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SOMMAIRE / SUMMARY

Archaeological Reconnaissance and Evaluation in the Achir basin (Algeria)

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ABSTRACT *A brief campaign of reconnaissance and evaluation in the Achir district located and reassessed the identity and potential research of three fortified sites traditionally associated with the Zirid state-builders (4th AH / 10th century AD). The first, Menzah Bent es-Soltane, is proposed as an early (pre-Islamic) Berber site, while the town and palace at Achir and the town at Benia are endorsed as 10th century foundations. All the sites are in a remarkable state of preservation, and further archaeological research on them could contribute greatly to the history of social and economic development in post-Roman Algeria.*

RÉSUMÉ. Une courte campagne de reconnaissance et d'expertise du district d'Achir était destinée à définir l'identité et les possibilités de recherches de trois sites traditionnellement associés aux bâtisseurs de l'État ziride (IVe H / Xe siècle). Le premier, Menzah Bent es-Soltane, apparaît comme un ancien site berbère (pré-islamique), tandis que la ville et le palais d'Achir et la ville de Benia semblent être des fondations du 10e siècle. Tous les sites se trouvent dans un remarquable état de conservation et de futures recherches archéologiques pourraient contribuer grandement à améliorer nos connaissances de l'histoire du développement social et économique de l'Algérie post-romaine.

The Achir project was part of a wider research programme instituted by the Agence Nationale d'Archéologie in collaboration with the Algerian National Museum and the Centre National d'Études Historiques. It was a programme of research designed to study a crucial episode in Algeria's past : the rebirth of urban society following the end of Roman administration. According to such documentary records as there are, a context for this post-Roman, early medieval, state-building is to be found in the activities of the *Sanhadja*, a people probably both nomadic and indigenous, who emerge into historical documentation in the ninth century AD (third AH) under their leader, Ziri. It was Ziri's son who founded Alger, and his grandson who built the monumental Qal'a des Beni Hammad, now a world heritage site. Ziri himself was associated with the long-lost foundations of *Achir*, and it was these settlements and their socio-economic context which provided the object for a new research initiative. Although not confined geographically within it, the programme was to take as its principal and

initial search-area a valley in the *haut plateau* 200 kms south of Alger, which was thought to have contained the *Achir* settlements. Within this search area, all periods and their economies were to be investigated, since only by chronicling the earliest prehistoric and subsequent communities, and their agriculture, could the emergence of the new era be recognised or understood. The goals were thus analogous to those of the Sri Lankan government's *Cultural Triangle Project* (Mandawala 1992), or the Irish Republic's *Discovery Programme* launched in 1990 (*Discovery* 1991). In 1992, the Department of Archaeology at York (Britain) was invited to contribute to this project by preparing an evaluation and a design for the research, conservation and presentation of the early medieval sites in the Achir basin. In view of the importance of these sites and the studies that had been initiated, it was felt that this preliminary statement might be of interest to readers of *Archéologie islamique* [1]

Geographical and historical Context

Modern Algeria occupies a territory which is nearly as extensive as modern western Europe, and may be considered for our purposes here as comprising four zones : The *Mediterranean Littoral* or coastal strip, The *Atlas Mountains*, The "*Haut Plateau*", and The *Sahara* desert. The settled population has always been found in the coastal strip, the mountains and the *haut plateau* (the Maghreb, figure 1), an area served by rainfall. The Sahara desert, watered sparsely by oases drawing on ancient rainwater moving slowly underground, provides a habitat for mainly nomadic peoples. It has acted at different times in history as either a barrier or a thoroughfare between the mediterranean coast and central/west Africa. All four zones saw signs of human occupation from the early stone age. The exploitation of each region through history was therefore probably prompted through political rather than environmental or technical imperatives. Although it had no written records, the prehistoric period provided

the formative experience and the reservoir of knowledge on which later inhabitants could draw for their social and agricultural strategies.

Figure 1 Algeria. Sketch map. showing the location of Achir

During the earliest period to be documented in writing (5th to 1st century BC), the eastern Maghreb was dominated by Carthage and may have formed a culturally united (Punic) zone. In 1927 Gautier (1927, 97-132) attempted to demonstrate that the truly indigenous peoples of the Maghreb were Punic speaking immigrant Phoenicians from the east, who remained resolutely "eastern" in their culture during the Roman occupation and after Without necessarily accepting this thesis, the Punic era will be expected to have provided important additions to the local cultural repertoire. The Roman administration imposed its own agenda on the Maghreb, socially and economically. The Algerian coastal strip was reorganised into the Province of Mauretania ; it was exploited for the mass production of grain and wine and became one of the three mediterranean centres selected by the imperial authorities for the production of olive oil (Mattingley 1988). The social infrastructure included cities, villas and "native settlements", each reflecting a particular social role at different times (Leveau 1984 ; Potter 1988). The changing emphasis of investment between town and hinterland shows how society was continually reorganising and readapting from an urban to non-urban policy and vice versa. By the 6th century the orthodox command economy based on villa and town had been completely supplanted over most of the mediterranean by a complex system of interconnected small chiefdoms (Hodges & Whitehouse 1983 ; Barnish 1988 ; Carver 1993).

The story of the Algerian territory in the early historic period, can be expressed in divisions corresponding to the powers which were recorded (or recorded themselves) as having dominion over it :

- Roman, to the 6th century.
- Vandal, AD 429-533.
- Byzantine, AD 533-670.
- Umayyad, AD 670-750.
- Abbasid, AD 750-909.
- Fatimid, from AD 909.

The history of the Maghreb from the end of Roman administration until the 10th century AD is extremely obscure, an obscurity aggravated by the discontinuity between the Roman, Byzantine and Arab periods. The documentation for each of these periods is sparse and confined to the relation of events in the form of an uninterrupted chronicle of crises and rebellions, for which we can hardly know either causes or objectives. Research on the period has been rare , and while it has certainly offered information and insights, it has yet to define those political, economic, cultural and social movements which were the agents of change for more than 500 years.

The Berber Principalities. Desanges (1962) studied the Berber tribes in both the Roman and Arab periods, thus hoping to establish a relationship between them ; but this did not resolve the problem. Archaeological excavations which could throw light on the matter have obtained few useful results since they have tended to concentrate on the Roman sites. Even where the archaeological layers offer a sequence of continuous occupation, allowing us to report on changes over a long period, the pre- and post-Roman phases have often been disregarded. The history of the Maghreb in these Dark Ages, like that of western Europe, gives the impression of a fundamental rupture, in which the culture, the spatial organisation, the way of life and the population itself seem to have been profoundly altered. The end of the Roman period is marked by a retreat from the great agricultural estates. But if urban urbanism and the abandonment of the great agricultural estates. But if urban development ceased, there are nevertheless strong indications that the Roman towns themselves continued to be exploited. The excavations in the Forum at Cherchel, although involving only a small area of the whole city, brought to light an episode of occupation which the excavators date to a period between the end the 6th century and the beginning of the 9th (Benseddik & Potter 1993, 391-394). This idea of a « reversion to the Libyco-berber world » (*ibid.*, 391) endorses the picture drawn by Phillipe Leveau from his research in the Cherchel hinterland : a decrease in urban domination and the emergence of native power, becoming apparent as early as the 3rd century AD (Leveau 1982, 894-898). Berber regional groups were developing during the period of Vandal administration (AD 429-533)

and the development persisted during the period of Byzantine control (AD 533-670) (Courtois 1955, 325-352). Some of these "principalities" can be dimly perceived ; for example, the kingdom of *Altava*, which stretched over the eastern part of Oranie and which featured at its head in 508, Masuna "king of Moors and Romans" Further to the east lay another kingdom to which is owed the *djedars*, a group of monumental funerary constructions in the form of circular or square mausolea built in cut stone, lying to the south-west of Tiaret (Kadra 1983). Of the personalities of this kingdom of the Ouarsenis, which endured until the Arab conquest, we know of few apart from the king Mastigas who was reigning in 535. Two other kingdoms — of Hodna and in the Aurès — were ruled in 535 by Ortaias and Iaudas respectively The sparse documentation does not allow us to grasp the extent or the organisation of these kingdoms, or their cultural and economic life. It is accepted today that, on the eve of the Arab conquest, Berber power had already brought considerable pressure on Byzantine authority, which was effectively confined to fortified towns in the eastern part of the Maghreb [see e.g. Cameron 1989].

The Arab conquest and the Islamicisation of the Maghreb. Having crossed the Suez isthmus into Egypt in AD 640, the Arab armies conducted several raids further west. However it was not until 670 that Uqba Ibn Nafi was authorised to conquer and occupy the Maghreb. The foundation of Kairouan was followed by a number of expeditions which brought the Arab armies to the shores of the Atlantic (El Fasi et Hrbek 1990, 81-116). Although the Arab conquest in AD 670 and the subsequent Islamicisation of the Maghreb are documented in more numerous sources than those offered by preceding centuries, they nevertheless reveal little of the development of the native peoples. The spirit of conquest and the *razzias* were not slow to alienate a large part of the Berber peoples (Monès 1990, 251-272). Kusayla, head of the Berber tribe *Awraba*, who together with his family had embraced Islam and strongly supported Uqba, soon felt himself insulted, turned against Uqba and killed him. Kusayla took control of Kairouan and ruled there from 683 to 690. The action of Kusayla was the prelude to a long resistance by the Berber peoples to the Arab conquest, while Islam itself made rapid progress thanks to the energy of its preachers. By 711, when the armies of Islam, a major proportion of which were Berbers, began the conquest of Spain, the Islamicisation of the Maghreb was largely complete.

The Ibadite revolutions and the Rustamids. The Ibadite doctrine, which held that all Muslims should be treated equally, particularly in matters of taxation, whatever their ethnic origin or date of conversion, had a favourable reception in the Maghreb, particularly among the Berber tribes of Tripolitania and principally in the *Zanata* confederation. From a flashpoint among the Zanata, the movement spread all over Tripolitania and to the south of Ifriqiya, numerous

tribes including the *Nafusa* and the *Hawwara* rallying to the Ibadite cause. In 750, the town of Gabès fell to the forces of the new movement, and in the face of its success the sheiks of Basra instructed 'Abd al-Raḥmān Ibn Rustam and Abū al-Khaṭṭab to create an Imamate in Tripolitania. Abū al-Khaṭṭab himself became Imam in 757 and in 758 the Ibadites installed themselves in Kairouan (Al-Nuwairī in *Hist. Berb.* 1982, II, 373). Under 'Abd al-Raḥmān Ibn Rustam and the Ibadite dynasty he founded (the *Rustamids)* Tiaret and its region became an important political, economic and cultural centre. In 911, the Fatimids, whose army was constituted largely of the Berber group the *Kutama,* unseated the Ibadites of Tiaret, obliging them to withdraw to the town of Sedrata and then to that of Ghardaïa. Fatimid control opened the way for the rise of one of the most famous of the state-builder dynasties of the central Maghreb, the Zirides, founders of Achir (Idris 1962).

