THE VIEW FROM AWDAGHUST: WAR, TRADE AND SOCIAL CHANGE IN THE SOUTHWESTERN SAHARA, FROM THE EIGHTH TO THE FIFTEENTH CENTURY*

BY E. ANN McDougall

Survival in the Sahara imposed a fairly rudimentary lifestyle on the medieval pastoralist, but the social and economic relations which nurtured it were neither as intrinsic nor as unchanging as they might at first appear. Finding a window on to this way of life, made obscure by its itinerant nature and the passage of time, is not easy, nor is an attempt to trace change in internal relations using externally compiled sources which are few in number, variable in quality and uneven in temporal distribution. In this paper, an effort is made to meet these challenges by approaching the subject through the history of an oasis where many strands of Saharan life appear to have crossed. Awdaghust, the famous medieval caravan centre, appears a number of times in early Arabic accounts, and has recently been given considerable attention by archaeologists, geographers and historians. Its lifetime provides

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1 The use of these sources for the non-Arabicist historian has been greatly facilitated by the recent publication of edited French and English translations of accounts dealing with West Africa. See Joseph M. Cuq, Recueil des sources arabes concernant l’Afrique Occidentale du VIIIe au XVIIIe siècle (Paris, 1975), and Nehemia Levtzion and J. F. P. Hopkins, Corpus of Early Arabic Sources for West African History (Cambridge, 1981). Most of the translations used in this paper are from Levtzion and Hopkins, hereafter referred to as Corpus.

2 There seem to be many accepted spellings for this oasis. I have adopted the most recent English transliteration for this (and most other place and tribe names used throughout) from Levtzion and Hopkins, Corpus. (The town’s name Awdaghust is distinct from the name presently given to the archaeological site, Tegeadaoust.)

the chronological limitations for this investigation, essentially the eighth to
the end of the fifteenth century. During this period, the southern Sahara
inserted itself irreversibly into the history of West Africa. Berber-speaking
peoples moving gradually southward began to be economically and politically
significant in southern desert-side societies. The most dramatic of these
Une concession médiévale, implantation et évolution d’une unité d’habitation' (Thèse
soutenue à Paris I, 1981); B. Saison, 'Tegdaoust VI. Fouille d’un quartier artisanal'
(Thèse soutenue à Paris I, 1979). Of particular interest here are two contributions to
Tegdaoust I: J. Devisse, ‘La question d’Awdaghust’, 109–56, and Mohammed el-
Chennafi, ‘Sur les traces d’Awdaghust’, 97–107; and the following in Tegdaoust
387–98; idem, ‘La question d’Awdaghust (II)’, 533–8; idem, ‘Conclusion générale’,
539–56; Claude Meillassoux, ‘A propos de deux groupes Azer: les Giriganko-Tegdawest
et les Maxanbinnu’, 525–32; D. Robert-Chaleix, ‘Fusaioles décorées du site de Tega-
doust’, 447–513. For other publications concerning Tegdaoust/Awdaghust and additional
work on other medieval sites (Kumber Saleh, Azuggi, Région du Fleuve Sénégal, villes
anciennes) see D. Robert-Chaleix, ‘Recherches archéologiques en République Islamique
de la Mauritanie’, Journal des Africanistes, llv (forthcoming, 1985). Among the most
useful for historians, Robert-Chaleix notes the following: D. Robert, ‘Les fouilles de
métallurgie du cuivre à Tegdaoust (Mauritanie orientale). Découvertes et problèmes’, in
N. Ehard (ed.), Métallurgies africaines. Nouvelles contributions, Mémoires de la Société
des Africanalistes (Paris, 1983); D. Robert-Chaleix, ‘Lampes à huile importées découvertes
à Tegdaoust. Premier essai de classification’, Journal of Africanists, llll (forthcoming,
1984); S. Robert, ‘Archéologie des sites urbains du Hodh et problèmes de la désertification
saharienne au Moyen Âge’, in Colloque sur les problèmes de la désertification au Sud du
Sahara: le cas de la Mauritanie (Nouakchott, 1973; Abidjan-Dakar, 1975); S. Berthier,
‘Une maison du Quartier de la Mosquée à Koumbi Saleh (R.I.M.)’, Mémoire de maîtrise
(Lyon, 1978); S. Robert, ‘Rapport des fouilles archéologiques sur le site de Koumbi
Saleh’ (Institut Mauritanien de la Recherche Scientifique [I.M.R.S.], Nouakchott, 1980);
idem, ‘Rapport de prospection régionale et de fouilles archéologiques sur le site de Koumbi
Saleh’ (I.M.R.S., Nouakchott, 1980); J. Evin and S. Robert, ‘Études des datations 14C
d’époque médiévale: site de Koumbi Saleh’, in Records on datations 14C (New York,
1982); S. Berthier, ‘Étude archéologique d’un secteur d’habitat à Koumbi Saleh (Mau-
ritanie)’, Thèse de Doctorat de 3e Cycle, Lyon ii (Sept. 1983); B. Saison, ‘Azuggi: archéologie
et histoire en Adrar mauritanien’, Recherche, Pédagogie et Culture, ix, lv (Sept. – Dec.
1981), 66–74; Abdel Wedoud Ould Cheikh et B. Saison, ‘Vie(s) et mort(s) de
al-Imam al Hadrami. Autour de la postérité saharienne du mouvement almoravide
(XIᵉ–XIIᵉ siècles),’ (I.M.R.S., Nouakchott, 1983); B. Tandia, ‘Sites d’habitats anciens
sur la rive mauritanienne du Fleuve Sénégal’, Mémoire de fin d’études, Ecole Normale
Supérieure (Nouakchott, 1983); M. Sognane, ‘La métallurgie ancienne du fer dans la
Vallée du Sénégal’, Mémoire de fin d’études, Ecole Normale Supérieure (Nouakchott,
1983); D. Robert-Chaleix and M. Sognane, ‘Une métallurgique ancienne sur la rive
mauritanienne du Fleuve Sénégal’ in Métallurgies Africaines; R. Vernet, ‘La préhistoire
de la Mauritanie. Etat de la question’, Thèse de Doctorat de 3e Cycle, Paris i (1983);
A. Holl, ‘Éssai sur l’économie néolithique du dhar Tichitt (Mauritanie)’, Thèse de
Doctorat de 3e Cycle, Paris I (1983); N. Lambert, ‘Les industries du cuivre dans l’Ouest
préhistorique en Europe méridionale et en Afrique du Nord-Ouest’, in Mélanges Balout
(Paris, 1981), 361–6; idem, ‘Nouvelle contribution à l’étude du Chalcolithique de
Mauritanie’, in Métallurgies Africaines; Biddih Ould Ahmed Salem, ‘Essai de répartition
spatio-temporelle des populations néolithiques et protohistoriques de la région de
peoples, at least in the annals of local tradition, were the Muslim Almoravids. But other Berber, and later Arab, groups were no less instrumental in shaping social and economic change.4

Change in the southern Sahara depended on the resources available at any given time, who had the ability to exploit them, and how such exploitation was organized. If we can uncover the relationships which existed between peoples and resources during the early medieval period, we can begin to trace later development as a function of changes in these relationships. In the case of Awdaghust and its human geography, we must consider the effects of climatic factors, fluctuating population levels, and the emergence of a viable, inter-regional salt commerce. It will become apparent that the economic growth of Mauritania’s central Adrar-Tagant region was critical to the town’s fortunes and fate. Seen in a broader context, such growth shaped Saharan relations with the great Sudanese empire of Ghana as well as providing the economic foundation for the emergence of a socially stratified Saharan society by the late medieval era.

EARLY SAHARAN LIFE AND THE OASIS OF AWDAGHUST

Mauritania’s earliest civilization was neither nomadic nor pastoral. A humid climate in the Adrar-Tagant supported an extensive neolithic population of sedentary cultivators and herders. Evidence suggests that most of them were black, and it has been argued they were Soninke or ‘proto-Soninke’ in origin. Work on the Dhar Tishit region has traced an agricultural civilization to between about 2000 and 300 B.C. which then disappears from archaeological history for almost a millennium.5 By the ninth century, when Arab sources


inform us of the existence of the kingdom of Ghana, cereal-growing agriculturalists identified in Mauritanian traditions as ‘Gangara’ had probably been established in the valleys and wadis of the Trab el-Hajra (central Mauritania) for some time. It is not unlikely their settlements knew an antiquity comparable to that of the Soninke kingdom itself, which if oral traditions are to be believed could mean several centuries. Gangara settlements clustered further south in the Assaba, however, tended to be in upland locations and were probably established somewhat later (though certainly by the tenth century). Recently explored sites show evidence of terracing, field enclosures and drainage canals, but no irrigation. Gangara agriculture was ‘dry’, distinguished by its dependence on annual rainfall. ‘The discovery of the Gangara lands’, writes geographer Charles Toupet, ‘demonstrates that this [early] desert-edge civilization rested on a stable agricultural base, [was] well-established, relatively dense and capable of producing cereals [especially millet] in abundance.’ The temptation to see the Gangara as remnants of the earlier neolithic population is strong, but should be resisted at this stage of research. The period prior to the ‘shrinking’ of the Tishit civilization experienced such severe drying conditions that the region’s lakes disappeared. We cannot overlook the likelihood that this trend continued, possibly for centuries. The silence of the archaeological record may reflect a very real abandonment of the area as a consequence of drought, or at least of annual rainfall levels insufficient to support dry agriculture.


Levtzion, Ghana and Mali, 3; Toupet, Sédentarisation des nomades, 157–61, and map of location of Neolithic, Bafur and Gangara sites, 156; idem, ‘La vallée de la Tamourt en-Naaj (Tagant)’, Bulletin de l’I.F.A.N., sér. B, xx (1958), 77. Traditions are agreed that these ‘post-neolithic, pre-Islamic’ villages belonged to black people called ‘Gangara’, ancestors of the present-day Soninke (Sarracolet).

No one (yet) seems able to provide dates for the various aspects of Gangara civilization. Toupet argues on the basis of al-Bakri’s reference to ‘black brigands and robbers’ infesting the Azginan mountains that the Gangara had established themselves in the Assaba by the tenth/eleventh centuries. These ‘upland locations’ may reflect a search for a more defensive position, or as Toupet points out, a search for better-quality soils and water supplies: Toupet, Sédentarisation des nomades, 157–60; see also S. Daveau and Ch. Toupet, ‘Anciens terroirs Gangara’, Bulletin de l’I.F.A.N., sér. B, xxv (1963), 193–214; Paul A. P. Munier, ‘Ruines Gangara dans l’Assaba (Mauritanie)’, Notes Africaines, lxxiv (avril 1957), 34–5.

Toupet, Sédentarisation des nomades, 159–60; quotation Daveau and Toupet, ‘Anciens terroirs Gangara’, 211.

