

# BEFORE TIMBUKTU

## The great trading centre of Tadmakka



**ABOVE** View northwards along the Essouk valley in northern Mali, the location of the ruins of Tadmakka. It is an oasis in an extremely arid environment – the harshest stretch of the cross-Saharan journey commences just north of the Essouk valley, the start of a long road to Morocco, Algeria and Libya.

**D**uring the 14th century AD, Europeans began to hear tales of vast camel caravans coming out of the Sahara laden with West African gold, slaves, and ivory. Central to these stories was Timbuktu, which came to be thought of as an African ‘Eldorado’, a legendary city made of gold. Timbuktu was, at this time, the main market centre of West Africa. It was an integral link in the flourishing Islamic world


trade system, stretching to other far-flung places such as China, India and Indonesia. Stories of this rich trading world of West Africa, and the enormous Saharan camel caravans, still fascinate and intrigue. But how did this trade come to be? What was the story of West African trade before the 14th century? What were the origins of this trans-Saharan trade system? These questions led me to dig the mysterious ruins of Tadmakka in Mali.

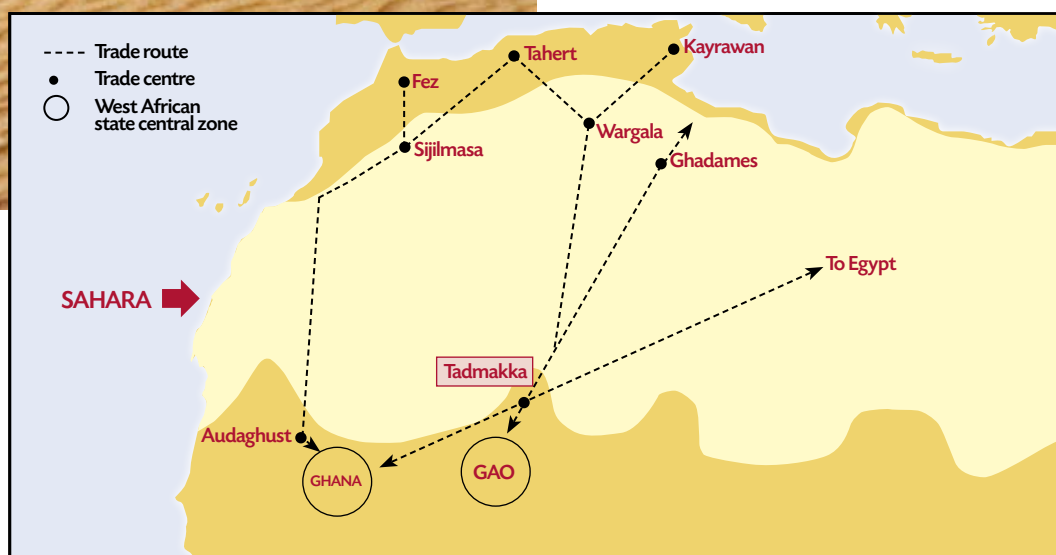
From the 14th century AD the city of Timbuktu, in West Africa, became legendary for the wealth it offered merchants crossing the Sahara. However, as **Sam Nixon** explains, before Timbuktu came Tadmakka.

### Tadmakka: a quest begins

Scholars have long believed that trade across the Sahara only began in earnest when West Africa became united with the expanding Islamic world trade system, and tapped into the new commercial opportunities this presented (see the Box on page 43 for more). While there is broad agreement on this, reconstructing the early story of this Islamic trade has proved far from easy. When exactly did West Africa become united with the Islamic world trade system? Where were the most important centres of this early trade? I believed archaeology could provide new answers. My explorations lay not at Timbuktu but at the largely forgotten, yet once legendary, trading centre of Tadmakka, deep in the Malian desert.