The Sanhadja and the Zirid Dynasty. At the beginning of the 10th century, historical sources report the abrupt appearance of a powerful tribal group known as the *Sanhadja,* which, from origins at Titeri in the centre of present-day Algeria, gained control over a large territory and initiated governing dynasties. The sources provide several pieces of information about the *Sanhadja,* without, however, allowing us to trace a complete picture of its tribes, their place of origin or their role in the history of the Maghreb, with the exception of two dynasties : the *Zirides* and the Murabitun (*Almoravides*). Before embarking on his history of these dynasties, Ibn Khaldūn assesses the *Sanhadja* as « One of the most considerable of tribes by their numbers, which has continued up to our own day [ie the 14th century] to form a major part of the population of the Maghreb. Every mountain and plain of this region has its Sanhadja population ; it is not for nothing that many people consider them to form one third of the entire race of Berbers » (*Hist. Berb.* 1982, II, 1). To underline the point, having listed the principal "branches" of the Sanhadja, Ibn Khaldūn writes : « certain historians of the Sanhadja have declared it to be divided into as many as 70 branches » (*Hist. Berb.* II, 3). If, as Idris comments (1962, 7), this « assessment is notional », it still serves to signal a tribe of some considerable presence. The geographers al-Bakrī and al-Idrīsī locate groups of *Sanhadja* in several regions of the Maghreb : in the desert of the Atlantic seaboard in the extreme south of the western Maghreb [al-aqsa] (al-Bakrī 1965, 149/284 ; al-Idrīsī 1983, 73/63) whence came the Murabitun (Almoravides) ; in the southern part of the high Atlas (al-Bakrī 1965, 160/304 ; al-Idrīsī 1983, 93-4/85) in the region of Détroit (al-Bakrī 1965, 104/205, 107/211, 109/215) ; and in the coastal region of Rif (al-Bakrī 1965, 90-91/181-4). Further east, in the central Maghreb, we meet the Sanhadja in the region of Tiaret (al Bakrī, 1965, 69/141) and in the mountains of Titeri (al-Bakrī 1965, 65/135 ; al-Idrīsī 1983, 108/69). Beyond the Titeri mountains to the east, we have no further notice of the Sanhadja. With this variety of terrain, comes an equal variety of life-style ;

we find Sanhadja people in fixed settlements in the Titeri and the Détroit region, living as mountain dwellers in the High Atlas and as nomads in the region of Tiaret and the broad southern desert. In his linguistic analysis of the names of the principal tribes of the Maghreb, 'Alī Sadkī construes the meaning of the name Sanhadja (*Iznagn*) as « people who live in tents and make raids » (Sadkī 1987, 127-146 ; 142). He makes a well-judged equation between the Almoravid Sanhadja and the Touaregs, taking the precaution to emphasise that « if the Iznagn (Sanhadja) are not all nomads, nomadism was, at least initially, the predominant way of life among them » (*ibid.*, 142, note 85). The Sanhadja would thus be nomadic camel-riders of the desert, certain groups of which would become implanted in the northern regions of the Maghreb. We have little data with which to support this hypothesis, unless it is by recalling that from the 5th century AD the Byzantine armies found themselves obliged, often to their disadvantage, to confront camel-riding nomads in the foothills of the north (Julien 1931, 286). And we may notice that in order to secure his position and bring prosperity to the settlements he founded, Ziri was to transform Sanhadja nomads into settlers : « .the inhabitants use neither gold nor silver in their transactions ; but they exchange camels, cattle and sheep for the things they need. This state of things persuaded Ziri to strike coins. He then made considerable gifts of money to his soldiers and gave them a regular income, with the result that pieces of gold and silver circulated freely among the public. The nomadic peoples who frequented the region agreed to work the land. » (al-Nuwairī 1982, II, 491-2).

The Foundation of the Zirid Dynasty and its capital. Zirid historiography presents a semi-legendary picture of the founder of the dynasty, Ziri Ibn Manad, and the stages by which he came to exercise power over the region. According to these sources, Ziri, through his daring and largesse, collected a group of armed followers who carried out raids against the Zanata tribes in the plain of Chélif. These actions and the booty which resulted allowed Ziri to form other armed bands and to subjugate other clans of the Sanhadja tribe. His own qualities and the violence of his warriors impressed themselves on all the Sanhadja and their Zanata neighbours, allowing Ziri to acquire an essential role in the political forum of the central Maghreb. In order to consolidate his power and the better to control his territory, Ziri decided to construct a capital, settling his choice on the site which was to see the foundation of the town of Achir. According to al-Nuwairī, Ziri undertook the construction of Achir in 935. He received assistance from the Fatimid caliph al-Qaim Ibn al-Māhdī, who sent him an architect, artisans and materials (wood and iron). In order to find citizens for his new capital, Ziri forcibly imported populations from Tobna, M`sila, Souk-Hamza (Bouira) and other urban centres (*Hist. Berb.* 1982, II, 489). Ziri's power continued to grow, leading his warriors to undertake expeditions further and further from their base. It seems very probable that Ziri and his followers were integrated into the Fatimid

strategy for the control of the Maghreb. The position of the Zirid heartland encourages us to believe that the Sanhadja had the tasks of protecting Tiaret, an important commercial crossroads and thoroughfare, and of containing the Zanata tribes of the central Maghreb who were allied to the caliph of Córdoba. From this point on, at least, the sources link the story of Ziri with that of the Fatimid dynasty. Thus in 946, he took part in the suppression of Abū Yazid [the "man on a donkey"] , a formidable opponent of the Fatimid regime. It was the emir of the Sanhadja who was responsible for fatally wounding the rebel at Qala Kiana in the mountains of Hodna (Ibn Khaldūn *Hist. Berb.* II, 6). Expressing his gratitude, caliph Isma'il al-Manṣūr offered Ziri « .honours and riches. In addition to a document appointing him chief of the Sanhadja, Ziri received permission to build palaces, caravanserais and baths at Achir He received also authority over the town and province of Tiaret. A little time afterwards, his son Buluggin received permission to found three towns, one on the shore of the sea called Djazair Beni Mazghenna [Alger], another on the east bank of the Chélif, called Miliana, and the third carried the name of Lemdia, a Sanhadja tribe » (*ibid.*). For the rest of his life, Ziri concentrated on enlarging and consolidating his territory His line of defence, marked out by the towns of Tiaret, Achir and Miliana, faced west, where several military campaigns had to be directed at keeping at bay the Zanata tribes of the Chélif and the Sersou. In the interior, the towns of Achir, Médéa, and Alger constituted a commercial axis which joined the caravan routes crossing the desert to the Mediterranean. Ziri throughout his life, and his son Buluggin after him, increased their influence at the Fatimid court, and themselves were key players in the Fatimid control of the Maghreb.

Buluggin the warrior Buluggin Ibn Ziri assumed command at Achir when, in 971, the news arrived of his father's death on a campaign against the Zanata in the plain of Chélif. « Buluggin immediately took to the field and achieved a striking victory over the Zanata. For this exploit he not only had the satisfaction of avenging the death of his father, and of his relatives, but received the praise of [the caliph] al-Mufiizz, obtaining appointment as the governor of Achir, of Tiaret, and all the provinces of Maghreb which had comprised the estate of his predecessor He was appointed, in addition, governor of M'sila, the Zab, and other provinces » (Ibn Khaldūn *Hist. Berb.* II, 8). Buluggin was thus recognised by the Fatimid caliph as the emir of the Sanhadja and governor of the territories conceded to Ziri. His first task was to subdue his emirate in which numerous rebellions had broken out at the news of the death of Ziri. The violence of his actions, which featured massacre, enslavement, deportation and the taking of hostages, earned Buluggin his reputation as an implacable warrior, as well as gaining him numerous allies. The pre-eminent position of the Sanhadja and their emir was recognised as much for their role in the control of territory, as for their loyalty to the Fatimid dynasty ; their achievement was rewarded in 972 by the

choice of Buluggin for the emirate of the Maghreb. Since the inauguration of their dynasty, the Fatimids had been working to construct the territorial, military and economic base which would serve as a platform for an assault on the caliphate of the whole world of Islam. Their conquest of the Maghreb was only a prelude to their conquest of the middle East and the expulsion of the Abbasids from Baghdad. The strategy was to begin with the conquest of Egypt which would open the route to Syria and then Iraq. After several unsuccessful attempts, the Fatimids took control of Egypt in 969, followed a little later by Damascus and part of Syria. These successes and the consolidation of Fatimid power led the caliph al-Mufiizz, to install himself in Cairo and appoint a lieutenant for the Maghreb. As the emir of the Maghreb, Buluggin played an essential role in the protection of the Fatimid caliphate against the incessant attacks of the Zanata, allied with the caliphate of Córdoba ; an essential role too in the control of overland routes of commerce which crossed the Maghreb and thence to Egypt and the middle East. From the time of his appointment, Buluggin launched military campaigns, which by way of Tiaret, Tlemcen, Fez and Sidjilmasa, enabled him to keep control of the principal caravan routes. In 973 he subdued Tlemcen and deported a section of its population to Achir A few years later it is recorded that he fortified and enlarged Achir, which became the residence of the crown prince.

The successors of Buluggin. It was at Achir that al-Manṣūr Ibn Buluggin learned of the death of his father during an expedition against Sidjilmasa, and then received in his palace there the notables who were to enthrone him. After his position had been confirmed by the Fatimid caliph, al-Manṣūr attempted to resume the expansion westwards ; but after several setbacks, the policy was abandoned and the Zirids concentrated on the territory which they already controlled. At his death in 996, al-Manṣūr bequeathed his position to his son Badis, a child of 12 years old, whose investiture was contested by a faction of his family Thanks in· part to the support of his uncle, Ḥammad Ibn Buluggin, Badis was able to enter into his inheritance. Hammad was designated governor of a large part of central Maghreb, and in 1007 founded the town which would be known under the name of the Qala of the Banū Ḥammad [Citadel of the people of Ḥammad]. When Badis attempted to restrain his uncle's power, war ensued. The death of Badis at the siege of the Qala and the appointment as emir of al-Mu'izz Ibn Badis, a child of 8 years old, allowed Hammad to declare his autonomy and to found his own dynasty, the Hammadites. From 1017, the Zirid territory split into two : in the east, in Ifriqiya, the descendants of Badis remained in control. However, between 1046 and 1048, al-Mu'izz Ibn Badis broke with the Fatimid caliph, which led the latter to authorise passage into the Maghreb of the notorious Hilali tribes. Faced on the one hand with the disruption caused by the Hilali, and on the other by the attacks of the Normans of Sicily on the coast of Ifriqiya, the Zirid emirs saw their powers more and more diminished. The Zirid

dynasty in Ifriqiya was finally eliminated in 1160, by the Almohad armies. The Hammadite emirate was also assailed by the Hilali, and from 1068, they were obliged to transfer their capital to Bougie. In 1153, the Hammadite dynasty was destroyed by the Almohad caliph, 'Abd al-Mu'min.