Daveau and Toupet raised the question some years ago: ‘Anciens terroirs Gangara’, 210, 211. Recently, Munson, ‘Archaeology’, 462–3, has made an interesting argument in favour of this continuity with reference to the Soninke kingdom of Ghana, but the hiatus in the evidence (from c. 300 B.C. to c. A.D. 500–600) still speaks louder than superficial resemblances in architecture and ceramics. His suggestion that Azer, a Soninke/Berber dialect spoken in the commercial oases of the Adrar–Tagant–Hodh in the Middle Ages, had its origins in ‘the final phase of the Tichit Tradition’ (c. 600–300 B.C.) is not totally convincing. From what we know of this ‘trade language’ its origins were more recent,
This would appear to have been the case in the Adrar, where traditions recall that a people known as 'Bafur' established themselves some time prior to the main infiltrations of northern Berber pastoralists and traders. Though fables about them abound, and no chronology can be attached to their settlements, the knowledge of irrigated agriculture and date-palm growing they brought with them (and which allowed them to develop an Adrar no longer suitable for dry agriculture) suggests northern origins, possibly the Draa region. In spite of legends depicting them as Black, Jewish, even Christian, they were probably Berbers of the same Znaga origins as their more famous Almoravid cousins. They were distinguished by their preference for the sedentary life of oasis cultivation. Though they would eventually be absorbed by immigrant Berber pastoralists (often as tributaries), traditions claim that in the eleventh century the Bafur had developed many rich oases and had accumulated, if not a large population, at least a relatively wealthy one.

and its use fairly closely confined to groups involved in central Mauritanian commerce. Munson's theory that the Soninke speakers of the Dhar Tishit were 'encapsulated' by Libyo-Berbers and that this gave rise to Azer does not really explain why it was not more widespread, especially after several centuries, why it would be adopted by selected Berber tribes, and why it would also take root in the Adrar (Shinqiti, Wadan) long after Soninke cultivators had moved south: see below, nn. 119-21.

10 Modat, 'Populations primitives', 379-86. The traditions he collected suggest they arrived during the first centuries of our era and co-existed with black (Gangara?) cultivators. In the eighth century, Berbers in the Draa area were converted to Islam and during the second half of the century would have begun their infiltration into the Adrar–Tagant. From time to time they were able to challenge the supremacy of the local 'black race'; the Bafur remained cultivators. See also Capt. Huguet, 'Les populations primitives de l'Adrar mauritanien: les gites bafor de la subdivision d'Atar et quelques autres', Bulletin du Comité de l'Afrique Française, Renseignements Coloniaux, iii (Mar. 1927), 119-24; A. J. Lucas, 'Considerations sur l'éthnique Maure et en particulier sur une race ancienne: les Bafours', Journal de la Société des Africaniest, i, ii (1931), 151-94; Norris, Saharan Myth and Saga, 65, 80, 127.

11 According to Norris, 'Bafur (Ba ṭawr = 'Bull father') [is] a vague and general term applied to pre-Ṣanhāja [Znaga] inhabitants of the Western Sahara, part Berber, part negro, part Semite': Myth and Saga, 139. Toupet is convinced of their white Berber origin: 'Sédentarisation des nomades', 155, 157. Thomas Whitcomb's work on the powerful Kunta group has disclosed evidence pointing strongly to Znaga origins, irrespective of their occupation. 'It would seem likely that they [the Bafur] were simply an old Znaga tribe which may have been of considerable importance, but which was defeated, possibly disgraced, and absorbed by other tribes.... The original form of the name of the region of the Adrar may have been Adrār an Bafur, 'the mountain of the Bafur', as suggested in the accounts of ninth/fifteenth-century Portuguese explorations': Thomas Whitcomb, 'New evidence on the origins of the Kunta', 2 parts, Bulletin of S.O.A.S., xxxviii, i and ii (1975), 103-23, 403-17: i, 120, n. 85.

12 Toupet, Sédentarisation des nomades, 155-7.

13 Huguet, 'Populations primitives... gites bafor', 119-24, passim. Norris presents an intriguing account of the Adrar conquest by the Almoravids in which wealthy but 'non-numerous' Christians were said to be in control of the plateau oasis, and populous, powerful but 'to no extent wealthy' herders occupied the valleys. While the description of the economic development of the Adrar at the time is probably reflective of reality, the role of various groups of Christians, 'huge dogs trained to fight', and pagan Negro Bafurs evokes the 'strange ideas' of the medieval Arab geographers Norris speaks of earlier: see his discussion of 'Yemenite "two-horned" conquerors and the people of the veil' in
The foggy historical era between the fourth and eighth centuries also saw the region peopled with Berber-speaking pastoralists variously known in the sources as Azenegue, Aznagá, Znága and Şanhâja. In spite of the popularity of Şanhâja in European works, it has recently been argued (convincingly) that the term derives from an Arabic deformation of Znága (or Aznagá); hence Znága would seem the preferable identification of the immigrants who were probably of the same origin as their sedentary Bâfûr contemporaries. Generally-held beliefs that pastoralists like the Znâga were or could be self-sufficient would seem to have little substance. In addition to a natural desire to vary their diet, pastoral communities have to consider the effects of seasonal changes in pasture, water, climate and breeding on the milk and milk products of their animals. Generally speaking, milk production is of insufficient quantity and quality during the dry season to nourish fully the population it can support the rest of the year. Foodstuffs obtainable from cultivators are often consumed as supplements during these periods.

Secondly, a milk-based diet is sorely lacking in carbohydrates and sugars, both of which are contained in agricultural products like cereals and dates.

Myth and Saga, 26–93, esp. 65. In fact, this semi-legendary account may represent a real insight into the evolution of the Bâfûr from early Znäga goat and sheep herders who became increasingly involved in developing the Adrar's potential for date-palm cultivation. This is consistent with Huguet's contention about the region's ability to support a privileged few in the rare mountain oases and the growth of a differentiated social constitution, as well as Whitcomb's theory about Bâfûr origins: Huguet, loc. cit.; Whitcomb, 'New evidence' I, 120, n. 85.

This belief and the historical evidence which has nurtured its growth in the context of the western Sahara is discussed in my 'The Sahara reconsidered: pastoralism, politics and salt', African Economic History, XII (1983), 265–288. Since writing this article in which the term Şanhâja is employed, Whitcomb's argument has convinced me that Znâga is more appropriate. My thanks to Michael Brett and Humphrey Fisher for drawing Whitcomb's discussions to my attention.

Whitcomb, 'New evidence', I, 114, n. 1. Norris retains the use of Şanhâja, distinguishing 'Znäga' as 'a name of a Berber dialect still spoken by some inhabitants of south-west Mauritania. The word is related to Şanhâja and Zanziga which may represent dialectical variations. Znäga (Şanhâja) is also a pejorative term in Mauritania to describe the lahma or vassal class': Myth and Saga, 228–30, n. 36, quotation n. 45. The ambiguity of the term and its meaning is underscored by the fact that in some parts of the western Sahara, 'it refers to a specific warrior tribe, the Idaw 'Ish, whose chiefs claim descent from the Almoravid chiefs': Whitcomb, loc. cit.

Most of the studies on pastoralism in recent years comment on these issues in passing; some give them more direct attention: J. Nicolaisen, Ecology and Culture of the Pastoral Tuareg (Copenhagen, 1963), 209–13; Stephen Baier and Paul E. Lovejoy, 'The desert-side economy of the Central Sudan', Int. J. Afr. Hist. Studies, VIII (1975), 551–71; Susan E. Smith, 'The environmental adaptation of nomads in the west African Sahel', in Wolfgang Weissleder (ed.), The Nomadic Alternative: modes and models of interaction in the African-Asian deserts and steppes (Paris, 1978), 75–96 (compare her chart of milk, meat and grain consumption, p. 80, with Nicolaisen's, p. 216). For the most complete study of the needs of pastoralists and their herds, as well as pastoral production in the real sense of the food value of herds, see G. Dahl and A. Hjort, Having Herds: Pastoral Herd Growth and Household Economy (University of Stockholm, Stockholm series in Social Anthropology No. 2, 1976). Their findings show that there are substantial differences between the quality and quantity of milk produced by different animals and that seasonal variations and periodic droughts are not felt equally in the milk production of each.

Smith, 'Environmental Adaptation', 76–80; P. Rogon, 'Problèmes des Touaregs du Hoggar', in UNESCO, Nomades et nomadisme au Sahara (Recherches sur la zone aride...
And thirdly, pastoralists make use of a wide variety of cultivated plants as medicinal agents, among which dates, henna and millet are important 'general purpose' ingredients. In brief, the products of sedentary agriculture play multi-purpose roles in the lives of pastoralists. Though in a historical context we will never fully understand them all, we should be aware of the relation between the vitality of the oasis and the size and wealth of the surrounding pastoral population. In such a symbiosis, changes in one could not help but affect the other. 

This was no less true of the Berber camel-herders who, by the late ninth century, controlled the town and hinterlands of 'Ghust'. According to al-Bakrī, whose information probably dates from the tenth century, the oasis of Awdaghust

[is a] large town (madina) ... there is one cathedral mosque and many smaller ones ... Around the town are gardens with date palms. Wheat is grown there by digging with hoes, and it is watered with buckets ... Excellent cucumbers grow there, and there are a few small fig trees and some vines, as well as plantations of henna which produce a large crop ... [there are] wells with sweet water. Cattle and sheep are so numerous ... Honey is abundant, brought from the land of the Sudan. The people of Awdaghust enjoy extensive benefits and huge wealth. The market there is at all times full of people. ... Most of the inhabitants ... are natives of Ifriqiya [Tunisia] ... but there are also a few people from other countries ... [They own] slaves so numerous that one person from among them might possess a thousand servants or more. 

No. 9, 1963), 61–3; R. Capot-Rey, 'Le nomadisme des Toubous', ibid., 91; G. Hardy and Ch. Richet, L'alimentation indigène dans les colonies françaises (Paris, 1933), introduction and 142–5; L. E. Sweet, 'Camel raiding of North Arabian Bedouin: a mechanism of ecological adaptation', American Anthropologist, LXVII (1965), 1132–50, esp. 1138. According to Sweet, 'access to a market, to water supplies in summer, and to cultivators' surpluses of dates and wheat are essential ecological relations of camel pastoralists...'.

18 A. Leriche, 'Phytothérapie maure: de quelques plantes et produits végétaux utilisés en thérapeutique', in Mélanges Ethnologiques, Mémoires de l'I.F.A.N. no. 23 (Dakar, 1953), 268–306. There is some very useful information in this under-utilized study. The 'date cure' for nomads (like the 'salt cure' for their animals) is an important aspect of general health care. Dates and milk are taken as aphrodisiacs, and dates (preferably black dates) are used in a number of ways to treat biliousness and acne. In addition to its use in tanning and dyeing skins, henna is applied in ointments to wounds and sores, and drunk in an infusion for treatment of 'inner organs'. Grains, especially millets, are used in many ways to cure eye illnesses, fevers, poisoning, anaemia, asthma, dysentery and whooping cough, among others. Leriche's research was carried out in the twentieth century, but it is highly likely that plants as medicines had similar, if not identical, predecessors and should be given more attention (along with disease itself) in historical studies. Humphrey Fisher points out that Gustav Nachtigal's description of his Saharan experiences includes a great deal of medical information which historians would do well to make use of: Gustav Nachtigal, Sahara and Sudan, Eng. trans. with notes by G. B. Allen and Humphrey J. Fisher, vol. iv, London (1971), vol. 1, London (1974).