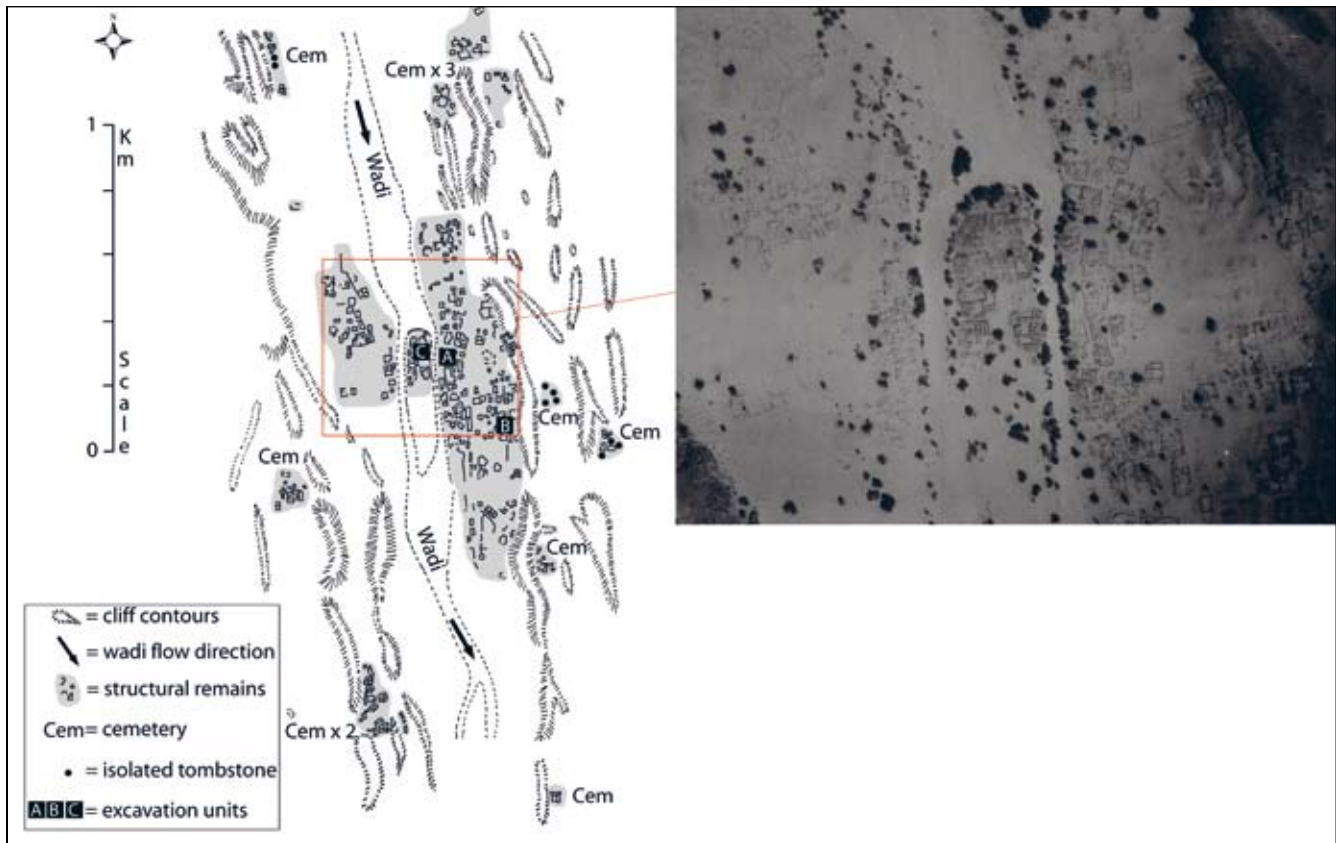
Tadmakka, known today as Essouk, or 'the market', lies some 500km north-east of Timbuktu in the desert heartland of the Malian Tuareg, and 45km from the nearest town, Kidal. Its stunning ruins stretch over a kilometre within the Essouk valley. Now isolated, in early Islamic times, Tadmakka's position on the West African side of the harshest stretch of the Sahara would have been extremely important as it offered an ideal location to allow caravans to prepare for, or recover from, the hardest stretch of the Saharan journey.

While Timbuktu was almost unheard of before the 13th century, Tadmakka was first recorded in Arabic texts in the 10th century, 



**ABOVE** Map illustrating Essouk-Tadmakka's location within West Africa and Mali.

**RIGHT** Map showing the West African trans-Saharan trade system before Timbuktu, and Tadmakka's position within it.



**ABOVE** Map of Tadmakka's ruins showing the excavation locations – the aerial photograph, focusing on the central area, gives a sense of the structural remains visible.

**RIGHT** View east-west across the central area of Tadmakka's ruins stretching from one hillside to the other – the remains of stone structures can be seen all around; in the middle distance the seasonal stream and its island (area covered in trees to left) can be seen.



vaguely linked to trade with the first historically documented West African states: Ghana and Gao. However, the first clear detailed account of Tadmakka was written in AD 1068, by the Spanish-Arab historian and geographer al-Bakri.

### Stories from al-Bakri & co

Al-Bakri's account is fantastic: he described Tadmakka in more glowing terms than any other place in the trans-Saharan world of West Africa, stating it was "better built than Ghana or Kawkaw [Gao]" and "of all the towns in the

world that which resembles Mecca the most" (Tadmakka's name means 'resemblance of Mecca'). He went on to tell of a king in colourful robes, of its thriving merchants, and its pure gold coinage "without inscription". Al-Bakri was not alone in his hyperbole – other contemporary writers also waxed lyrical about overflowing treasure houses at Tadmakka. Accounts of Tadmakka cease in the 14th century, concurrent with Timbuktu's rise to power.