Many questions are raised by this history, to which research has yet to provide answers. Thus, if we recall that powerful Berber tribes — Kutama, Sanhadja, Masmuda — appeared on the scene during the 10th to 12th centuries, we know nothing of the past of these peoples. The interdisciplinary research which has begun at Achir will, it is to be hoped, throw a little light on this obscure but crucial period of the later history of the Maghreb.

Looking for the Archaeology of the early historic Period

The archaeology of the post-Roman period is as elusive in Algeria as it is elsewhere in Europe and in Africa. It is also as rewarding, since here, as in so many regions around the Mediterranean and the North Sea, the "dark ages" of the later first millenium are the formative years for the modern country The themes of the enquiry are also held in common : what type of socio-economic formation was adopted and how it was decided ? What was the role of the environment, the role of ideology, the role of immigration and conquest and all the other agencies which may have provoked the changes that are sensed in the documents ? For archaeologists, there are also crucial theoretical issues which lie at the heart of the discipline how do we recognise such characteristics of social organisation and such agents of change in the material culture ? The documentary framework raises certain expectations as to which cultures will dominate in a given century, expectations which are often difficult to resist. For the purpose of present and future archaeological research it might be prudent, however, to seek more neutral terminology in the hope of creating the conditions which will allow the past of the Berber peoples to emerge with greater clarity The half millenium itself could be termed the "early historic period" in imitation of a phrase used further north to research a territory without assigning pre-emptive cultural or religious labels. This might be conveniently divided into five phases, each a century in length, in which the material culture, found or sought, might be reviewed.

• In phase 1, AD 550-650, we should expect to witness the decline of public investment in the Roman towns and of private investment in the rural estates ; the native settlements of the Roman period would continue in the countryside and colonise the towns. Some of these settlements should manifest a hierarchy which would reflect the rise of Berber principalities. Old Tiaret itself could have been the site of such a pre-Islamic principality (see below). Another (or the same) principality was responsible for constructing monumental burials : the *djedars* (Kadra 1983). These mounds, located in the area of Frenda, and constructed in ashlar blocks on a square or round plan, were probably erected both in emulation and in defiance of Byzantium, whose armies and agents were attempting to re-establish imperial control from a bridgehead in Tripolitania. Byzantine fortresses mapped and studied by Gsell may still be found, e.g. at Tipasa or Tobna (Gsell 1901, 344-84) but rarely further south or west of the supposed line of the *limes*. Of the fortification perched on the edge of the Achir basin (Menzah Bent Es-Soltane, see below), he remarks « the problem is to know if the important fortress of Kherbet Achir, situated at the north-west of Bordj Bou Areridj is Roman or Byzantine » (Gsell 1901, 347). Byzantine refurbishment of Roman towns was part of their declared project, but may have been quite limited in delivery (Cameron 1989, 176).

• In phase 2, 650-750, we might expect the traces of settled or nomadic centres associated with the early attempts at territorial control by the indigenous people, and with the activities of their resistance to the Arab armies. The latter may not have founded new cities, but they should have adapted the extant Roman and Byantine infrastructure in the service of their expansion.

• In phase 3, 750-900, there was at least one permanent foundation, that of Rustemid New Tiaret in c. 760 AD (149 AH). This lay 5 miles west of the modern and French colonial settlement of Tagdemt, which itself covered over the Roman, Byzantine and possibly early Berber establishment, which we could call "Old Tiaret" The site of the deserted Rustemid Tiaret was surveyed in the 1940's, and some of its ruins recorded ; it was then declared to be « an urban centre developing normally in the heart of the Berber country at a site chosen deliberately by the Imãm (religious leader) » (Marçais and Dessus-Lamare 1946, 25). Such "normality" carries a large number of assumptions. There are not many other urban centres, at least none named, and the site is discussed in the context of a people who are otherwise supposed nomadic, exploiting the long strip of the *haut plateau* and its excellent grazing (Gautier 1927, 299). If, on the other hand, these were not nomadic people, then we are justified in having expectations of eventually discovering and defining their settlement and economy.

• Phase 4, from AD 900, saw the origins of the capital city of Achir and foundations at Alger, Médéa, The Qa'la, Bougie, together with documented occupation at Sétif, Constantine and elsewhere.

The inventory of sites and monuments compiled in the 19th century by Stéphane Gsell (1901, 1911) has provided the archaeological study with a basis, much enhanced for the Islamic periods by the Marçais family (1919, 1946, 1954). A new chapter opened with excavations and research by the Agence Nationale at Sétif (Fentress *et al.* 1991) which skillfully defined an archaeological sequence from the Roman period onwards. Paraphrasing the detailed results, the Roman and Byzantine town had faded by the 7th century, and only produced a number of structures which might be called urban in the 10th century The study of early medieval material culture has thus been launched. We also have the example of a research campaign on an early Islamic town in Morocco, that at Qsar el-Seghir (Redman 1986). In general terms, for the Algerian territory, there is virtually everything still to know, but since not everything can be discovered at once, it might be considered worthwhile examining those targets which can throw most light, not only on the origins of the state in the Maghreb, but on those aspects of human behaviour which have the widest application elsewhere. These might be selected as follows :

- The *earliest post-Roman settlements.* Are they the relics of a settled or nomadic culture ?
- The *earliest towns.* What do they owe to indigenous culture, what to invasion, intrusion or political intervention, what to a new ideology and what to the economy of the time ?
- What was the *agronomic strategy* adopted in each of the four phases and its alignment with the contemporary social and economic structure ?

Addressing these questions will bring an immediate reward for historians of the Maghreb, but it will also confront fundamental puzzles of social transition in an area and at a time where such transitions are hinted to have been frequent, sudden and comprehensive. If the problem of archaeological visibility can be resolved, the motor which drove such changes should also be visible. The sources for the data required can be summarised as :

- settlement form, hierarchy and distribution ,
- burial practice ,
- the exploitation of the environment.

The first two of these packets of evidence should offer information on social ranking and the balance of investment between them, which constitute the principal signals of the prefered ideology of those with power The third provides both an indication of the resources available and the likely success at a particular instance in the creation of surplus. Watson's thesis on agricultural innovation in the early Islamic world, for example, offers us a vision of the extraordinary potential for wealth-creation provided by the early Islamic network of plant-

exchange which stretched from Burma to Spain (Watson 1983). Etymological evidence suggests that a large number of important plants migrated westwards in this way, among them durum wheat, sugar cane, cotton, the orange, lemon, lime, and spinach, plants whose names (wheat excepted) derive from Arabic words and apparently became native to North Africa and western Europe in the later first millenium. The implication of such introductions to the Maghreb is that irrigated summer produce would be added to winter wheat, increasing the agricultural output greatly The archaeological correlates of such activity should be visible enough : the gardens themselves, the irrigation systems (which must be disentangled from the Roman, Watson 1983, p. 5, n. 14) and above all the pollen and plant macrofossils where they occur in stratified contexts (cf the excavations at Sétif where Durum wheat was recorded in the Islamic-period layers ; Palmer in Fentress *et al.* 1991, 264). Agricultural change, whether indigenous, autochthonous, imported or imposed will be a vital element in the study

The selection of the Achir basin as an area of research meets many of the criteria demanded by the wider agenda. It was certainly exploited in the 10th century as the hub of the first certain indigenous urban state. It was Islamic, if variously schismatic, and should reflect 10th century ideological argument in its material culture. It lies on a cross roads between the Kabylie, the *haut plateau* and the caravan routes across the Sahara to Mali. We can look back past the era of Achir into the earlier periods which gave it birth, the pre-Islamic Berber period (phase 1) above all, and the prehistoric beyond that. The examination of the earlier periods represented will not only put the great foundations of the 10th century in their context, but provide a definition for early Berber culture itself.

Evaluation in the Achir Basin

The purpose of archaeological evaluation is to assign a value to an archaeological resource, this value being expressed in terms of the research questions that the resource is capable of addressing (Carver 1991). Specifically this means discovering as much as possible about the archaeological deposits before any destructive investigation takes place. This is achieved by mapping the deposits and assessing their quality The research agenda (what we would like to know) can then be matched to the deposit assessment (what we can know) to give the evaluation. From the evaluation derives the research strategy and the management strategy Two other factors influence the direction actually taken by the research and management programmes, because of the special character of archaeological resources, that is the fact that they are contained by *land.* These

factors are : (1) the vulnerability of the resource and (2) the interests of the current occupants of the land. Both these factors exercise restraint on the desired academic programme, and it is right that they should do so. Research and
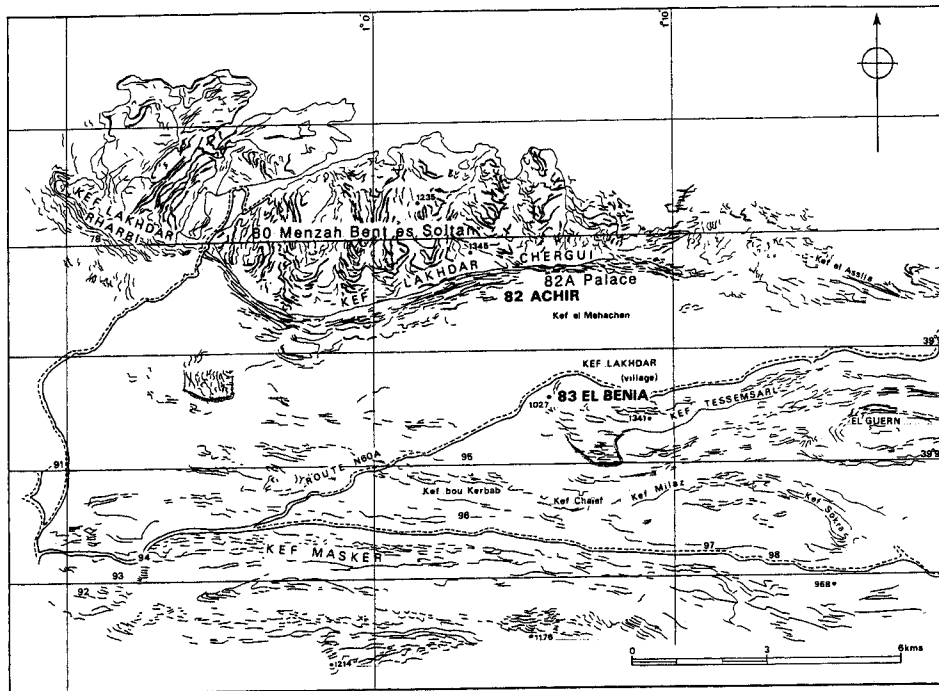

Figure 2. The Achir basin, showing the relative postions of site 80 (Menzah bent es Soltan), 82 (Achir Town) ; 82A (Achir "palace") and 83 (Benia). (T Pearson after Dales et al.).

management programmes are therefore a compound of the academically desirable, the archaeological feasible and the socially permissible.