19 Too little attention has been given to the relation between oases and nomads in a historical context. Some of the issues involved are discussed in: R. Capot-Rey, Le Sahara Français, 1, 11 (Paris, 1953), 271–80, 303–67; Toupet, 'Sédentarisation des nomades', 212–16; Paul Dubié, 'La vie matérielle des Maures', in Mélanges Ethnologiques, Mémoires de l'I.F.A.N. no. 23 (Dakar, 1953), 111–251. 

20 Corpus (al-Ya'qūbī), 22.

21 Ibid. (al-Bakrī), 68, 73–4. Al-Bakrī compiled his work in Spain from a variety of sources, some of which preceded by at least a century the eleventh-century manuscript itself.
Other written sources have little to add to our picture of this intriguing oasis. In the late ninth century it was already a prosperous place, housing the ‘King’ of the surrounding ‘Sanhaja’, and by the tenth century Awdaghust was the main southern terminus for trade with Sijilmāsa.

In the year 1054–5 [wrote al-Bakrī] ‘Abd Allāh b. Yāsin invaded the town of Awdaghust, a flourishing locality (balad), and a large town (madina) containing markets, numerous palms and henna trees. This town used to be the residence of the King of the Sūdān who was called Ghana before the Arabs entered (the city of) Ghana. This (former) city was inhabited by Zenāta together with Arabs who were always at loggerheads with each other. The Almoravids violated its women (ḥarīmahā) and declared everything that they took there to be booty of the community. The Almoravids persecuted the people of Awdaghust only because they recognized the authority of the ruler of Ghana.

Though there is ambiguity in this passage as to who controlled Awdaghust and when, al-Bakrī may have been suggesting that Ghana’s influence extended to Awdaghust during the late tenth and early eleventh centuries prior to the Almoravid invasion. In contrast, the last reference to Awdaghust the ‘trading town’ is al-Idrīṣī’s twelfth-century account in which Awdaghust is described as a small market with little water and a population subsisting on camels. Two centuries later it was identified as an independent region, with a Muslim ‘sultan’, whose people depended on camels for their livelihood.

For a town with such a seemingly short-lived history, Awdaghust has received considerable attention. Its attraction emanates from the role it played as an intermediary between several medieval cultures. Fortunately, the findings at Tegdaoust (the archaeological site in southern Mauritania thought to be Awdaghust) augment our knowledge considerably, not to mention lengthening the town’s life-span. Apparently the urban centre of tenth-

22 Ibid. (Ibn Hawqal), 48, 49.
23 Ibid. (al-Ya’qūbī), 22; (Ibn Hawqal), 45–9; (al-Muhallabi), 197.
24 Ibid. (al-Bakrī), 73–4.
25 Ibid. (al-Bakrī), 73, 4. Though these statements were once thought to provide conclusive proof of Ghana’s rule over Awdaghust from the tenth century (see for example Levitzion, Ghana and Mali, 28), the most recent interpretation of al-Bakrī’s text is much more cautious. Hopkins and Levitzion note that ‘before the Arabs entered Ghana’ could refer to the period before the first Arab traders reached Ghana (the eighth or ninth century) and that the reference to Ghana’s authority could mean any time before the rise of the Almoravids, not necessarily that this was still the case in 1056–7: Corpus, 385, nn. 25, 26. There is also nothing to suggest that both references were to the same time period. It is quite feasible that Ghana’s influence in the region ebbed and flowed according to other factors like the strength of the Znāga.
26 Ibid. (al-Idrīṣī), 118. This appears to be inconsistent with archaeological evidence (see below).
27 Ibid. (al-‘Umarī), 274; (al-Dimashqī), 209. He adds that this ‘sandy town with palms’ is a very unhealthy place.
28 The Tegdaoust ruins are situated at 17° 25’ latitude north and 10° 25’ longitude west in the region of southern Mauritania which has a Sahelian climate. The ruins are nestled in the small sandstone outcropping of the Rkiz, an ‘annex’ of the Affolé, located in the western part of the great depression known as the Hodh. (See Map 1; also Suzanne Daveau, ‘Etude geographique de la région de Tegdaoust’, in Tegdaoust 1, 39–61.) The main site is about 700 × 400 metres in surface, with cemeteries lying beyond, and considerable evidence of habitation outside this zone.
Map 1. Awdaghust and the southern Sahara.
century fame had its origins in the seventh or eighth century and was only the third 'Occupation' of at least seven. Its large streets and well-built stone walls and houses (some Mediterranean in style) covered some 25,000 square metres. It grew out of two earlier civilizations. The first (seventh or eighth, early ninth century) knew no permanent buildings but left remains of extensive terracing, drainage canals and granaries; the second (ninth, possibly early tenth century) witnessed the introduction of mud-brick habitations and large enclosures. The urbanization which so radically transformed Awdaghust's physical appearance remained in evidence during Occupation IV (most of the eleventh century). But increasingly, mud brick came to replace the short-lived stone architecture, and during the later years of the Occupation protective well-walls and drainage canals began to appear in each of the courtyards.

The end of the eleventh century, continuing into Occupation V (the twelfth century), witnessed devastating destruction to walls and building foundations which must have necessitated at least short-term evacuation of parts of the town. Reconstruction followed quickly, older building materials being re-used in the new habitations. But towards the end of the twelfth century there are indications that important streets had been abandoned to encroaching sands, and the following Occupation (from the end of the twelfth to the end of the fourteenth century) confirms the onset of a process of desertification. The town's physical dimensions shrank considerably and the signs of a general impoverishment of life are unmistakable. From the early twelfth century, it would appear that nomads from the surrounding region began to install themselves in the neighbourhood of the town. A significant gap exists between this and the last Occupation, suggesting that the town was abandoned by the fifteenth century and only resettled some two centuries later.

29 The earlier identification of four strata (Tegdaoust I, 9, and D. Robert, 'Fouilles de Tegdaoust') has been considerably refined in the light of more recent analyses. There is as yet no agreement on the precise dating of these occupations. In Tegdaoust III, 554–6, Devisse presents the following hypotheses:

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<td>Occ. VII</td>
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He emphasizes that the datings are provisional and that the work of Robert-Chaleix, Vanacker, Saison and Polet offers modifications which will have to be taken into account in later estimations. I have chosen to use the more detailed analysis of Robert-Chaleix, whose dates differ slightly for Occupations III to VI (see below).

30 D. Robert, 'Fouilles de Tegdaoust', 480; Tegdaoust I, 9; Devisse, 'Conclusion générale', 554–6; and Robert-Chaleix, 'Tegdaoust V: une concession médiévale', whose chapters deal with each Occupation individually. Of particular interest is the chart she has compiled comparing each of the Occupations under the headings: 'Carbon 14 datings', 'Characteristic elements', 'Most common objects unearthed', 'Pottery industry', 'Metalworking', 'Daily life', 'Imported goods', 'Relations North/South', and 'Relations East/West'. Drawing on the research of Vanacker, Saison and Polet (in addition to her own) she provides, at least for the present, the most comprehensive view of the evolution of Awdaghust’s material culture: see esp. pp. 194–208.)
During each of these phases, water was the key to life in Awdaghust. Occupations I, II and III do not appear to have had difficulty supplying their populations, both human and animal. Circular wells (one in nearly every courtyard) during the early years of urban development indicate plentiful supplies and private control of water. The fourth stratum shows the first evidence of difficulties. Much deeper, square wells replaced earlier structures, suggesting shortages during the first half of the eleventh century. And the protective well-walls and drainage ditches of the later years indicate that at certain times of the year excessive (flood?) waters collecting in pools and streams threatened to pollute wells, caused damage to walls and foundations (noted above) and perhaps bred disease (especially malaria). Some wells, nevertheless, remained in use to the fourteenth century.31

But apart from what seems to have been a rupture between the fifth and sixth Occupations (around the end of the twelfth century),32 Awdaghust's civilization enjoyed a remarkable longevity of some five to six centuries. Its various stages of growth retained a material culture much influenced by 'southern' or Sudanese tastes and techniques of production, above all in the fabrication of cotton, jewellery and ceramics, and the working of copper and brass. In spite of evidence of imported crafts in varying quantities during each of the town's phases, the local artisanship prospered, showing signs of decline (above all in pottery and metal working) only during the twelfth century.33 Excavations on a nearby tell reveal an industrial zone where furnaces smelted ore, and where agricultural tools, building materials and ceramics were produced in great numbers. During the early Occupations, the volume was sufficient to have supported a regional market.34

Awdaghust's resilience in the face of changing architecture, population and climate suggests the presence of people whose roots were deeply implanted in the desert-edge. Unfortunately, archaeological evidence can shed little light on their identity, and the written sources are, if anything, even less illuminating. The influence of Mediterranean immigrants is clearly reflected in the use of stone during the third Occupation, and this is confirmed by al-Bakrî's reference to the town's many North African merchants. However, the evidence is not conclusive about the extent of this architectural influence.

33 Vanacker's work especially discusses in detail the changes which occurred in the production of specific ceramics, jewellery and metal in the course of the occupations and is summarized in her conclusions: Tegdaoust II, 171–6. Of particular importance was the virtual disappearance of copper working in the twelfth century. Both Vanacker and Robert-Chaleix attach considerable significance to this development. Vanacker notes that we may have been overlooking an important industry whose techniques were diffused as far west as the lower Niger, and whose decline was largely due to changes in international trade (173–5). Robert-Chaleix postulates the interesting hypothesis that Awdaghust's processing of copper into brass may have been providing Ghana with a means of exchange ('money') and that destruction of this industry was the real target of eleventh-century Almoravid raids: 'Tegdaoust V', 281–4.
34 Robert, 'Fouilles de Tegdaoust', 479–83; Vanacker, Tegdaoust II, 171–5. Vanacker argues that the level of artisanal activity at Tegdaoust during the ninth, tenth and eleventh centuries was such that we need to re-evaluate the role of the town, no longer to see it purely as a centre of salt-gold exchange and an intermediary in international trade, but as an 'active city' participating in exchange based on its own artisanal production (p. 173).
How far does it point to local adaptation to the exigencies of the site and its environment; to ideas imported from the North; or to a Sahelian–Sudanese population whose artisans specialized in a type of construction later seen in Timbuktu and Jenne? Techniques of production in metal working and ceramics, on the other hand, leave no doubt as to the Sudanese origin of these workers. Similarly, the labour required to cultivate the extensive groves and fields of dates, henna and cereals described by al-Bakrī was also, in all likelihood, from the Sudan. Neither merchants of local origin nor nearby Znāga were likely to have taken up the hoe; it seems, therefore, a reasonable hypothesis that the labour was imported, and represented a large proportion of the thousands of slaves al-Bakrī noted among Awdaghust’s inhabitants. Such slaves would almost certainly have come from the south.

