieval coastal Sahel prospered. However, the system quickly fragmented again and the prosperity it delivered collapsed in the disruptions of the 11th c.[139].

130 Stone et al. 279.
131 Dachraoui 1981, 284.
132 Djelloul 1999a, 136–139; Stone et al. 2011, 279.
133 Al-Bakri, *Kitāb al-Masālik wa-al-Mamālik* 197, 4; Djelloul 1999a, 133; Stone et al. 2011, 222.
134 Hasaki 2005; Stone et al. 2011, 279.
135 Mahfoudh 1999a, 153–155.
136 Fantar 1995, 19.
137 Djelloul 1995, 54.
138 Trousset 1995, 35. For a discussion of Henchir Ben Amia see Bonifay et al. 2002/2003, 198 and Slim et al. 2004, 108 f. (Site 33).
139 Cf. Cambuzat 1986, I 141–153.

Abstract

This paper is a case study of a 120 km-long coastal stretch of the northern Sahel of Tunisia with a strong local identity, where both Late Byzantine and Early Ifrīqiyan sites are abundantly attested. In the near absence of direct archaeological evidence of the late 7th– late 8th c., it argues that sites inhabited in the periods before and after the transitional century provide the best guide to its settlement patterns. Based in part on evidence from *Leptiminus*/Lamta, it posits that in the transitional period ancient settlements' populations disintegrated together with their traditional livelihoods and relocated to more secure or better defended sites nearby which remained loosely connected. This model of transition can take local topography and history more into account than can the traditional pan-Maghrebi narrative of the continuity of a few ancient settlements at the expense of the wholesale rupture and abandonment of most others.

Résumé

Cet article est une étude archéologique d'une bande côtière longue de 120 km située au nord du Sahel tunisien, dotée d'une identité locale forte, où les sites de la fin de la période byzantine et du début de l'Ifrīqiya sont abondamment attestés. En l'absence quasi totale de preuves directes de la fin du VIIe siècle au VIIIe siècle, il fait valoir que les sites habités avant et après le siècle de transition constituent le meilleur guide pour ses modèles de peuplement. Il est postulé que, pendant la période de transition, les populations des anciennes villes ainsi que leurs moyens de subsistance traditionnels se sont désintégrés et ont été relocalisés sur d'autres sites plus sûrs situés à proximité, qui restaient faiblement connectés. Ce modèle de la transition permet de mieux prendre en compte la topographie et l'histoire locale que le récit traditionnel pan-Maghrebi, dans lequel la rupture et l'abandon de la plupart des villes anciennes donne l'avantage de la continuité à quelques-unes.

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Illustration credit

Fig. 1 Chris Cohen, after Talbert – Bagnall 2000, Map 33 and Bonifay et al. 2002/2003, 130 fig. 2.

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