As a result of a preliminary reconnaissance by the Achir project team, sites of all periods had already been located (*Les Cahiers d'Achir* [hence *C. d'A.*] n° 1, 1992) (fig. 2) ; the prehistorical sites have been made a separate programme. Those thought to be early medieval include the following prime candidates for major settlements, and these formed the subjects for the initial phase :

• Site 80. *Menzah Bent es-Soltane*, a fortified hill-top site (0,6 ha) on the north side of the Kef Lakhdar col ;

• Site 82. *Achir*, a fortified enclosure (24 ha) lying at the foot of Kef Lakhdar, on its south side, with the ruins of a "palace", 1 km adjacent to the east ;

• Site 83. *Benia*, a fortified enclosure (35 ha) lying southwards across the Achir basin from Achir

The procedure adopted for each site was intended to follow the same itinerary, but it has not been completed to date at each place to the same degree, for example geographical survey has not yet been undertaken (Table I). This paper is only concerned to present the results of the evaluation, stages 1 to 9, and the recommended programmes for research and management are still under consideration by the Algerian authorities.

1. Survey of documentation including previous site visits and assessments. In this case there were published descriptions of visits to one or more of the three sites in 1852 (Chabassière 1869), c. 1908 (Rodet 1908), 1922 (Marçais 1922), and between 1954 and 1957 (Marçais 1954, Golvin 1957).

2. Aerial Photographs. Vertical APs were available for the Achir basin.

3. Topographic mapping, reported as 2-dimensional plans with hachures to indicate breaks of slope.

4. Contour or detailed hachure plans to report intimate topography.

5. Surface collection of pottery in order (a) to construct a ceramic typology, (b) to reconstruct the formation process of the topsoil, (c) — if the pottery distribution is largely undisturbed — to reflect the usage of ceramics by area, and thence seek social / functional variation.

6. Selective excavation to review the potential for monumental or other display.

7 Creation of a Deposit Model and the design of a *visibility template* showing the different responses of the predicted feature-repertoire to non-destructive instrumentation, and to excavation at different data-aquisition levels.

8. Project Design, for the Research Programme.

9. Project Design, for the Management Programme.

10. Geophysical Controlled Testing ("pilot study" or "feasibility study"), of resistivity magnetic susceptibility, magnetometry etc over a pilot area ; followed by its excavation and scoring of the sensitivity of the different rigs.

11. Geophysical mapping (instruments suggested by the results of stage 6.)

Table 1 Evaluation Programme for the Archaeological Sites at Achir

Evaluation of Benia (Site 83) (fig. 3-7)

The site of Benia was visited by a Capitaine Rodet in 1908, who reported it as the name given to ruins at the foot of Kef Tsemsal. He noted the citadel, a

fortified enclosure on the south side which rose to the summit of Kef Tsemsal. He also noted that the locals refered to this citadel as Menzeh Bent es Soltane, a name otherwise attributed to site 80 (see below). He reported a city wall 2 m thick, but mentions no towers. He notices that the main walled area divides into two (our Zones D and E on fig. 3) saying that the southernmost of these has the appearance of a planned settlement. There was only one structure visible on the

Figure 3. Benia : plan of recorded features
on the ground and from the air (T Pearson after A. Copp).

ground in the centre of the walled city (labelled "mosque" on fig. 3), which was believed by Rodet to be a ḥammām (baths). There were two springs inside the city wall (now unlocated) and three outside it (two of which are still in use). He retrieved two stone capitals and mentions a kufic inscription found previously by a certain Lt. Bigeard in 1890, and then in the Museum at Algiers. Marçais visited in 1922, when the site was covered by thick vegetation, where it was not under cultivation. He found a Kufic inscription giving a date of 1022 AD (413 AH). Marçais supposed Rodet's ḥammām to be a mosque. He was convinced that Benia was the second Achir to be founded, and dated it in the mid 11th century This implied that Bologgin was the founder and that it would be the place described by al-Bakrī who speaks admiringly of its defensible position : « A town of very great importance... In all the region there is no place more difficult to take and more likely to discourage an enemy... The only part accessible to an assault isto the east, and this can be defended by ten men... Elsewhere the eyes slip on the rock, never mind the feet » (quoted by Marçais 1922, 29). This defensible character, however, hardly conforms to the Benia we see today

Aerial Photography. In the vertical photograph which was available, the oval circuit defined as the site of "Benia" could be clearly seen. This same circuit is also largely visible on the ground today, tending to become uncertain in the same places on the ground as from the air. The AP does however show the positions of the towers which punctuated the walls at approximately 15 m intervals ; at least 23 towers can be defined on the west city wall, where they are particularly evident. The aerial photograph also shows the extent of the site which is under the plough and the extent which is currently residential. In the part which is neither, the topographic traces of ancient structures can be made out. They are concentrated at the south end of the main walled circuit and in the citadel area to the south of that. It can be deduced that these areas (Zones C and D) are the best preserved archaeologically

Mapping the Topography [Intervention 3]. The topography was surveyed and the results are summarised in fig. 3, which includes the line of the city wall, the visible towers, the springs and the principal breaks of slope. A profile measured from N. to S. gives the relative heights (fig. 4). On the strength of this surface inspection, the area of the monument was divided into zones, each of which is likely to have a different archaeological visibility

• *Zone A*, at the top of the citadel, is level, grassed, unploughed and contains the remains of at least one building visible as a surface undulation.

• *Zone B*, on the slope down from the citadel, is steep and grassy with no visible remains.
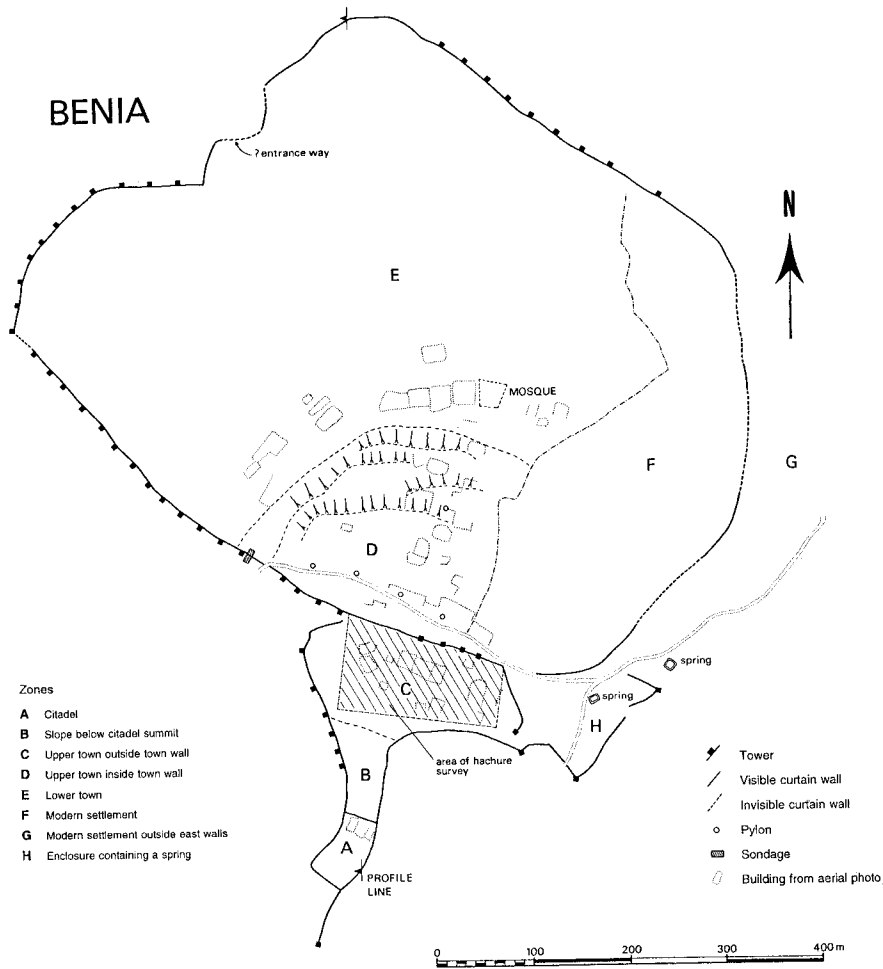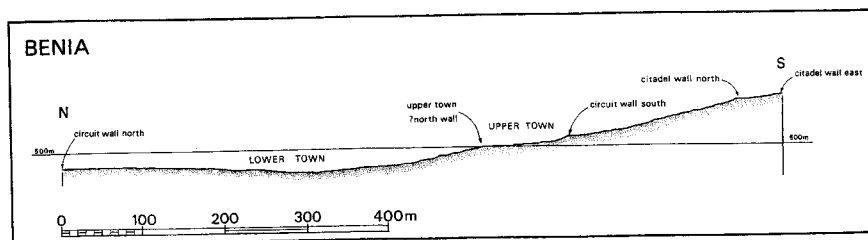
Figure 4. Benia : profile S-N through the upper and lower town (T Pearson after A. Copp).

• *Zone C* is the first level space below the citadel and enclosed by its curtain-wall, but lies outside the main city wall. It has been partially ploughed, but still retains the form of many ancient structures : they are visible in a part of Zone C were mapped with a hachure plan (see below, and fig. 5).

• *Zone D* is the highest level space inside the city wall, a wall which separates it from Zone C (see also fig. 5). It has been partially ploughed but still retains the detailed form of many collapsed structures visible as wall-lines on the surface. Walls are also visible where the modern track has worn through the surface soil to expose them.
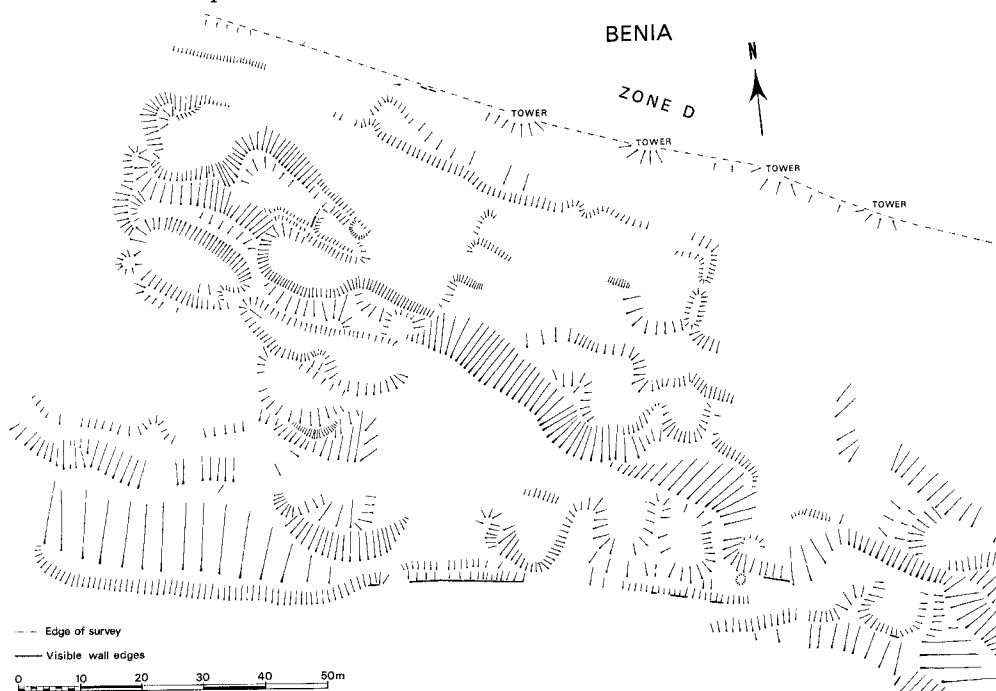

Figure 5. The line of the town wall, Benia, with Int 1 in the foreground.