Despite these areas of uncertainty, Awdaghust is well placed to tell us a lot about life in the southern Sahara during this formative period. Yet to date analyses have shed more light on North African politics and religion, or Sudanic state building and trade, than on local life. In his seminal work on West Africa some twenty-five years ago, Raymond Mauny established a framework for ‘the question of Awdaghust’ which has since been reiterated in one form or another by most historians: ‘[trans-Saharan] commerce gave birth to the southern Saharan towns; the departure of the merchants struck their death blow’. Even the early Tegdaoust research tended to emphasize the centrality of the trans-Saharan trade in shaping Awdaghust’s various phases of growth. Tegdaoust III, happily, begins to direct attention towards local factors: to the impact of a rapidly growing urban community on a rather fragile environment; to the effect of artisanal activity on supplies of wood and water; to the consequences of domestic animals (especially sheep) for local vegetation; and to the interaction of these developments with changes of a broader nature – regional production, trade and climate. Those involved with the Tegdaoust project during its fifteen-year duration have begun to evaluate the significance of their findings; on the other hand, they would be the first to admit that there are many questions which still remain unanswered, and many anomalies which remain unexplained. Awdaghust’s

37 Corpus (al-Bakrī), 68, 74; Raymond Mauny, Tableau géographique de l’ouest africain au moyen âge (Dakar, 1961), 341: ‘Although the texts do not speak specifically of them, the principal occupation assigned to the slaves was cultivation of the earth and the guarding of herds’. Mohammed el-Chennafi also suggests the intriguing possibility that slaves were used in Awdaghust as warriors: ‘Traces d’Awdaghust’, Tegdaoust I, 103.
38 Mauny, Tableau géographique, 479.
39 Devisse, ‘Question of Awdaghust’, 109–56, takes into account the role of locally produced and traded salts and makes the much-needed link between the regional and international economy. But there remains a twofold problem: his assumptions that the salt trade acquired its importance to Awdaghust in the context of the trans-Saharan trade, rather than the regional economy (as will be discussed below); and that there was only one source of salt supplying the Awdaghust market in the tenth century (see my discussion of this in ‘The Sahara reconsidered’. Devisse’s discussion of the role of the salt in the medieval political economy of the region is best developed in the important article ‘Routes de commerce et échanges en Afrique occidentale en relation avec la Méditerranée’, Revue d’Histoire Economique et Sociale, 1. (1972): 1, 42–73; 11, 357–97.
‘pre-urban’ and ‘semi-urban’ Occupations, for example, remain something of a mystery with respect to origin and economic significance. How did relations with the surrounding nomads change during the urbanization process? What significance should we attach to the various water supply problems which plagued the town? How do we account for the continuity of Awdaghust’s material culture over such a long period? What role did the Almoravid conquest – usually held to be a great watershed in medieval West African history – play in Awdaghust’s evolution? And how do we explain the town’s survival beyond the era when it served as a critical terminus for the trans-Saharan trade? We have yet really to look at the role of agriculture and craft production,41 and the servile population associated with it. And we have yet to pose the question of Awdaghust’s significance for the broader social and economic history of the region. Indeed, our image of Awdaghust and its human components, like our view of much of the southern Sahara, remains disturbingly one-dimensional.

**WAR AND TRADE IN SOCIETY**

The multi-ethnic, multi-coloured kaleidoscope of southern Saharan society did not settle quietly into place. War was very much a part of life from the turbulent ninth- and tenth-century jostling of the Znaga to the rise of the Almoravids in the eleventh century, to the twelfth-century insertion of the Idaw ‘Alī in the Adrar, and to the last of the major ‘catalysts’, the infiltration of the Arab Banū Ḥassān during the fifteenth and sixteenth centuries. Some suggest that the violent interaction these movements set in motion culminated in the seventeenth-century wars known collectively as Shur Bubba.42 Nevertheless it is arguable that war, or at least violent conflict, was intrinsic to pastoral existence in as difficult and capricious an environment as the Sahara. Pastoralists fought to ensure access to such necessary resources as pasture, water and salt. The seasonal and perhaps more critical regional variations in rainfall endemic to deserts could only aggravate such competition. Not surprisingly, some traditions attribute not only inter-tribal disputes but intra-tribal fragmentation to such conflicts.43

41 Not only the working of metal but the mining of copper may have been important in the region’s early history: Vanacker, *Tegdaoust II*, 173–5; see above, n. 33.


43 The question of conflict and its role in nomadic societies is addressed in a general sense in Pierre Bonte’s stimulating article ‘La Guerre dans les sociétés d’élite nomades’, *Etudes sur les Sociétés de Pasteurs Nomades* no. 133 (Les Cahiers du Centre d’études et de recherches marxistes, 1977), 42–67 (there are some problems, however, with his interpretation of the early Mauritanian historical data, pp. 58–60, in contrast to my analysis below). Of similar interest are the ideas of L. E. Sweet in ‘Camel raiding of North Arabian Bedouin’, where raiding is seen as performing several functions (social, political,
In Saharan society, the causes of conflict were not necessarily easily distinguishable. For example, it has been suggested that the early movement of Berbers into the western Sahara saw sheep and goat herders cut off from their pastures in the Middle Atlas and Draa by new Arab and Zanāta masters. Attempts to evade taxation and Arab attacks forced them to look increasingly towards the desert, and to concentrate more on the raising of drought-resistant camels. This gradual development into a camel-based people altered their lifestyle and concomitantly expanded their military potential. In the ninth and tenth centuries their interests, like their retreats in times of drought, turned towards the Sudan. But competition over resources continued, especially between the Gudāla and the Lamtūna tribes of the western regions, as each kinship group or clan claimed rights over its own pastures, transhumance routes and salt mines. Control of salt in particular 'cannot be ignored in the assessment of the relative strength of the Šanhāja [Znāga] groups and their motives and their wars'. Nor, it would seem, were the pressures of drought and famine inconsequential to the success of Ibn Yāsīn's proselytization and the emergence of the Almoravids. His teacher, Wajjāj b. Zalwī, was renowned further north for his mediation in times of drought, and as Norris points out, nomads were not loath to hear a preacher whom they believed could, among other things, console them in times of drought by bringing rain. It may have been a year of drought and hunger which finally occasioned the Almoravids' move out of the desert, first north to Sijilmāsa, then south to Awdaghust.

Economic) which tend to equalize resource distribution and are critical to the reproduction of the tribe. For examples in the context of the western and southern Sahara, see Corpus (Ibn Hawqal), 48, 71–3; (al-Bakri), 73; (Ibn al-Athīr), 160; (Ibn ‘Idhāri), 222, and Ibn Khaldūn, cited in La Chapelle, 'Sahara occidental', 47, 58, 60–2; Norris, Myth and Saga, 77–80, 92; Valentim Fernandes, Description de la Côte d'Afrique de Ceuta au Sénégal (1506–7), ed. P. de Cenival and Th. Monod (Paris, 1938), 69–73, 91–3. Fernandes offers us a glimpse of medieval transhumance wherein 300–500 men annually 'followed the rains', sending two men ahead to look for promising pasture, leaving one to 'take possession' of places where it had recently rained, while the other returned to fetch the tribe. 'Sometimes', he noted '[two tribes] approach the same place where it has just rained from different sides; and ultimately enter into battle [over it]'. On the impact of drought on tribal and herd structure: Sweet, 'Camel raiding', 1135–9; Dahl and Hjort, Having Herds, II 24–29. Conflict generated by seasonal moves to pasture, water and to date and grain harvests was frequently commented upon in early colonial reports on the region, for example, Rapports Politiques et Militaires, Archives Nationales, R.I.M. (Nouakchott), E2-103, 110. On the role of drought, famine and other ecological and climatic problems in tribal divisions, see Norris, Myth and Saga, 198–9, also his The Tuareg (Westminster, 1975), 76, 84, 100, 105. A case in point is the history of the multi-branched Kunta tribe found from the Mauritanian Adrar–Tagant to the Malien Azawad to Southern Algeria: see Whitcomb, 'New evidence'.

44 La Chapelle, 'Sahara occidental', 58–60.
45 Ibid., 60; Bonte, ‘La guerre’, 42, 50. La Chapelle points out that in the fourteenth and fifteenth centuries the Šanhāja were blocked from northern pastures by the Ma'qil Arabs ('Sahara occidental'), 67, 68).
46 Ibid., 92, 117, n.C; Corpus (al-Tādhil), 179, as cited by Conrad and Fisher, ‘The conquest that never was’, 31. This relationship between those seeking relief from drought and a willingness to follow an Islamic teacher is paralleled in al-Bakri's account of the introduction of Islam to the Sudanese kingdom of 'Malaal': Corpus, 82–3; repeated in a later account, pp. 368, 369.
47 Corpus (Ibn al-Athīr), 160; La Chapelle, ‘Sahara occidental’, 62–4. He calls references to the Almoravid movement into the Adrar as a jihād a 'deformation of history'.
The exigencies of pastoralism, however, not only provoked but also placed limitations on war. Weather variations, the limited carrying capacity of pastures and wells, and the seasonal availability of particular foods meant that men and animals were scattered and mobile for most of the year. Much of the great Almoravid movement may well have consisted only of seasonal campaigns, especially in the southern regions where the rainy season was not healthy for the herds. Moreover, it seems that animals were not the only ones affected adversely by prolonged absences from the desert. Like the sixteenth-century Moroccan armies whose vulnerability to disease forced them to abandon Gao after their victory, tradition remembers the Almoravids suffering terribly from the climate during their early expeditions, and still not completely acclimatized at the time of Abū Bakr’s death in 1087. In short, we should expect that ecological adaptations of men and animals shaped not only the pastoral culture of the medieval southern Sahara but the nature, duration, location and frequency of its warfare. This warfare nevertheless emerges as a starting-point of social and economic change within the region during the medieval period.

In the eleventh century the process of change was at a relatively early stage, but the importance of warfare to the society and the economy was made clear by the Almoravids. Though traditions credit the Almoravid leader Abū Bakr with dividing his people into those who herded animals, those who studied religion, and those who fought wars, what little evidence we have about these early warriors suggests that they were not yet considered ‘professionals’. Ibn Yāsīn’s call to Holy War was addressed to all western Saharans (men and women), and the movement rapidly encompassed all the tribes in the area. Norris proposes that ‘some of the noble and vassal Murābiṭūn [Almoravids] were Mujāhidūn but not all the Murābiṭūn were suggesting that the first raids were little different from those the Znāga periodically made into the ‘pre-desert’ zone. This is perhaps an excessively simplistic explanation which goes far too far in its attempt to counterbalance the received wisdom. Terrasse has suggested that population growth resulted in over-population: Histoire du Maroc, 1 (Paris, 1949), 217–18. Each uses Ibn al-Athīr’s thirteenth-century account compiled from unidentified sources in which the dates appear to be too late in every case. He has the movement leaving the desert in 1058/9 instead of 1054/5: Corpus, notes, 397.

49 Semonin, ‘Almoravid Movement’, 59. Al-Bakri mentions the Almoravids taking their herds for their annual ‘salt-cure’ at the salt-water wells of Agharaf, south of the Adrar, and to their summer pasture in the Amatlūs: Corpus, 67, 70. And Norris comments that ‘the Saharan milieu and the habits of its nomads could in themselves have compelled him to modify and adjust the ideals and practices he had learnt…’: ‘New evidence’, 263.