• *Zone E* is separated from Zone D by series of terraces (the "breaks of slope" indicated on the plan, Zone J), and represents the greater part of the enclosed area at Benia. Topographically, it is a shallow basin with re-entrants to the north-west and east. Access is relatively easy from both these directions (*contra* the comments of al-Bakrī cited above). Only to the north is there a small over-hang to negotiate. There is no part of this town, apart perhaps from the citadel, Zone A, that « could be defended by ten men » (al Bakrī, quoted in Marçais 1922, 29). In the Achir sites, such a description could refer only to Menzah Bent es-Soltane, where access is from the south, rather than the east (see below). Zone E is currently under the plough, which has bared the tops of many walls. Walls and other areas have also been quarried for stone. The loose rubble has been gathered and stacked in heaps to facilitate ploughing. In many cases the plough has been restricted within the walls of a buried building, so that the shape of the fields is also the shape of the building. But since this is not always the case, only a detailed survey, which mapped walls still hidden as well as those with surface indications, would provide a representative plan of this part of the town. The building labelled "mosque" which stands in Zone E is defined by four stone-lines, probably not exactly coincident with the walls beneath, a displacement suggested by the shape formed by the four stone lines, which is not square. A semi-circular annexe was visible to the south. The tops of several columns still showed and another had collapsed. This is presumably the same building seen by Rodet and Marçais, who interpreted it as a *hammam* (with well) and a mosque (with *mihrab*) respectively (see above).

• *Zone F* is a residential area, within the old buried town, now occupied by the people of the present village of Kef Lakhdar Their houses face on to the track which leads from the springs to the school on the east side of Benia. The parts of the properties which project into the Benia monument are generally gardens. There is no major construction which may have inflicted extensive damage, and the small scale digging associated with horticulture is unlikely to have caused major erosion of the archaeological resource.

• *Zone G* is an apron of land which carries the school, the houses which over-look the main village and the track which comes down the slope from Benia. It is now occupied, but is also a natural site for a former suburb or market for the medieval town. For this reason it should be included in the management plan. It is not under immediate threat from the present occupants whose way of life is generally sympathetic to the resource. Archaeological exploration of this zone would be difficult owing to the intensity of current use and access.

• *Zone H* is an area between Zones F, G and C, which appears to consist of an enclosure containing at least one of the active springs. It is complex to map since this is the current entrance to Benia for the residents, their animals, tractors and other farm machinery But it is not improbable that this area also

represented an important entrance way for the medieval town. This area is also clearly important for the study of the water-supply system. The spring enclosed is, it can be assumed, one of those remarked by Benia's early visitors and is a source presently tapped outside the city walls. The enclosure observed in the survey has both wall-lines and towers, not dissimilar to those of the medieval city Therefore we have in Zone H the possibility of studying the medieval water-supply system and the measures taken to protect it.

- *Zone J* is an area of terraces, separating Zones D and E.
- *Zone K* is the area which lies outside the city wall to the west.

Feature Plans A feature-plan was undertaken only in Zone C, using surface indications translated by remote plotting at intervals with theodolite and represented as hachures (for the area surveyed see fig. 3). Linear features were traced which should represent two phases of construction: those running east-west (on the south side) being apparently superceded by those respecting the line of the town wall. There are no clues as to the function of the structures of either phase. It is not clear from the topography whether the wall implied by the four towers seen between Zones C and D is a primary feature of the citadel or the town ; nor could be it seen whether the towers faced north or south from the wall line. The natural assumption would be that Zone C represents an early enclosure associated with the "citadel", and that the principal circuit of Benia (enclosing Zones D, E and F) is a development of a later date ; it is also possible that town and citadel were constructed together with a common circuit, but the citadel was later cordoned off from the town with wall built between them, with the towers facing outwards, protecting the citadel from the town (see below). The addition of the citadel to the town would appear a less probable option, but these alternatives could only be securely resolved by means of stratigraphic excavation.

Surface Collection [Intervention 2]. The surface of Zones A-F were liberally strewn with ceramic debris, comprising both pottery and building materials. A sample transect was taken along a central N-S axis across the zones of the monument ; the transect consisted of contiguous 5 square metre quadrats over most of its length breaking into 30 m samples at 30 m intervals at the north end (fig. 3). This was judged to be a justifiable economy of effort following examination of the assemblage from the first 40 5 m quadrats. The ceramic assemblages were recorded and inspected by Clare Dales (1992, ch. 3) ; a preliminary classification of the ceramics, undertaken by Pedro Jiménez, of the Centro Ibn Arabí at Murcia, divided the material largely by form and putative function (see appendix 1 and fig. 13). It has yet to be discovered if this classification is time-sensitive, but the assemblage as a whole belongs to the later middle ages (9th-10th centuries).

Preliminary analysis of the results from surface collection uses the coarse typology of forms and absolute quantities by sherd-count. The assemblage is dominated by Storage Vessels ("type 2") and Building materials, mainly brick and tile ("type 8"), and this material occurs in all zones. The quantitative distribution of material by type is fairly even, but it can be noted that Storage vessels peak in Zone A and Zone D, while the rarer types (lamps, incense burners, lids etc., types 4-7) occur in Zones A to D. Pottery wasters ("type 9"), indicating local manufacture, occur in Zones D and F The present analysis was intended principally to study the deposit using only coarse functional divisions of the ceramic assemblage (types 1-9). Whether the quantities of each sub-form offer more subtle variations in distribution, and what might be the significance if they do, has not yet been determined. It also remains to be seen whether a functional classification using analogies with "Islamic" material elsewhere is adequate for the Achir assemblages. It would also be enlightening to analyse the fabrics for a time-sensitive typology, determining which are the indigenous and which are the imported ceramics. Pending this work, a preliminary conclusion from the surface collection is that the ceramic assemblage represents an agricultural scattering, which has touched, in the main, a single phase, the final phase of occupation. The distribution of building materials implies that all zones were built up. In other words, the whole site, including the citadel, was occupied at the time of its desertion, and the whole site was subsequently ploughed. This would imply that the principal rewards of detailed non-destructive mapping of pottery and surface features over the whole interior would be the distribution of activities by function and rank for this final phase. This would be a useful result, but its feasibility depends on the sensitivity of the classification of the ceramics that is possible. At the same time, it should also be noted that the greatest densities of material were being retrieved from Zones A to D (the "high town") rather than Zone E (the "low town"). These upper zones also produced the greatest variety of material. This trend is likely to mean either that the strata in the upper zones lie less deep than in the lower, or that these strata have been more damaged by the plough, or that the upper town was occupied for a longer time, to account for the presence of more variety, assuming this variety is a sign of longevity All three of these effects are likely to be significant and to have caused the slight difference of character observable in the upper town assemblage. The upper town (Zones A-D), following this deduction, is both archaeologically richer and more vulnerable than the lower (Zone E-G).

Test Excavation [Intervention 1]. A sondage 15 x 3 m was excavated across the line of the city wall on the west side of the city (see fig. 3 for location, and fig. 6). The objectives here were to determine the depth and quality of the surviving strata inside and outside the city wall, and to determine the height of the surviving stone-work and whether it could be displayed as a monument.

During the design of the evaluation programme it was guessed that the city wall on the west side would have survived sufficiently to make of it a monument visible to the public. If this turned out to be true, it would have major implications for the research and management strategies, since it would counter any pressure to dig precious archaeological deposits inside the town purely for display purposes. If the city wall could be displayed without major archaeological commitments, the need for a displayable monument would be satisfied and the research programme could proceed independent of the presentation programme.

The outcome of this pilot study was highly satisfactory The city wall of the 'low town' circuit and one of its towers were exposed. They were both composed of large stone blocks jointed with clay and found to stand externally to 2 m high. The tower had been added over the face of a pre-existing wall, at least

*Figure 6. Benia, inner face of the town wall as revealed by excavación,
showing two phases of construcción (Ph. M. Carver).*

for the lowest 2 m , there were some signs that, above 2 m, it had been bonded into the city wall. The method of construction was therefore to construct an *enceinte* wall 2 m high and equip it with towers thereafter There is no reason to suppose a large interval of time between the commencement of the fortification and its completion. It was also discovered that the wall had originally been rendered over its outer face with white mortar The potential for monumental display thus exceeded expectations. The strata on the outside were archaeologically simple, a clay bank or rampart buried by debris from the collapsed wall. It is therefore eligible for rapid clearance with non-intensive archaeological monitoring.

The strata on the inside of the wall were, by contrast deep, and complex. The collapse of the city wall and other buildings had been punctuated by arable and pastoral activities over the centuries. The first collapse lay, however, over the walls of buildings which were almost certainly medieval in date. No constructed floors were defined here, but the ultimate phases of use were marked by very large amounts of broken pottery The natural subsoil was not certainly reached. There
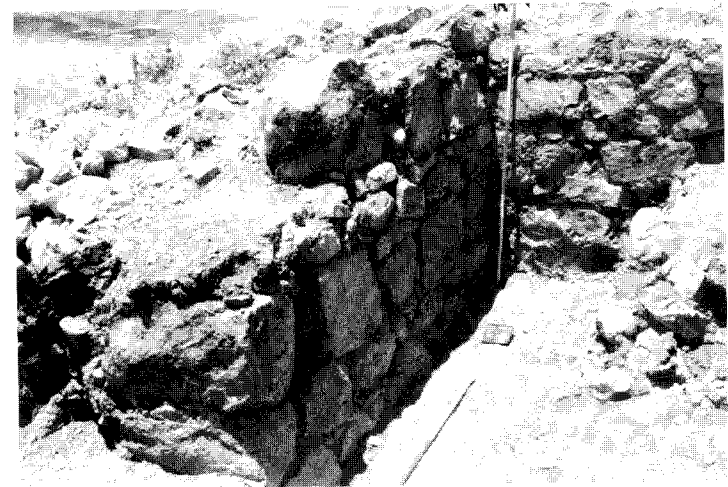
*Figure 7 Benia, outer face of the town wall,
with, left, part of an interval-tower (Ph. M. Carver).*

is at least 1 metre of stratification, covered, at a point close to the city wall, by up to a metre of rubble.

Model of the Deposit at Benia. The elements of the Benia deposit, according to the first stage of the evaluation, can be summarised as follows :

• Benia was occupied for an unknown duration at some period during the later middle ages (ie 9th to 15th centuries).

• It consisted of a town containing buildings with walls of stone, bonded with clay, and roofed with clay tiles. The pottery assemblage is dominated by storage vessels, for water, grain, etc.

• There are at least two major defensive walls : that enclosing the citadel and a part of the "high town" (Zones A to C) and that enclosing the remaining part of the high town (Zone D) and the low town (Zones D, E, F, J). The relationship between them is currently uncertain, and depends which way the towers are facing on the wall between Zones C and D. If the towers are on the

north of the wall, it is likely that the upper "high town" is older, or that its defences were intended to provide protection from the town as well as outsiders ; 10th century Fatimid rulers added such a defended citadel for example at Cairo (Rogers 1976, 52). On the other hand, it is possible that the towers lie on the south side of the wall, in which case the low town was the first to be fortified, and the high town was a collaboratively planned addition. Alternatively, the whole defensive structure was planned and erected at the same time. All the zones of the connurbation appeared to have ended together.

• Archaeological strata are conserved and legible to a depth of 1 metre in the interior of the city walls where they are protected by a mantle of rubble (tested in INT 1, Zone J). This depth is likely to be less in the high town and greater in the low town, due to erosion down the slope from the former to the latter

• All zones have been cultivated at some time or another The procedure generally involves the removal and stacking of loose stones, and the ploughing of the upper 25-50 cm of deposit. Cultivation has often taken place within rooms of buildings ; this is expected to have allowed walls to survive to heights up to 2 m. Cultivation is likely to do more damage in the high town (Zones A to D) than in the low town where they are presumably better protected by erosion products.

• The surface mapping of ceramics will give a valid picture of the distribution of ceramic types, and thus different rank and activity in different parts of the town. But this picture risks revealing the situation in a single phase only (the last).

• The archaeological deposit is generally confined within the walled area as so far defined, except for a possible faubourg (Zone G) and a defended spring, possibly linked with the high town (Zone H). There are also indications that pottery from the intra-mural strata have washed out from under the walls (as at the north end), or been tipped over them.

• The western defences of one low town were originally covered in white plaster, and still stand 2 m high. There is no complex archaeological sequence stratified against the exterior of the wall at this point. With a small amount of clearance on the west side, the town of Benia could thus be presented as an effective monument without large scale attrition or extensive damage to the archaeological resource through excavation.

Evaluation of Achir Town (fig. 8)

Documentation. As with Benia, the first recorded visit to the site at the south foot of Kef Lakhdar (our site 82) is that of Capitaine Rodet in 1908, although he himself notes that there is a brief mention in Gsell's *Atlas.* Rodet records that the locals are unanimous in giving these ruins the name of "Achir" He defines the "town" as the part enclosed by a wall 2 m wide, but the wall was only visible at foundation level and there were no traces of any major monument above ground level within its *enceinte.* The interior was "completely cultivated" but faint lines of stone rubble suggested the lines of previous buildings ; and the regular character of the lines implied a degree of town-planning. Rodet also remarks that « outside the defences, in the cultivated fields, you meet numerous ruins probably of the same date in origin as the town of Achir » (Rodet 1908, 91). One of the ruins seenby Rodet could have been the monument which was subsequently examined by L. Golvin in 1954-56 (Golvin 1957, 1966) and has since entered the literature as the "Palace of the Zirid Emirs" (eg Scerrato 1976).

Excavations. Achir, town and palace, formed the principal targets of the first campaign of field work by the Achir Project Team in 1991. In the town, examples of the foundations of the town wall have been examined on the north and west sides, and a building in the centre of the site has been excavated (*C. d'A.* 1992, 23). The palace is currently the subject of a programme of excavation and restoration (*C. d'A.* 1992, 25). The palace site and the land between the palace and the town are discussed below

Aerial Photography. A high-level photograph was available which confirmed the shape of the fortified *enceinte* mapped by Rodet (1908). Faintly visible on the same photograph was an alignment of pits running north-south in the NE part of the town. This was anticipated to be an underground water-course or *qanat* (see below).

Topography. The area of the town was defined by its *enceinte* and by the large wadis which suggest limits to east and west. The area was planned at 1:500 and the result given in fig. 8. The principal feature is a large wadi which has cut through the centre of the monument, subsequent to its desertion. The town divides into six zones, as follows

• Zones A and B define the "upper town" within the enceinte. The "stone lines" seen by Rodet are strong here, particularly on the west side (Zone A). They may be interpreted (as Rodet did) as the lines of the walls of collapsed buildings ; or they may be contemporary terraces, on which buildings stood ; or they may be terraces constructed of loose stone for agricultural purposes long after the desertion of Sanhadjian Achir The strongest possibility, as at Benia, is that they represent all three ; that is, the visible stone lines are late agricultural terraces, but they reflect an earlier town plan. Some will, however, emerge simply as clearance lines, and it is possible that the "cairns" are likewise the result of field clearance.
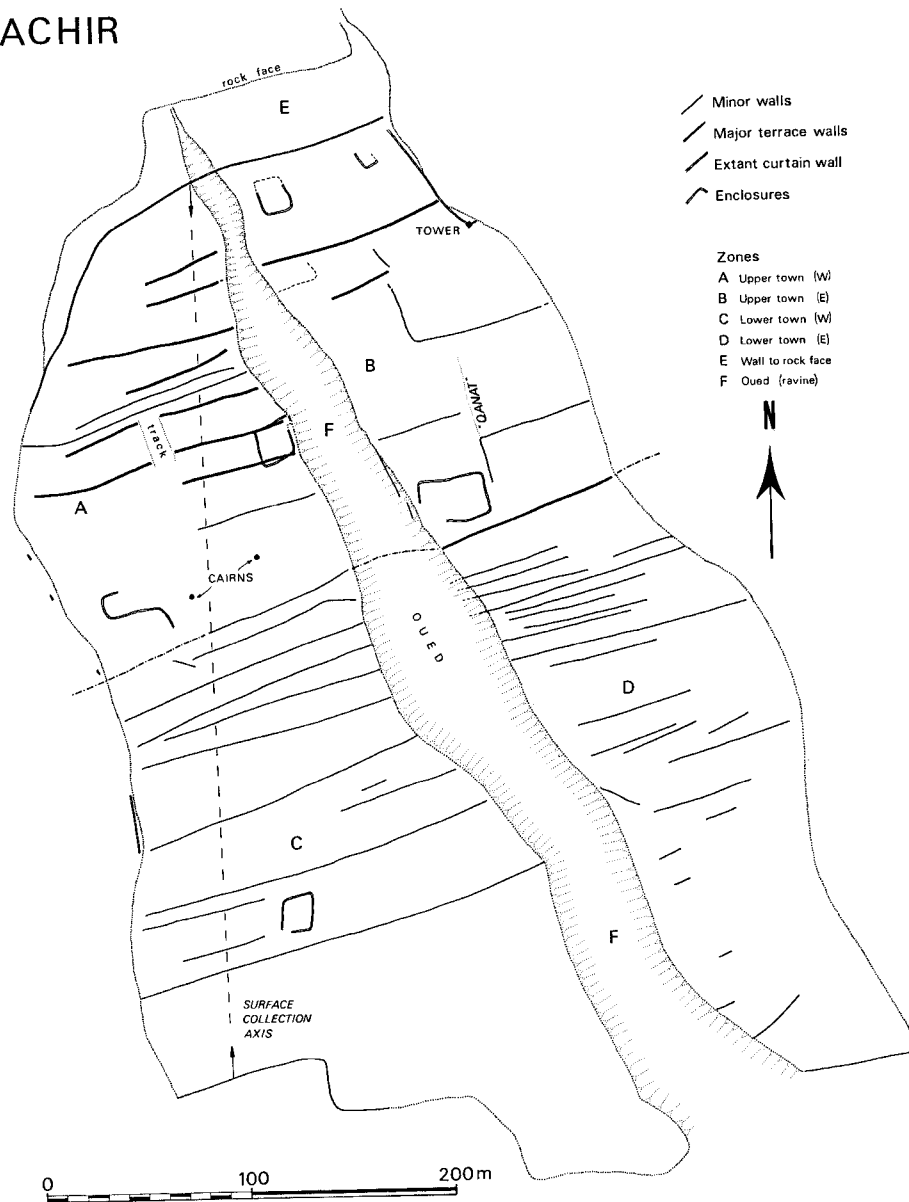
MARTIN CARVER & DJAMEL SOUIDI

ACHIR

Figure 8. Achir : town plan, showing recorded surface features (T Pearson after A. Copp).

The excavations of the town wall and of a building near the centre of the site are located in Zone A. Other quadrilateral areas in Zone B are also most likely to mark the sites of large buildings. That currently under excavation should offer an example of a large building in the central part of the upper town. It should also provide an indication of the stratigraphic relationship of the walls and floor of the building with the terracing, both earlier and later in date. This will assist greatly in making an accurate assessment of the vulnerability of the site. A preliminary assessment would suggest that, in this zone, the walls of buildings can survive up to 0,5 m high, and that floor levels can survive within them (*C. d'A.* 1992, fig. 29). An analogous stratigraphic situation can be projected for Zone B.

• *Zones C and D.* In this, the "low town", the terraces are regular but less evident. Zone C contains at least one quadrilateral which may indicate the site of a building belonging to the ancient town. Nothing is known of the stratigraphy in these zones, but a detailed assessment could be made by cutting back the shoulders of the central wadi. Where this has happened naturally, substantial walls emerge from beneath a cover of fawn sandy clay a metre or more below ground-level. These may of course prove to belong to some subterranean structure, such as a *qanat* (see below).

• *Zone E* lies to the north outside the *enceinte* and at the foot of the cliff which rises to Kef Lakhdar. It has yet to be mapped in detail, but it includes two important features : (1) rocky ledges which represent the highest ground easily accessible to Achir town and therefore, on analogy, with Benia, the potential site for a citadel, however diminutive ; and (2) the source of the water supply which sprang (and still springs) from the permeable strata at the foot of Kef Lakhdar. It is highly probable that attempts were made to canalise the water which emerged from the horizontal seam which runs at present ground level along the length of the mountain flank. It is also probable that later residents who exploited the land for agriculture adapted any urban water-supply system for purposes of irrigation. Such an adaption may have completely erased all surface traces of the earlier system. At present, the principal indication that there is here a water source of some importance is that no fewer than five wadis depart from the NE corner of Zone E.

• *Zone F* is a wadi cutting across the centre of Achir town, which might also owe its existence to the collapse of a former urban canalisation. Although now 25 m or more deep, there is little doubt that it has been naturally formed in the period posterior to the occupation of Achir, that is over the last 1000 years. Wall-lines in Zones A and B appear to have been interrupted by the wadi. Its relationship with the town wall to the north is, however, ambiguous giving rise to the thought that the wadi line was originally established artificially as part of the urban water-supply system. On disuse, the canalisation held long enough for the water to etch its own course until gravity took over.

Surface collection of pottery. The assemblage from Achir town was simpler in its composition than that at Benia, being dominated by storage vessels (type 2) and building materials (type 8). There were few table wares (type 3), lids (type 5) or lamps (type 6). The distribution of the material shows no significant variation either in type or quantity, along the north-south sample transect (fig. 8). It might be concluded that the whole area defined by the enceinte was equally covered by buildings and activities (and disturbed by subsequent cultivation).