51 Abū Bakr b. ‘Umar al-Lamṭūnī was the successor to Ibn Yāsīn as leader of the Almoravids; he died in 1087. For an account of his role in the history of the Almoravids and the Sudan, see Levtzion, Ghana and Mali, 30–46.

mobilized fighters in a holy war... They had other, pastoral occupations’. As Ibn Tumart later wrote, the militant Almoravids were but shepherds and herdsmen, dependent on others for sustenance. But although they found most of their needs satisfied by the resources of the Adrar – rich date-palm groves, the Bafur to cultivate for them, and a community to supply their leatherwork and arms – this dependence was clearly associated with war. Craftsmanship is a case in point. War generally required substantial supplies of animals and equipment, especially arms. If the first was the product of pastoralism, manufacture of the latter required the skilled artisanship found in sedentary centres like Nûl Lamta (the Draa area) and the Adrar’s Azuggi. ‘Men of tents and desert dwellers’, we are told, sought arms such as ‘lances and shields, saddles, bridles and other things [they] ... urgently need from craftsmen’. Most renowned of Saharan arms manufactures were the lamt shields, light, pliable shields large enough to cover steed and rider. These were made from the skins of the lamt, a gazelle-like animal of the Adrar–Tagant found in the vicinity of Awdaghust, and because of their durability, craftsmanship and size were exported in large numbers to the Maghrib.

In the anarchy which followed Abû Bakr’s death in 1087, it is said, ‘all tribes remained more or less warriors...no tribe succeeded in acquiring predominance’. Nevertheless, changes did come about, leading to those differences within the nomadic, pastoral tribes which tradition attributes to Abû Bakr. ‘Some [tribes] clearly became tributaries, others found peace more profitable, abandoning under the pressure of events the métier of arms and little by little becoming zawâyâ... In time the zawâyâ multiplied and enriched themselves to the point where they were obliged to disperse’. The emergent medieval society, in which warriors became distinct from the

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53 Norris, ‘New evidence’, 263; Semonin, ‘The Almoravid Movement’, 45. The mujâhidin were those who fought in the holy war or jihâd against non-Muslims or ‘bad’ Muslims.

54 Norris, Myth and Saga, 85–6.

55 Ibid., 80. Some traditions argue that the Bafur were chased from the Adrar; others that they were made tributaries. Given that the Almoravids needed a workforce, and that several tributary tribes of the Adrar which later emerged trace their origins to the Bafur, the later seems more likely. See Norris, Myth and Saga, 152–6, and Huguet, ‘Populations primitives ... gites bafor’. Many of the tributaries or freed slaves reputedly of Bafur origin were ‘very rich’ in colonial times: pp. 124–5.

56 Cited in Norris, Myth and Saga, 85–6.

57 Corpus (al-Idrisî), 127; (Yâqût), 173; Norris, Myth and Saga, 80. Their use in Saharan warfare is illustrated in Ibn Hawqal’s accounts of Znâga warfare, Corpus, 48, and those of al-Bakrî, ibid., 68–9, 72–3. See also Farias, ‘The Almoravids’, 810–13; Norris, Myth and Saga, 105. For scattered references to Saharan medieval warfare see Corpus, 22, 28, 95, 98, 129, 133, 164, 165, 173, 179, 180, 185, 220–2. Unfortunately, we know nothing of the identity of these town-dwelling artisans, nor of their relations with the ‘men of the tents’ they supplied. In the nineteenth century such artisans seem to have been few in number and limited in talent. Al-Wasît reports that they formed a sort of caste who paid tribute to warrior tribes. The women worked in leather and the caste was endogamous: Ahmed Lamine ech Chenquiti, El Wasît, Etudes Mauritanennes No. 5 (Sénégal, 1953), 17–18.

58 References to these extraordinary shields, some four-and-a-half to five-and-a-half feet long and seven-and-a-half feet in diameter, are numerous; see especially Corpus, 127, 134, 173; on the lamt near Awdaghust, ibid., 69.


60 Ibid., 47. For a discussion of zawâyâ or Zwâya, see below, pp. 18–19, also footnote 61.
zawāyā or men of religion, has been likened to the organization of the Almoravid movement itself, in which Ibn Yāsīn attended to religious, judicial and financial affairs, while the Lamtūna chief dealt with the affairs of war as amīr. While this is an interesting observation, it does not explain the ‘how’ or ‘why’ of these post-Almoravid developments. It does not, moreover, account for the fact that studies of other pastoral societies have traced similar structural developments: the emergence of a class of warriors performing distinct social functions, yet related to other social groups by a growing array of institutionalized relations.

We move towards a better understanding of these developments by looking at the Almoravid movement as more of a dependent variable, its nature, organization, successes and failures shaped more by the dynamics of Saharan society than the reverse. The demographic history of the era remains unknown. While climate and pasture conditions may have favoured population and herd expansion, periodic drought or fluctuations in the water table could also have occasioned relative over-population even without population growth. Both trends were probably evident at different periods and, in spite of their different natures, would have generated the need to expand traditional pasture and water claims and engage in warfare. At the same time, war was potentially a means of accumulation, and hence of differentiation. In no scenario is this clearer than the emergence of Ibn Yāsīn’s early following among the Gudāla, when a series of raids on the Lamtūna produced the booty which gave the movement its initial power. Tribes who resisted unsuccessfully,


63 I would agree in large part with Levtzion’s argument that the Almoravids ‘did not reconstruct a tribal confederation which had existed in the past but introduced a new element into the segmentary politics of the Sahara. This politico-religious movement under the combined leadership of the spiritual authority and the tribal amīr mobilized the resources of the Sanhāja [Znāga] and made them rulers of the Maghrib and Spain’: Cambridge History of Africa, ii, 654. But I would take issue with his suggestion that this took place because of the introduction of a new element into the Saharan system. It seems to me that it was the exigencies of existing Saharan politics and kinship structures, and the nature and distribution of Znāga resources which shaped the initial movement. Norris’s account of the early history of the movement and the restraints placed on it by a leader conscious of the need to promote common interests and suppress dissension among the local Znāga also tends to support this analysis: Norris, Myth and Saga, 92–4.

64 Sweet, ‘Camel raiding’, 1135; Bonte, ‘La Guerre’, 49, 50. In other words, from a situation in which the art of war was merely one aspect of pastoralism, Saharan society was slowly moving towards one in which war was necessary for its very survival and reproduction. Hence the needs of war began to shape the character of pastoralism. For an insightful analysis of this process in the eighteenth-century Sahelian society of the Segu Bambara see Richard Roberts, ‘The Maraka and the economy of the Middle Niger Valley: 1790–1908’ (Ph.D. thesis, University of Toronto, 1978), 28–38.

like the Lamṭa, had one-third of their possessions confiscated. This practice was a means of ‘purifying’ the remaining property, but considering it was applied to all who were defeated, it also effectively augmented Almoravid resources. Moreover, these tributaries provided human reserves from which warriors could be drawn.66 What was developing here was an ideology of protection which served to reinforce (and legitimate) the complex process of social division and occupational specialization which was under way.67

The post-Almoravid period simply saw the expansion of these processes accelerated by the arrival of the various Arab groups collectively known as the Ḥassānīya, from the thirteenth century onwards. These took over from the Znāga the role of warriors, leaving the latter to the role of zawāyā or men of religion. By the fifteenth and sixteenth centuries, therefore, the tributary relations which had earlier characterized the Adrar had permeated the southern Sahara. Contemporary sources describe a stratified society in which occupational specialization closely followed ‘class’ lines, to which ethnic labels were then attached. Arab warriors battled with each other and dominated groups of ‘Azenegue’ (Znāga) fishermen, herders and merchants.68 Both, however, were superior to ‘Barbaro’ cultivators and ‘Ziguis’ hunters,69 as well as Sudanese slaves. All Arabs were nobles, rode camels, and were armed with javelins, lances and daggers; their raison d’être was to protect. They fought over access to water and pasture, and over the rights to Znāga tribute.70 But in spite of their common nobility, according to Fernandes, some emerged as ‘more noble than others’.71 Similar inequalities characterized the Znāga, who in spite of their oppression appear to have been quite prosperous. Though they had no ‘kings’, Ca da Mosto wrote that the richest among them were ‘honoured and obeyed to some degree by others’.72 And all Znāga considered themselves socially and economically superior to the ‘Barbaros’. These dark-skinned inferiors, who lived in towns growing wheat and dates, may have been descendants of the Bāfūr. ‘They neither sowed nor harvested for themselves, only for their landlords (hôtes); they live on dates.’73 They could also have been of slave origin, for though few references are made to slaves per se in the Portuguese accounts, slavery, as we have seen, was no stranger to medieval Saharan society.

The ‘tribus maraboutiques guerrières’ as Amilhat has appropriately

68 Whitcomb notes that the Portuguese rendering of the name, Azenèque, was actually closer to the indigenous pronunciation than the Arabs’ Šanhājā: ‘New evidence’, I, 114, n. 1.
69 Fernandes described these nomad hunters who lived among the Arabs as ‘a sort of caste, in a sense a profession and not a race’. De Cenival and Monod discuss the identities of Azenèques (whom they consider part of the great Šanhājan movement), Barbaros and Ziguis in the context of other fifteenth- and sixteenth-century accounts: Fernandes, Description, 73, 150–2, n. 140.
70 Fernandes, Description, 53–79, 91–9, 117, 121. See especially the notes which are not only explanatory but introduce comparative material which confirms the highly stratified and specialized nature of this society: pp. 142–56 passim.
71 Ibid., 71, 95.
73 Fernandes, Description, 81, 121: see also notes, 150, 1.
described the early zawāyā, were not distinguished by European writers. One Lamtūna tradition has a qādī of Abū Bakr’s army retiring to a zawāiya (religious establishment) with tā’ibūn (penitents), ‘who desired to cut themselves off for the purpose of study and devotion and to forsake activity and the bearing of arms’. But Norris sees this as an indisputable anachronism, ‘a late portrayal of an early form of conversion to devout religious practice’. In his view, ‘this so-called zawāiya was simply a place of peaceful religious devotion, or may still have retained a paramilitary function like a ribāṭ’, thereby reflecting the unstable marriage between religion and warfare which characterized this phase of the Almoravids’ growth. ‘In any event [if the zawāiya existed] the tā’ibūn must have been very different from those of the regrouped social classes in the fifteenth and sixteenth centuries.’ This regrouping of social classes, the combined result of Islamization and the processes of differentiation discussed above, not only identified the Znāğa as the zawāyā par excellence. Ultimately it produced client and tributary relations within the zawāyā sector itself. The basis of power was not dissimilar to that of the warriors, namely, the ability to protect. But in the case of the zawāyā it was the spiritual and material aspects of security which were important: security which the support of a spiritually powerful tribe could promise through prayer and mediation, and which a materially well-off tribe could provide in food, animals and a variety of useful commodities. It is the material basis of zawāiya strength which concerns us here. Fernandes described the Znāğa as a ‘peaceful people, very hospitable, who entered into war with no one’; though he did not use the term, he was clearly talking about zawāyā. He also identified them as the great and wealthy merchants of the region who undertook all the important commerce with ‘Guīnē’ (Sudan). The relationship we can trace between those who acquired zawāiya status and the commercial activities of the area indicates that the issue of economic growth requires further attention. It makes clear that the social development experienced by the southern Sahara was not based on accumulation from pastoral production alone.