Test excavations. Have already been undertaken in Achir town and enlarged into a full-scale investigation of the town wall and a central building (*C. d'A* 1992). These leave no doubt that, in spite of its present inscrutable appearance, the site has considerable potential for monumental display The town wall and the central building can both offer walls a metre or more high and contain floors which could be consolidated. There is also some reason to believe that the town was watered by means of an underground system which could be both excavated and possibly re-activated to carry water to fields beyond the monument.

Model of the Deposit at Achir The essential elements of the archaeological site at Achir town, according to the first stage of the evaluation are as follows :

• The monument consists of the ruin of an urban settlement, surrounded by a wall, containing buildings probably laid out according to a street plan, and supplied by an underground water system. There is every reason to believe, as other commentators have, that this is the first *Achir* and thus the first urban creation of the Sanhadja.

• Archaeological strata and walls are preserved to a height of 1 metre or more. Beneath the ploughzone the site has not, so far, been completely scrambled by ploughing. However, floor levels will begin to be touched in the upper part of the town if ploughing continues.

• The site is currently drained by the wadi which cuts across its centre. Although this wadi has a capacity which should carry the water of the wettest season, there is continuous erosion from its shoulders, wet or dry, which is gradually reducing the area of the archaeological site.

• Non-destructive methods of exploration are currently not promising. Detailed hachure or contour planning will give information mainly on recent agricultural use, apart from in Zone E which should be more productive. Ceramics lie on the surface over the whole length (north-south) of the town slopes, but they offer no great variation in the types represented. Geophysical survey has yet to be tested.

Achir Palace and the land between the town and the palace sites. Reconnaissance and Evaluation

Systematic reconnaissance and evaluation of the palace site (fig. 9-11) and the land which lies between the palace and the town site have yet to be undertaken. Rodet's comment (cited above), that ouside the defences of the town lay 'numerous' ruins, probably of the same date in origin as the town of Achir is an important statement which raises questions about the status of the "palace" and needs testing with a programme of reconnaissance and evaluation over a wide area. At the palace site itself, information which will be helpful to a full evaluation is contained in the publications and archive of L. Golvin (1957, 1958, 1966 ; see also Lézine 1969). He records that the site was discovered by M Tabuteau and that the place was known as Beniat el-Rahmoun. Carved stone
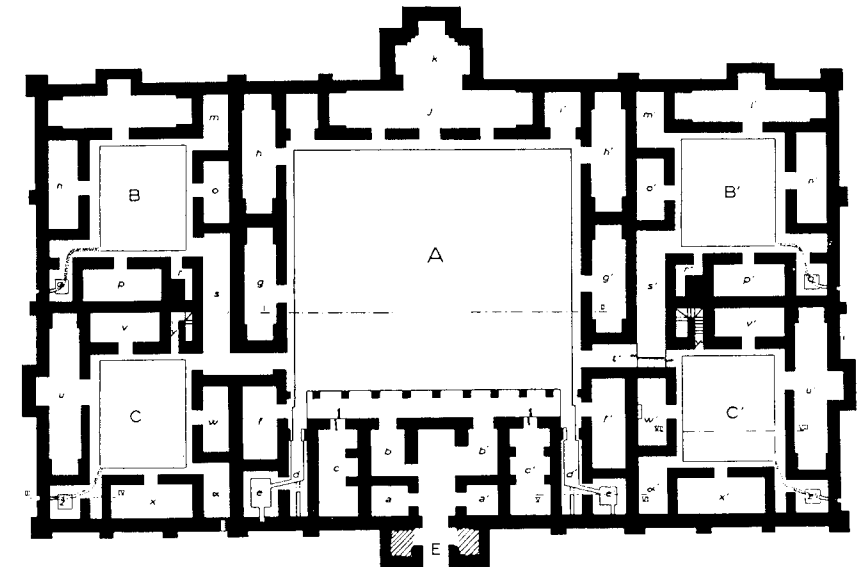
Figure 9. Achir Palace, Plan (Source Golvin 1966).

discovered on the site implied an Islamic context for the building. Golvin claims to have excavated the whole palace, apart from one room, during the periods 13 March - 31 May 1954, and 1 November - 31 December 1955 (Golvin 1966, 58). Golvin was convinced that the building was a palace, if not *the* palace of the Zirid emirs and supposed a structure which stood originally 11 m high, citing the mosque and palace at Mahdiya (Media) which he suspected to have been built by the same person. It might be suggested that the distinction between a palace such as that at al-Ka'im at Mahdiya (Marçais, 1960) and an 8th century *ribat*, such as

Soussa (Grabar 1987, fig. 51) is a fine one, but the plan of the Achir building suggests a formal role, and currently occupies a prominent place in the architectural history of the Mediterranean area. The following paragraph is a paraphrase of comments very kindly provided by Sibylle Mazot.
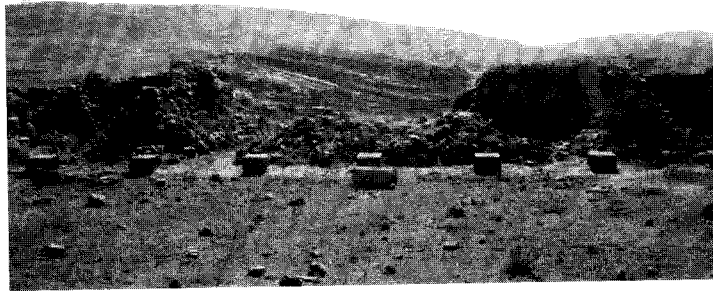

Figure 10. Achir Palace, looking S towards Benia (Ph. M. Carver).

Figure 11 Achir Palace, detail of exterior wall, east side (Ph. M. Carver)

The planning of Achir's palace is based on a tripartite organisation : a central courtyard flanked by two ranges and headed by a T-shaped main room, which comprises a cruciform hall with three alcoves, fronted by a corridor ["k, j"

on fig. 9]. The tripartite organisation and the T-shaped formula derive from oriental traditions existing before the spread of Islam, and aspects of both are transmitted to the architecture of Sicily Achir could well have been a source of inspiration for architectural ideas coming from the orient and spreading to Sicily In Achir, if not in later Sicily, the central position of the cruciform room strongly implies an official function. (Sibylle Mazot, personal communication, based on her *L'Architecture normande de tradition islamique en Sicile, conquête et échanges*, thèse de doctorat, Université de Paris-I). However, so far only the site of the visible building itself appears to have attracted archaeological attention. South of the present ruins are a series of terraces which deserve careful investigation, since they may conceal a garden, which in turn might provide a surer diagnosis of the range of functions of this establishment than is possible from the archaeology of the ruins themselves.
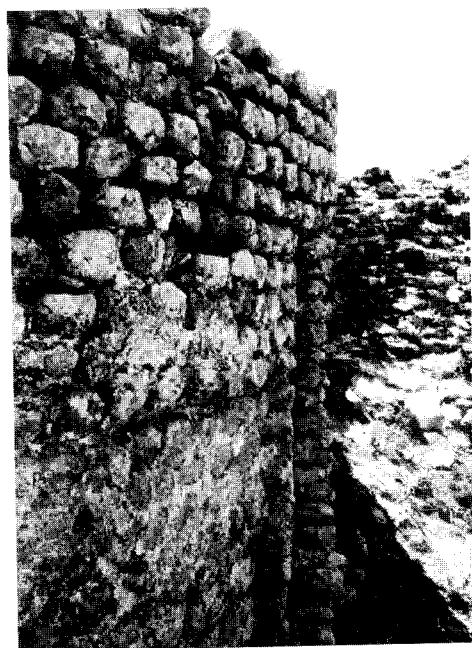
Menzah Bent es-Soltan

No evaluation has yet been attempted for Menzah Bent es-Soltan (fig. 12), and the following remarks are suggested by the documentation and a preliminary reconnaissance trip. Menzah Bent es-Soltan lies on the north side of the Kef Lakhdar range, and thus strictly speaking outside the Achir basin. However, its proximity, traditional association with the name of Achir, enigmatic character and likely early medieval date prompt its inclusion in studies of Achir. It is moreover the best known as well as the most controversial monument in the area, and earlier visitors have routinely associated it with Achir For Berbrugger, the then editor of *Revue Africaine*, who visited in 1852, Menzah Bent es-Soltan was itself the site of the town of Achir « so long and so vainly sought » and his informants seem to have been of the same opinion (Chabassière 1869, 119, 121). Rodet's map (1908, 101) implies that he, at least, saw Menzah Bent es-Soltan, Achir and Benia as a single system, and Marçais (1922 ; 1954, 89) continued what has become a tradition by including all three sites under the rubric of "Achir"

The site is notoriously inaccessible. Berbrugger arrived from the col carrying the Ain Boucif road to the north, while Chabassière ten years later and Rodet at the turn of the century both approached along a path from Achir town (Chabassière 1869, 116 ; Rodet 1908, 89). Menzah Bent es-Soltan lies at about 1300 m above sea level and occupies a narrow spur, little more than 250 m long and 50m wide, projecting northwards from the Kef Lakhdar range. The site is a well-defined citadel, enclosing an area about 250 x 25 m with a wall which survives 2-4 m high. The descriptions of Berbrugger Chabassière and Rodet, when compared with observations made on visits in 1992, imply that the monument has deteriorated very little in the last 100 years, or indeed in the period since its

initial construction. The defensive wall is built with fitted stone jointed with very hard, high-quality mortar The technique of construction is quite unlike any of the wall fabric seen at Benia, Achir town or Achir palace. The principal building seen by Chabassière and Rodet remains well defined in the centre of the site (Building F). Its plan is culturally unspecific, offering, like the site as a whole, no immediate parallels, and assignable to periods from Byzantine to Ottoman (Chabassière 1969, 116). In 1992, there was pottery on the surface, which is similarly undiagnostic. A heap of carved/cut stone lay near the entrance from the neck of the spur (at point B on the plan), but revealed nothing of its provenance or cultural affiliation.

Figure 12 Menzah Bent es Soltan, detail of wall construction.

The walls which enclose Menzah Bent es-Soltan follow the lines of the bare rock which provide their foundations, both in the horizontal and the vertical planes. This makes the fortification almost invisible even from 200 m away The view from the summit of MBS is of the north rockface of the Kef Lakhdar range to the south and the immediate valley to the north. *Contra* Chabassière (1869) the site has very little field of view in any direction. These factors add greatly to an impression that Menzah Bent es-Soltan was sited for concealment not for domination, an impression not diminished by the name itself (Refuge of the Sultan's Daughter). Strategically, it would have had its most effective role opposing an enemy from the north (and the sea) rather than the south (and the

desert). This might imply that the site is an early Berber creation, built to a pseudo-Classical design and confronting Byzantine expansion.

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The group of sites in the Achir basin constitute an important resource for the early history of Algeria, Islam and ultimately for the Mediterranean. The preliminary evaluation has suggested that the sites are well preserved archaeologically, and further detailed evaluation, followed by research excavation, and a curation and presentation programme will be productive. Although the interpretation of the group must be uncertain or controversial at this point, the research potential must be considered high. It is not excluded that Menzah Bent es-Soltane, in default of other cultural affiliations, belongs to the early Berber period. The "palace" of Achir may prove to belong to an early phase of the Islamic conversion , and Achir town and Benia, its nearly contemporary successor, provide as perfect a pair of deserted 10th century "new towns" as the archaeology of north Africa has to offer

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Appendix 1. Ceramics at Achir. A preliminary typology

Description by Clare Dales, drawn from information and identifications by Pedro Jiménez, Centro Ibn Arabí, Murcia (Spain).

0 **Unidentified pieces**

1 **Kitchenware**

1.1 Coarse, open vessels. Wheel spun. Generally red clay with large (0,51 mm) inclusions. Can have handles or lugs. Sometimes simple incised decoration.

1.2 As above, except vessel is a closed type.

1.3 Open vessel, for the preparation of cous-cous. Red clay, wheel spun. Slightly finer than 1.1/1.2. Holes in base for steam.

Storage Vessels

2.

2.1 Large jar. Like Roman 'Dolium'' Immovable storage jar for cereals. Narrow necked, coil construction. Often highly decorated with incised Kufic script or stamped geometric designs.

2.2 Large jar. For storage and transport of water Approx. 40 cm high. Wide, globular body and narrow neck. Old examples, two or three handles. Never glazed to allow cooling of contents through evaporation. Fine clay, few inclusions. Ring construction.

2.3 Smaller jar. For water transport. As above except approx. 25 cm high. May have spout.

2.4 As above but less than 20 cm high.

2.5 Travelling water bottle. Very fine clay no inclusions. Globular body no base. Two handles or small loops to suspend vessel. Very narrow neck (stoppers never found, presumably cloth or wood).

2.6 Small ointment jar. 10 cm high or less. Fine clay, ring construction. Glazed both sides. Usually no decorations.

2.7 Zoomorphic jugs. Medium sized, 30 cm, jugs. Most common forms are bull or lion. Glazed.

2.8 Jar. 30 cm high, no handles or neck. Globular body. Internal glaze for easy cleaning.

2.9 As above, but less than 30 cm in height.

Tablewares

3

3.1 Cup or drinking bowl. Open form, fine clay, often pale (almost white), few/no inclusions. Less than 16cm in diameter. Wheel thrown. No handles, ringed base. Glazed inside and outside. Polychrome, underglaze decoratin. Colours are green (copper) and brown/black (manganese). Very common form in 9th-11th century Islamic Spain. Very durable pottery as is fired twice.

3.2 Dining plate. As above, but 16-21 cm in diameter. Sometimes two holes on base ring for hanging.

3.3 Serving dish. As above, but more than 21 cm in diameter.

3.4 Small jug. Less than 20 cm in height. Fine clay internal and external glaze. Body pear-shaped. One handle and spout.

3.5 Small bottle. Cylindrical body with shoulders near horizontal. Internal and external glaze.

Multi-Purpose

4

4.1 Large all-purpose bowl. 50 cm or more in diameter Coarse and heavy with large inclusions. Truncoconic, flat base, no glaze. Simple decoration, slip lined often red. Sometimes burnished to create impermeable inner surface.

Associative/Complementary Use

5.

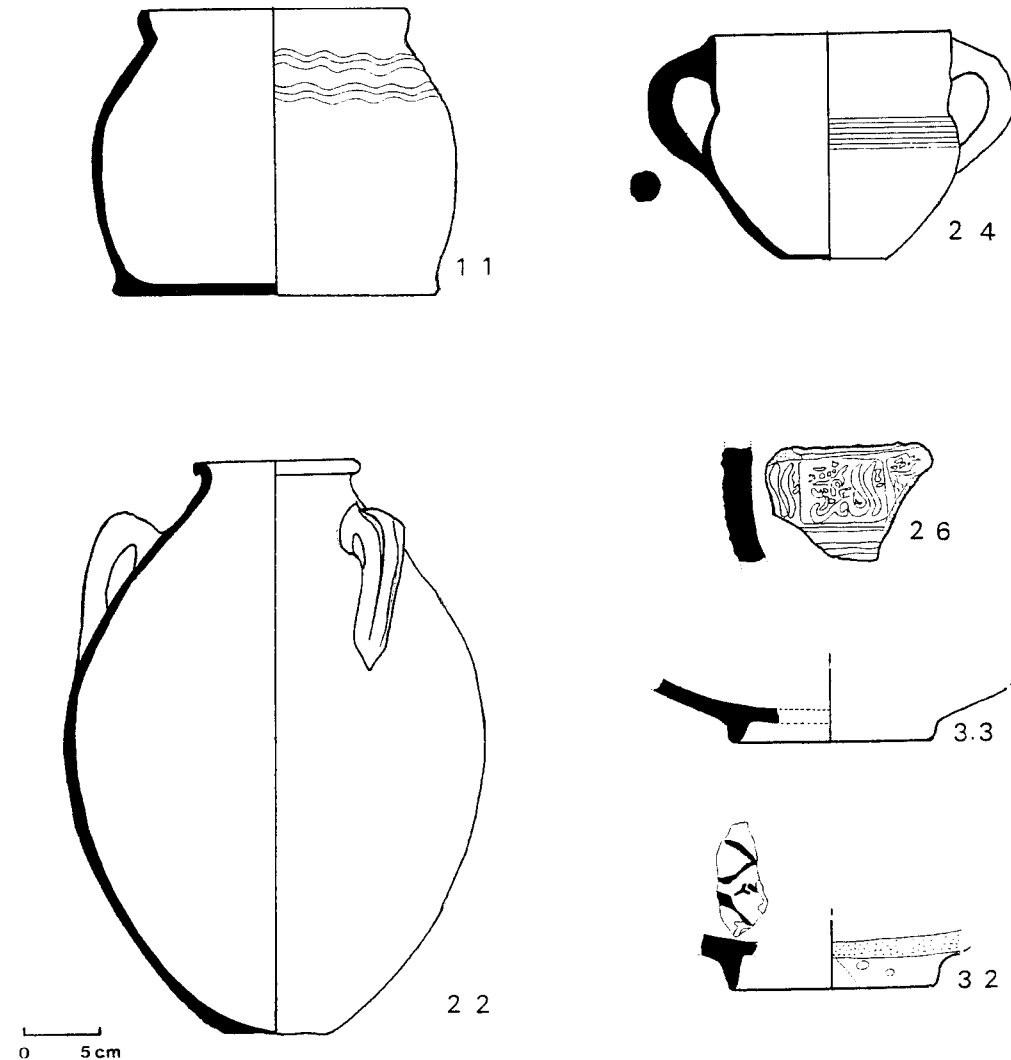5.1 Lid. Type encompasses all lids, so forms vary.

Figure 13. Pottery form-types from surface collection at Achir Town and Benia (C. Dales after P. Jiménez).

MARTIN CARVER & DJAMEL SOUIDI

5.2 Stand for large jar (eg type 2.1/2.2). To catch condensation dribbling down outer surface. Usually coarse, flat with small rim, but forms vary with the jar to which they belonged.

6.   Fire Associated Uses

6.1 Lamps. Generally less than 10 cm in diameter. Fine reddish clay, few inclusions. Predominantly open form with deep rim in section for oil and spout for wick. Unglazed, although inner surface may be burnished.

6.2 Portable furnace. Coarse pottery, large inclusions. Divided body Lower portion ; cylindrical with strengthening internal column. Small fire window Upper portion ; truncoconic without base. Two sections divided by ceramic grate. Item made in three pieces but is permanently fixed. Prone to breakage and often bear marks of repair work.

6.3 Incense burner. Fine, often pale, clay. Double walled. Glazed on outer surface or outer wall. Outer wall decorated with pierced decorations and sometimes with green and brown/black slip underglazed designs.

7   Potters' Artefacts

7.1 Potter's trivet. To space pots in furnace. Very hard due to repeated firings. Unglazed, undecorated and made of coarse clay.

7.2 Ceramic stick. To form shelves in kiln. Coarse, unglazed and undecorated.

7.3 Stamps. Occasionally for potter's mark. More often for designs such as those found on type 1.1/2.1.

8   Construction Materials

8.1 Brick. Made of local clays, often reddish, with inclusions. Usually fired, although can be sun-baked.

8.2 Roof tile. Hemispherical, pale yellow Full of inclusions. Upper surface smooth, underside unfinished. Fired.

8.3 Well rings. Large (1 m diameter, 30-40 cm wide), ceramic rings. Fit together to line well sides. Coarse, full of inclusions. Fired.

8.4 Well top ring. As above, but slightly larger ring that is above ground level. Can have inscription, motif or geometric stamped design.

8.5 Drain liners. Conic sections made to fit end-to-end to form drains. Sometimes internal glaze.

8.6 Wall tile. Typically 5x5 cm 10x10 cm. Decorated and glazed. Decorations can be messages (or parts of messages if tiles are made to fit together), geometric designs or pictures of vegetables.

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Fortifications et fonctions portuaires sur le littoral atlantique musulman

par Christophe Picard

ABSTRACT *The development of the Muslim seafaring, since the Xth Century, on the coast of the Atlantic Ocean, was based on the existence of harbors. Some harbors are known from Arabian and Christian sources, some are known through Archaeology. These ports provide existence of the possibility to bring products from interior areas for export by sea. In towns like Sevilla or Saltes, the dār al ṣināʿa and the defenses were the mains constructions. Analysis of these buildings, in the area of the ports, make it possible to classify different kinds of Muslim ports of the Atlantic Ocean during the Middle Age.*

RÉSUMÉ. L'essor de la navigation musulmane sur l'Océan Atlantique à partir du Xe siècle a pu se faire par un réseau de mouillages permettant un cabotage régulier et saisonnier Les descriptions arabes et chrétiennes ainsi que les fouilles rendent compte d'une certaine diversité des infrastructures définissant un espace portuaire. Si un certain nombre d'escales permettaient d'acheminer les produits des zones intérieures jusqu'au rivage, sans habitat particulier, la plupart des édifices recensés avaient un aspect défensif. La reconnaissance de ces édifices permet l'amorce d'une typologie des mouillages.

De nombreuses études, historiques et archéologiques et des publications, comme celle qui accompagne l'exposition andalouse intitulée *Al-Andalus y el Mediterráneo* [1], démontrent l'importance du contexte maritime dans la civilisation arabo-musulmane d'Occident. Les recherches portent plus particulièrement sur les zones portuaires ; l'archéologie, à ce sujet, apporte de plus en plus en précisions, complétant les nombreuses études monographiques sur les principaux ports d'al-Andalus ou du Maghreb.

Dans cet ensemble occidental musulman, le littoral atlantique commence à susciter un intérêt qui est encore loin, toutefois, de ce que l'on connaît pour le

1 *Al-Andalus y el Mediterráneo*, Barcelone-Madrid (Lunwerg Editores), 1995. Série de mises au point sur les grands problèmes concernant l'histoire maritime d'al-Andalus.