Trade usually occupies a focal position in studies of the medieval Sahara,
although in the context of its agricultural and pastoral society, commercial exchange was not the only (and probably not even the primary) means by which different sectors of the economy were integrated. Nevertheless, inter-regional networks moved raw materials, manufactured goods and foodstuffs over long distances. Treated lamt skins from the Adrar, for example, were transported to Nūl Lamṭa for manufacture into shields. Though some were then exported to the Maghrib, many returned to the southern Sahara, along with a variety of arms and imported goods. Cloth came both from the north and the Sudan, as did millet. But as our sources concentrate on the more lucrative aspects of the trans-Saharan trade, we can only speculate on the nature of this inter-regional and local exchange. Initially, most goods probably moved within seasonal treks to pasture, water, salt and oases. In some places, temporary seasonal markets sprang up to facilitate exchange, and these in turn tended to attract more people and goods. The great ‘caravan centres’ of Sijilmasa, Walata and Timbuktu knew such humble origins, as did al-Idrīṣī’s ‘Azuggi’, which was probably ‘some temporary bedouin town, the raison d’être being seasonal pasture combined with the needs of the important trade in Lamt skins...’.80 The exchange commodities were mainly pastoral – milk, milk products, meat and goatskins (often tanned and dyed with locally grown henna). The production of agricultural and artisan goods (including worked gold) did provide surpluses for trade, but except for the gold and some leather destined for export, most appear to have been handled within the pastoral barter economy during the medieval era.81

Most, but not all. Salt and salt merchants were the important exception to the general rule. Desert salts were highly valued throughout the Sudan, regions rich in manpower and agricultural potential, but sorely lacking in good-quality salts.82 In contrast, salt was so readily available in Saharan pastures, wells and salt-licks that there was no need to exploit salts buried beneath the sands. No reason, that is, except to trade. The exploitation of Saharan mines by the tenth century confirms the existence of production intended for exchange, and the regularity of traffic strongly suggests the emergence of equally exchange-oriented traders. In the tenth and eleventh centuries salt from Awlīl (on the coast) and Ijīl (north of Adrar) was the basis of an extensive and important trade between Awdaghust and Sudanese kingdoms like Ghana and Kugha. For the former, it ensured ‘gifts and goodwill’; for the latter, a necessary foodstuff, a profitable export, and a


81 I think further reflection and research on Tegdaoust findings, especially metal working, will soon require that this statement be qualified and that inter-regional copper and brass trade will also prove to be exceptions to the rule.

82 For a discussion of the different salts available and the needs of the Sudan see my ‘The Ijīl Salt Industry: its role in the precolonial history of the Western Sudan’ (Ph.D. thesis, University of Birmingham, 1980), especially 199-225.
source of taxation.\(^{83}\) In some regions, desert salts were used as currency and their control became an element of government policy.\(^{84}\)

By the twelfth century, salt from Taghaza (north of Timbuktu) was probably contributing to supplies feeding the Sudan. Along a salt route leading from Ijil to Timbuktu, there sprouted a proliferation of prosperous markets which became a battleground for competing Znäga tribes. Wadan, Tinigi, Shinqiti, Tishit and Walata were the result of these military and commercial efforts. Significantly, most of the population of these oases, once warrior Znäga, emerged as zawâyâ by the sixteenth century,\(^{85}\) and commercial centres like Shinqiti, Tishit, Walata and Timbuktu became renowned for their clerical activity as well as for their trade.

The salt trade was probably the most lucrative in the region. By the turn of the sixteenth century, several merchant groups operated exchange systems which tied into the trans-Saharan trade through Wadan and Timbuktu, into the Atlantic trade through the Portuguese at Arguin, and into the Sudan trade in gold and slaves via the Niger River and Jenne.\(^{86}\) Znäga control of the industry stemmed from their organization of desert production. Though Awlil disappears from the sources after the twelfth century,\(^{87}\) we know the Masufla carefully regulated the affairs of Taghaza,\(^{88}\) and evidence suggests that the Idaw al-Hajj of Wadan and the Tajakant of Tinigi operated the Ijil industry.\(^{89}\) Wadan had become the 'principal town' of the Adrar by dint of its role as 'entrepôt for all the salt of Ijil', just as Timbuktu had emerged as 'the entrepôt for all the gold traded to the east as towards the west for salt'.\(^{90}\)

Given these developments, it is not surprising that Fernandes' description of Saharan society underscores the prominence of merchants, in particular Znäga merchants. Only they were trusted and welcomed in the markets of the Sudan. Moreover, though Arabs had the right to demand hospitality from them, which included rights to their animals, their food and their

\(^{83}\) *Corpus* (Ibn Ḥawqal), 46–7; (al-Bakrî), 81; see McDougall, 'The Sahara reconsidered'.

\(^{84}\) *Corpus* (al-Bakrî), 57; Cuoq, *Recueil des sources* (al-Muhallabî), 77–8.

\(^{85}\) Mohammed el-Chennafi, 'Traces d'Awdaghust', 101–3.


\(^{87}\) *Corpus* (al-Idrisî), 106, 107. He describes Awlil as supplying salt to 'all the towns of the Sudan' but by way of the Senegal River, rather than overland via Awdaghust. Ibn Saʿîd's mid-thirteenth-century mention of Awlil appears to be nothing more than al-Idrisî, repeated: *ibid.*, 184.

\(^{88}\) *Corpus* (Ibn Baṭṭûta), 282–5.

\(^{89}\) Fernandes, *Description*, 76–9; McDougall, 'The Ijil Salt Industry', 75–7. Two Znäga kings were said to control Ijil. Given that Wadan and Tinigi were both major centres of Ijil's trade and the Idaw al-Hajj and Tajakant were powerful Znäga tribes, the hypothesis is not unlikely. Nevertheless, we should not exclude the possibility that there were still other salt sources being exploited. There are some puzzling aspects of Fernandes' account and inconsistencies in his, Ca da Mosto's and Pacheco Pereira's descriptions of the number of salt bars a camel carried, which leaves room for question. See McDougall, *op. cit.*, 62–3, 67–9; Ca da Mosto, *Voyages*, 22; Levtzion, *Ghana and Mali*, 172.

\(^{90}\) Fernandes, *Description*, 82, 3.
women, it was in their role as merchants that the Znāga zawāyā most influenced the warrior-dominated culture. They contributed substantially to its material base through the payment of a regular tithe based on the merchandise they imported from the Sudan. Also, in response to the warrior's alter ego as 'protector', there emerged a special ethos which not only legitimized protection payments, but more importantly shaped the codes of conduct regulating behaviour between warriors and traders:

If it happens that a man, as respected as he might be, having taken a merchant into his protection, as is the custom of the country, pillages his cargo or anything else against his will, or kills him, this man is dishonoured, he and his children, and considered worthless. His parents scorn him and he is no longer admitted, nor are his sons, to the djemaa (council) of the tribe.91

But the merchant–warrior relationship also had the potential for conflict. Wars frequently took place between the Arabs of Brebish and Lodea, for example, over rights to Znāga tithes.92 Attacking another tribe's 'protected merchant' could also lead to war. According to Fernandes, 'if admission of guilt was not forthcoming immediately, the first tribe launched a "cruel war" on the other, such that one sometimes saw an entire tribe exterminated in this way'.93

These glimpses of southern Saharan life reveal its many contradictions, not least the ambiguous role of war as a means of both destruction and accumulation. Internecine conflict could reduce the resources of the defeated sufficiently to jeopardize their continued survival; it could also deliver increasingly valuable booty to the victor. Between the ninth and the sixteenth centuries, as Saharan commerce and production grew, the stakes of war rose considerably. The gap between the winners and the losers widened commensurately. Meanwhile, the ambivalence of relations between warriors and traders (a universal phenomenon?)94 was highly visible in the structural development which was under way in the society, especially as the process was inextricably involved with a deepening penetration of Islam. Cultural and behavioural patterns were developing concomitantly with occupational specialization of a religious, economic and political nature. These tended to entrench the socio-economic divisions which in turn had the effect of delineating distinctive 'ethnic' boundaries.95 But as the seventeenth-century

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91 Ibid., 70–3; quotations 94–5.  
92 Ibid., 70–1.  
93 Ibid., 94–5.  
94 Roberts explores a comparable tension in the context of the Segu Bambara State in the Middle Niger Valley: 'The Maraka', 44–52. Meillassoux has suggested a much broader relevance in the introduction to his The Development of Indigenous Trade and Markets in West Africa (London, 1971), 54–5. It would seem a logical extrapolation from the long-recognized ambiguity of the relationship between trade and war: while war can disrupt trade patterns, as often as not it is used to protect (or simply acquire) them; while war invariably destroys much in its path which might otherwise be traded, it can also provide booty (both human and inanimate) which, in turn, becomes marketable. Meillassoux develops the 'warrior-trader' theme and the implications of their relationship for early Sahelian political evolution in his 'The role of slavery in the economic and social history of Sahelo-Sudanic Africa', in J. E. Inikori (ed.), Forced Migration: the Impact of the Export Slave Trade on African Societies (London, 1982), 74–99.

95 The complex relationship between the formation of ethnic boundaries, the structuring of social (class) relations and the emergence of occupational specialization are explored by Fredrik Barth in 'Nomad–sedentary relations' and in F. Barth (ed.), Ethnic Groups and Boundaries (Bergen, 1969), 9–38. His analysis focuses primarily on the dichotomized
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Early medieval wealth invested in agriculture and warfare had tended to produce distinctive groups of dependent cultivators and specialized warriors by the eleventh and twelfth centuries. Through the salt industry, moreover, exchange had surpassed initial limitations placed upon it by rudimentary pastoral society. The development of a form of surplus readily convertible into a wide range of commodities was vital to the growth of specialized traders who broadened the scope of economic and political activity.97 Growing professionalism and specialization then brought with it new forms of social relations, in this case various forms of lordship and dependence, as well as introducing a role for indigenous ‘non-producers’ like clerics and scholars. An oasis like Awdaghust where warriors, cultivators and traders interacted was bound to experience the growing pains these changes produced. Awdaghust provides a window on the decline of Gangara civilization, the vagaries of a slowly drying climate, the beginnings of servile labour and the making of the zawâyâ. Awdaghust’s pre-urban Occupations may well have been examples of Gangara-style cereal cultivation, a great attraction for early Berber pastoralists. The emergence of the urban agglomeration (Occupation III) followed two to three centuries of regularized seasonal exchanges between herders, artisans, and farmers, and a concomitant growth in production in each of these sectors. By the tenth century the Znâga of

ethnic status of nomads and sedentaries, but much is relevant to emerging ethnic differences even among nomads. Two points of discussion are especially pertinent here. With respect to how and why people become associated with a particular group (and how and why they change ethnicities) he notes that migration and conquest play only an intermittent role, and that other processes are often more critical. (Economic factors are not infrequently involved, as his own studies have shown.) Secondly, keeping in mind ecology and available resources, he notes that when one ethnic group has control of the means of production utilized by another group, a ‘relationship of inequality and stratification obtains’. It can be inferred, then, that the stratification (as distinct from the dichotomy) at least initially has a causal base separate from the characteristics associated with the ethnicities involved, and that it can change fundamentally if the second group finds independent access to resources formally controlled by another: Ethnic groups and boundaries, 21–7.

96 Meillassoux has recently constructed a view of socio-political development for this same period which is similar in analysis and conclusions with respect to emphasis on the emergence of servile labour, a merchant class, and the professional warrior; see ‘The role of slavery’. But, pp. 76–85, he takes the existence of slavery and its requirements for reproduction as the key factor in an analysis which leads him to identify different stages of development, and a different chronology, from those suggested here. While I am indebted to Meillassoux’s stimulating ideas in this important article, it seems to me that this emphasis upon slavery as the chief consideration is excessive, and leads to an interpretation which, among other things, simply does not fit the chronology of the region’s economic and urban history.

97 On the importance of transferability of surplus and the inherent limitations of pastoral capital see Barth, ‘Nomad–sedentary relations’, 11–22. It is likely that other commodities (above all ceramics and metals) also contributed to this evolution, though probably to a lesser extent. (See note 81, above.)
Awdaghust seem to have experienced population growth both in men and herds. They were said to incorporate some 300,000 tents, thousands of camels, and herds of cattle and sheep which amply provided the Awdaghust market.\textsuperscript{98} Locally worked copper, brass and pottery knew their greatest level of production during the ninth and tenth centuries.\textsuperscript{99} And cereal cultivation not only expanded but diversified to included the figs, dates, cucumbers and henna noted by al-Bakrī. Though it has been argued that the Gangara (or the early cultivators, whoever they may have been) were driven out of the region as part of the inherent conflict between nomads and sedentaries,\textsuperscript{100} archaeological evidence tends to suggest this was not the case. Though there may have been a cultural rupture between the first and the following Occupations (the effect of the Berber/Znaga contact?), the material culture and artisanal production do not indicate a significant change in population.\textsuperscript{101}

The emergence of large enclosures and evidence that water came to be privately controlled emphasizes the dominance of the sedentary rather than the nomadic culture during the second Occupation, an impression heightened by the gradual disappearance of the rural elements (both pastoral and agricultural) by about the mid-tenth century. The arrival of an increasing number of Maghrebian merchants, the introduction of their tastes in architecture (the building in stone), and the complete urbanization of Awdaghust during Occupation III seem to have had surprisingly little impact on the style and methods of local artisanal production, which indicate continuity rather than rupture with past Occupations.\textsuperscript{102}

But there are indications that more fundamental changes were under way. One of the most significant of them may have been described by al-Bakrī when he spoke of Awdaghust’s oasis-type agriculture which required irrigation. Is it possible that even as Awdaghust knew its greatest development in terms of population and international repute, its annual rainfall was no longer sufficient, or at least sufficiently regular, to support the dry cultivation it once knew? The signs are by no means conclusive, but the Tegdaoust findings for the eleventh and early twelfth centuries (the fourth and possibly fifth Occupations) are consistent with such an hypothesis. The digging of deeper, square wells during the early eleventh century suggests problems of supply of a fairly regular nature, as do the numerous protective constructions around wells and the drainage ditches of later years. Ironically, though the latter resulted from seasonal excesses of rain and the former from shortages, they both suggest the presence of a long-term drying process. The indications are that the rains, when they came, came as torrents causing short-term flooding and giving few, if any, long-term benefits to agriculture. Recent climatic behaviour in Mauritania indicates that violent storms often follow several years of drought.\textsuperscript{103} In the case of Awdaghust, the destruction caused by the

\textsuperscript{98} Corpus (Ibn Hawqal), 48; (al-Bakrī), 68. ‘Tents’ in this context probably refers to a social unit as in the modern usage in which it represents a man, his wife, servants and children: Stewart, Islam and Social Order, xvi.


\textsuperscript{100} Levzion, Ghana and Mali, 6–7.

\textsuperscript{101} Devisse, ‘Conclusion générale’, Tegdaoust III, 554.

\textsuperscript{102} In fact, this continuity is stressed by Devisse, Robert-Chaleix and Vanacker.

rains was rapidly repaired, but the desertification which the unsettled weather probably signified was not so easily controlled.

These changes were accompanied by others. As production expanded and Awdaghust reached a population of some 5,000 to 6,000 people, we have argued that many among its growing body of manual labourers, well-diggers, domestics and artisans were of Sudanese origin and servile status. Robert-Chaleix postulates that many of the artisans and metal-workers may have installed themselves as ‘tributary workers’ under Berber authority, constituting an artisanal caste not unlike those common to the Sahel–Sudan. And al-Bakrí tells us that among domestics, Sudanese slaves were especially sought after as concubines and cooks. But it was the agricultural sector, with its intensive labour demands, which probably accounted for much of the augmentation in Awdaghust’s slave population. Though we know nothing about it from the written sources, local traditions regarding a servile group of mixed Berber-Soninke origin, the maxanbinnu, may be of some relevance. According to one interpretation, their name comes from maxa sere binnu, ‘black men of the King’, and they were employed as miners and transporters of salt from Ijil and Tishit on behalf of the king of ‘Wagadu’ (Ghana). Other traditions link them, in turn, to the similarly mixed Berber-Soninke people, the Guiriganke or Tegdawest, as they are referred to by the Moors. It is uncertain when the Tegdawest, who gave their name to the site, first established themselves in the region of Awdaghust. But a Guiriganke/Tegdawest clan is associated by tradition with the founding of Ghana, and is said to have provided one of its Maxa or kings. That, together with al-Bakrí’s assertion that Awdaghust was controlled by Ghana some time before the mid-eleventh century, gives at least the suggestion of a link between Awdaghust, Ghana, the Guiriganke and the maxanbinnu, while pointing to the character of Awdaghust’s early population.

104 See above, p. 12; the population estimate is from Mauny, Tableau géographique, 482.
106 Corpus (al-Bakrî), 73–4.
108 The connexion comes through a group called the ‘Tafanko’ or ‘Tafaranko’, a name sometimes given to a certain fraction of the Guiriganke, said to be former slaves (haratin) who at one time specialized in weaving and had as their slaves the maxanbinnu. (Meillassoux, ‘A propos de deux groupes Azer’, 526–7. The tradition linking the maxanbinnu to the Tafaranko (and hence, the Guiriganke/Tegdawest), comes from Ch. Monteil, ‘Notes sur le Tarikh es-Soudan’, Bulletin de l’I.F.A.N., sér. B, xxvii (1965), 492. Meillassoux notes that he found no evidence confirming this tradition (p. 528, n. 24), whereas el-Chennafi draws an even closer connexion by identifying the name ‘Tafaran’ with Tegdawest (‘Traces d’Awdaghust’, 105).
109 The only direct discussion of this question is presented by Robert-Chaleix, ‘Fusăioles’, Tegdaoust III, 510–13. On the basis of the diffusion of certain types of spindle-weights she postulates a migration of the Tegdawest from the Tishit to the Awdaghust region in the fifteenth century. El-Chennafi on the other hand implies a much earlier occupation, though he specifies no date. One might also argue that the evidence of ‘fusăioles’ links the migration to the Tafaranko, rather than the Tegdawest per se; hence, it does not preclude an earlier presence of Guiriganke/Tegdawest clans in the Awdaghust area.
Vague as our sense of this population is, the association of several groups of mixed ethnicity and different class is very much in keeping with the town’s geographical position\textsuperscript{111} and its Sudanese-influenced culture. More specifically, the traditional association of the maxanbinnu with slaves, with Ghana, and with the region’s salt industries, allows us to postulate a relation between Awdaghust’s use of servile labour, and its control of the salt trade.\textsuperscript{112} Salt, we have seen, was central to the commercial economy of the desert, and particularly associated with Awdaghust. According to Ibn Hawqal, the ‘King of Awdaghust had special relations with Sudanese kingdoms, who (stood) in pressing need of the goodwill of the kings of Awdaghust because of the salt which comes to them from the land of Islam. They cannot do without this salt...’\textsuperscript{113} In these circumstances, given the Sudanese character of the slave population of Awdaghust, it is very probable that slaves and salt helped to pay for each other in the commerce of the desert with the Sudan. By the fifteenth century Wadan’s central role in the western Saharan slave trade hints at the close connexion between this commerce and the trade in salt. There is every reason to think that, at an earlier date, salt was one important means by which Awdaghust acquired its slaves for the variety of purposes we have seen.

Ibn Hawqal is imprecise as to the role played by Awdaghust’s Znâga or Berber/Soninke in organizing the salt trade. We can only speculate that their commercial role was similar to that of other southern Saharan Znâga. At the same time it would certainly appear that, far from disrupting the commercial development of Awdaghust, the control of the entire region by the Soninke empire of Ghana served to expand both salt production and exchange. This hypothesis is consistent with traditions which trace the arrival of Soninke merchants known as Masna in the Tishit area, and the exploitation of the local sebkha by their slaves.\textsuperscript{114} Moreover, although the Almoravid raid on Awdaghust is usually assumed to have caused the town’s demise, this was clearly not the case. There is no archaeological evidence which indicates vast destruction from pillage and burning, and the rapidity and care with which reconstruction generally took place does not reflect a decimated population.\textsuperscript{115} ‘There is also nothing to suggest that the raid resulted in a foreign occupation; hence no reason to think that indigenous merchants were unable to continue with their affairs. Indeed, if the North Africans who were, according to al-Bakri’s account, the objective of the Almoravids’ wrath, did in fact depart as a result, this may even have benefited local merchants. Trade may have increased still further. Recently it has been argued that the Almoravids built up a thriving

\textsuperscript{111} Robert-Chaleix, ‘Tegdaoust V’, 281, discusses the significance of Tegdaoust’s position in the Hodh, surrounded by natural defences in the Tagant and Dhar Tishit–Walata to the west, north and east, but noticeably open to the south.

\textsuperscript{112} Ca da Mosto, Voyages, 17–19.

\textsuperscript{113} Corpus, 49.

\textsuperscript{114} Meillassoux, ‘A propos de deux groupes Azer’, 228–30. The Masna organized the exploitation of the Tishit salt sebkha which produces an inferior earth salt called amersal; according to one tradition they used maxanbinnu labour.

\textsuperscript{115} Robert-Chaleix, ‘Tegdaoust V’, 284. She argues that in the face of existing physical evidence the damage from excessive rains in the latter part of the century caused more disruption than can be attributed to the Almoravid raid.
gold trade with Ghana during their short stay in the southern Sahara.\textsuperscript{116} And imports from the north continued to flow into Awdaghust (although in declining quantity from about the mid-twelfth century).\textsuperscript{117} Both these findings make more sense in the context of an Awdaghust which maintained its pre-Almoravid role in the inter-regional salt commerce. And indeed, our general knowledge of commercial growth in the Adrar–Tagant–Hodh area during the twelfth and thirteenth centuries tends to confirm this view.\textsuperscript{118}

Awdaghust, for example, remained part of an expanded Ijil salt network, the parameters of which can be traced through the usage of an almost obsolete commercial idiom, Azer. Today this language (essentially a dialect of Soninke reflecting Berber influences)\textsuperscript{119} remains in use among only a few people, principally the Guiriganke/Tegdawest. ‘Azer’ is said to derive from the Berber ‘El Answar’, the name of a people not only associated with the emergence of the Guiriganke but also with the founding of the principal oases of the region.\textsuperscript{120} Hence, the use of Azer as a mediaeval market language in the salt-trading centres of Wadan, Tinigi, Shinqiti, Tishit and Walata, as well as Awdaghust, becomes a reflexion of the common origin of the oases, their

\textsuperscript{116} Levtzion, \textit{Ghana and Mali}, 137–41; Devisse, ‘Question d’Awdaghust’, 116. Farias suggests that the development of Azuggi (in the Adrar) and the old ‘Ţriq Lamtũnũ’ provided the necessary foundations for this thriving commerce. Recently undertaken archaeological work at Azuggi may provide us with a better understanding of this important stage in Mauritania’s economic history: see Paulo de Moraes Farias, ‘The Ţriq Lamtũnũ (XIth–XIIth c.) a trade route?’, paper presented at the Centre of African Studies, School of Oriental and African Studies, London, December, 1970, and Robert-Chaleix’s bibliography ‘Recherches Archaeologiques’ (forthcoming), references to Azuggi. This view of the Almoravids as encouraging commercial growth contrasts with a more traditional view that their movement disrupted western Saharan trade, as in La Chapelle, ‘Sahara occidental’, 70.


\textsuperscript{118} This argument is consistent with an interesting suggestion Devisse has made that Awdaghust probably retained an important economic position as a centre for raising transport camels: ‘Routes de commerce’, 60–1; idem, ‘Question d’Awdaghust’, 155, 156. Robert-Chaleix’s analysis emphasizes Awdaghust’s continuing role as a centre for the inter-regional trade in salt and cotton, though at a somewhat later date: ‘Fusairoles’, 510, 511. This still leaves us with al-Idrīsī’s puzzling information about Awdaghust’s twelfth-century decline. One possibility is that his information actually dates to a period shortly after the Almoravid incursion when the departure of North African merchants may have momentarily disrupted trade. It is also possible that problems with water supplies or short-term drought periodically affected the town, and that al-Idrīsī is describing a temporary phase.

\textsuperscript{119} Azer or ‘Azayr’ is a Soninke dialect ‘more or less contaminated by Berber’ which is almost extinct in present-day Mauritania. It seems to have been closely associated with the commercial development of the desert-edge and was widely spoken in the south-western Sahara until the fifteenth and sixteenth centuries, when it gave way to the languages of the Znäga and the newly arrived Banū Ḥassān Arabs. Norris describes it more generally as a ‘Sudanic…perhaps autochthonous language spoken widely in parts of the Western Sahara when its southern regions were subject to Ghana, Mali and Takrūr’. It survives in various place names like Shinqiti derived from Azer \textit{shi-n-gede}, ‘the horses’ springs’ and certain loan words. See Ch. Monteil, ‘La Langue Azer’ in Th. Monod (ed.), \textit{Contributions à l’étude du Sahara Occidental} (Paris, 1938), 215–21; H. T. Norris, \textit{Shinqiti Folk Literature}, 31.

\textsuperscript{120} El-Chennafi, ‘Traces d’Awdaghust’, 101–5.
Berber–Soninke culture, and the growth of the salt industry itself.\textsuperscript{121} By drawing attention to the role of local elements in shaping the history of Awdaghust, moreover, it underscores the emergence of a desert-edge ethnicity quite different from the Berber–Black distinctions historians have tended to impose on early southern Saharan life. Irrespective of who controlled Awdaghust in a political sense, this ethnicity, rooted in the architecture, artisanship, economy and language of the town, would have continued to evolve.

This finding is consistent with the view of much wider changes in the pattern of society in the southern Sahara during this period. Tīn Yarūtān, the tenth-century Znāga chief over Awdaghust according to Ibn Ḥawqal and al-Bakrī, would have exemplified the original warrior pastoralist. The story of how he summoned his sister’s herders and their camels to fight an approaching enemy suggests a lack of specialization in warfare. Nevertheless the Znāga of Awdaghust were recognized as powerful, well-equipped fighters, whose reputation had begun to create for Tīn Yarūtān the role of protector of weaker individuals and tribes, who each year sought the security of his following.\textsuperscript{122} Yet by the late medieval period the Awdaghust Znāga had emerged as merchants and, it would appear, as zawāyā. Their colonies appeared first in Walata and then, by the fifteenth century, in Timbuktu.\textsuperscript{123} To attribute this transformation to the Almoravids alone, to their conquest of the town in the mid-eleventh century and to its incorporation into their political and economic system, would be to over-simplify. But it is reasonable to suggest, in the light of the considerations put forward in this article, that the choice of the Awdaghust Znāga to abandon arms for religion and trade was taken as a result of the post-Almoravid economic situation, in which Awdaghust occupied a propitious position, and peace became more profitable than war.

At some point, however, Awdaghust was abandoned, and its inhabitants dispersed. Why? El-Chennafi has suggested that the infiltration of the Banū Ḥassān, the immigrant Arab tribes who took over the role of warriors in western Saharan society, disrupted the western networks of exchange, thereby strangling the Awdaghust market.\textsuperscript{124} While we cannot dismiss this possibility, the evidence we have looked at suggests that the Arabs, as much as the ‘Azenegue’ or Znāga, had every reason to ensure that this commerce continued. More significant was the direction in which commerce was developing, which is to say, towards Timbuktu and Gao. The exploitation of salt deposits at Taghaza had not destroyed salt production at Ijil; on the contrary, it had expanded the commercial potential of the Ijil network, augmented the volume and value of trade, and drawn new international

\textsuperscript{121} Ibid. Monteil refers to Azer as an ‘intertribal commercial language, commonly spoken in the famous empires of Awdaghust and Ghana’: ‘La Langue Azer’, 215. He notes that one source (Delafosse) says Azer was spoken more recently at Arawan and Tawdenni: \textit{ibid.}, 220. Though this has not been confirmed by further research it would, if true, underscore the conclusion of this article.

\textsuperscript{122} \textit{Corpus} (Ibn Ḥawqal), 48; (al-Bakrī), 69. See also Levtzion’s analysis, \textit{Ghana and Mali}, 31. Devisse’s interpretation of Ibn Ḥawqal’s account differs: ‘Question d’Awdaghust’, 120.


\textsuperscript{124} \textit{Ibid.}, 105–6.
connexions. But the shift towards the Niger Bend meant that merchants in new centres like Walata and Timbuktu were better placed to benefit from all branches of trade and from both supplies of salt. For Awdaghust had clearly relinquished its special role in the salt trade: not to Walata, whose prosperity derived directly from Taghaza, but to Wadan, the ‘entrepôt for all the salt from Ijil’.125

Nevertheless, the instrumental blow to a town which might otherwise have survived as a regional market was much more immediate. The wells which were still in use at the end of the twelfth and beginning of the thirteenth century, had been abandoned by the early fourteenth century. And material remains leave no doubt that standards of living dropped considerably in the interim. But the accelerated drying conditions were not restricted to Awdaghust.126 One can only imagine the shrinking fields, the contracting supplies of food and water, and the diminishing availability of pasture for nearby herds. While some pastoralists undoubtedly moved towards the better-watered south, others began to install themselves on the outskirts of the town. Once again, Awdaghust began to take on a rural character, the one described in the fourteenth-century account of a ‘small, non-populous town whose inhabitants were dependent on camels for their livelihood’.127

Such a reality could well underlie local traditions which render Awdaghust’s demise in terms of a great revolt by the slave population. One recounts that the slaves took control while the elderly, the women and the children fled – the progenitors of the modern-day Guiriganke/Tegdaoust.128 Another, Tegdaoust, account says that a slave concubine and her twin children were spared; but when neighbouring people attacked the slave-controlled town, all the survivors fled, including the concubine and her children.129 It is probably safe to say that these versions of the town’s abandonment owe much to legend; indeed it is highly likely that what is remembered as a single, great...
event was in reality a long period of difficulties – perhaps several instances in which slaves or servants rebelled, fled or suffered at the hands of masters. Certainly comparable instances can be cited where in times of drought, famine and/or disease, oasis slaves were the first to suffer.\footnote{Their inability to move in search of supplies left them prey to hunger and thirst, and above all to disease. Exactions by masters, also ‘in need’, often became excessive: McDougall, ‘The Ijil Salt Industry’, 321. In the central Sudan, among the Tuareg, the phenomenon has been observed in several manifestations. See Stephen Baier, \textit{An Economic History of Central Niger} (Oxford, 1980), 32–5.} Interpreting these traditions even more broadly, one might point to the significance of the fact that neither version offers an explanation for the revolt and ensuing massacre; that the Tegdawest account brings in an attack by neighbouring people; and that in the final instance, slaves and surviving Tegdawest leave together, ‘reconstituting their previous social hierarchy, with the masters being provided by the twins’.\footnote{El-Chennafi, ‘Traces d’Awdaghust’, 102.} Perhaps the problems which forced Awdaghust’s inhabitants from their town were not realized solely in master–slave conflict, but involved other peoples (the surroundingZNâga? other Azerophones?) and other social groupings, a scenario much more in keeping with the range of ethnic development and social stratification we have been discussing. A recent consideration of the traditions suggests that the role of slaves has been exaggerated, though in the final phase of the town’s demise it may have been more important than in normal times.\footnote{Ibid.} Perhaps the conclusions we should be drawing from these obscure remembrances in which slaves play such a central role is that by the fifteenth century, when the famous town disappeared, the norm had changed. The climate had dried dramatically, the economy had diversified and expanded, and the society had acquired pronounced socio-economic divisions. The southern Sahara which witnessed Awdaghust’s late-medieval decline was very different from the one which had nurtured its growth.

**SUMMARY**

Early medieval wealth invested in southern Saharan agriculture and warfare tended to produce distinctive groups of dependent cultivators and professional warriors by the eleventh and twelfth centuries. Exchange surpassed initial limitations placed on it by rudimentary pastoral society through the development of the salt industry. The realization of a form of surplus readily convertible into a wide range of commodities was vital to the growth of specialized traders who, in turn, broadened the scope of economic and political activity. Growing professionalism and specialization brought with it new forms of social relations, in this case a variety of forms of dependence, as well as introducing a role for indigenous non-producers like clerics and scholars. An oasis like Awdaghust where warriors, cultivators and traders interacted was bound to experience the growing pains these changes produced.

This paper suggests how an understanding of these social and economic changes can help fill the gaps which still plague the history of Awdaghust. It argues that we need to examine the pieces of written and archaeological evidence we have in the light of the changing forms of agriculture practised in the area, the region’s drying climate between the ninth and the fifteenth centuries, and the making of the specialized merchant-clerical groups called 

\footnote{El-Chennafi, ‘Traces d’Awdaghust’, 102.} Awdaghust thereby
emerges not only as an international caravan terminus, but as a regional centre of agriculture and trade, especially the salt trade, controlled by local pastoralists. It was therefore able to outlive its so-called eleventh-century destruction by the Almoravids, and see its Znūga masters turn increasingly towards the salt trade and religion. But its fortunes also depended upon its large servile labour force and sufficient rainfall to support irrigated cultivation. By the fifteenth century, it would appear the drying conditions were severe enough to pose insurmountable problems, possibly even to provoke a slave rebellion said to have brought about Awdaghust's demise.