In addition to these early histories, significantly, Tuareg traditions speak of Tadmakka as

their ancestral trading capital. The Tuareg are the nomads of the central Sahara, the main group associated with cross-Saharan trade, who later came to run Timbuktu's trade (see Boxes on this page and page 45). Crucially, their legends go further than the historical documents: they describe the existence of Tadmakka even before history first records trans-Saharan trade in the 10th century; indeed, right back to the time of the 8th century AD Islamic conquest of North Africa.

Amazingly, despite its histories and legends, Tadmakka remained totally unexcavated

and featured little in scholarly discussions of cross-Saharan trade before Timbuktu. Instead, accounts focused more on another trade route further west, running through the trade centre of Audaghost in Mauritania; a route outside the lands of the Tuareg. Though the western route and Audaghost were no doubt important (excavated trade evidence at Audaghost dates back to the 10th century AD), everything pointed to Tadmakka as being the one place that should be highlighted in the story of trade before Timbuktu: Tadmakka was the



## TIMBUKTU AND THE ISLAMIC WORLD TRADE SYSTEM

Following its birth in the 7th century AD Islam spread rapidly, throughout the Arabian Peninsula, and then further into Asia to the east, and Africa to the west. Through this Islamic network, a flourishing long-distance trade developed in luxuries (e.g. silks, books, precious metals) and essential products (e.g. pottery, oil, salt).

North Africa was brought into this trade web by the 8th century AD, after its Byzantine rulers were conquered by Islamic forces. This conquest enabled Muslim influence to take hold in the Mediterranean, but also gave access to West Africa and its gold, slaves and ivory.

While (Arabic) written historical accounts of trans-Saharan trade only first appear in the 10th century – recounting trade with the West African states of Ghana and Gao – certain scholars believe that trans-Saharan trade started almost immediately following Islam's arrival in North Africa, but that it was simply not historically documented. Evidence suggests the earliest trade, and Islam itself, came to West Africa through the trade centres of Tadmakka (as the new evidence, outlined in this feature, indicates) and Audaghost in Mauritania. These



**ABOVE** Map of the Empire of Mali and Timbuktu's position within it.

centres provided the platform for the rise of the most famous centre: Timbuktu.

Timbuktu was supposedly founded as a nomadic encampment in the 11th century AD by a woman called 'Buktu', who, according to Tuareg legends came from Tadmakka. Timbuktu became one of the most glorious and famous of cities. From the 13th century it increasingly came to dominate trans-Saharan trade to West Africa. However, its heyday came in the 14th century, under the control of the Empire of Mali, the new power in West Africa. By the 14th century Timbuktu had palaces, libraries, universities and numerous mosques.

While it was a place of extreme religious importance, Timbuktu's fame around the world was for trade, and principally for the wealth of gold that flowed through it.

Although Timbuktu declined from the 15th century – partly due to loss of trade to Europeans on the West African coast – and was irreparably damaged in 1591 by Moroccan invasion, its name lived on. For centuries it inspired European explorers, but it was only in the 19th century that Europeans discovered it (Gordon Laing, 1826, was the first). But by that time, it was no longer a 'city of gold'.



**LEFT** Caravan approaching Timbuktu in 1853 (from *Travels and Discoveries in Northern and Central Africa* by Heinrich Barth, vol. iv, London 1858).

**RIGHT** 'The Emperor of Mali' shown on 'The Catalan Atlas' by Cresques Abraham, 1375.



supposedly glorious ancestral trading centre of the Tuareg, the nomads who go on to develop Timbuktu; also, the legends of an 8th century AD Tadmakka hinted at the earliest evidence of developed trade across the Sahara – a good 200 years before the westerly route. I began to believe the most important trans-Saharan trade centre before Timbuktu was being neglected, together with the story it could tell.

I knew Tadmakka's isolation made exploration difficult. More problematically, the Malian civil war (ended 1996) and its aftermath had long made excavation impossible. However, in early 2004, I learnt some interesting news. I was in a restaurant in Mali's capital, Bamako, with the late Tereba Togola, the Director of Malian Cultural Heritage, who had just visited Tadmakka's ruins. He informed me of the region's improved political situation. I now knew it was possible to work at the untouched ancestral trading capital of the Tuareg.

Together with Malian government archaeologists and Essouk's government heritage agency (the Mission Culturelle Essouk), I set in motion

the first-ever archaeological project to explore Tadmakka. I wondered whether Tadmakka would be as fabulous as the 11th century al-Bakri suggested; whether the Tuareg legends of 8th century occupation would be shown to be correct; and whether Tadmakka would therefore produce evidence of the earliest known developed trade across the Sahara.

### The project commences

So it was that in December 2004, we set out from Bamako on the 2,000km journey to Tadmakka's ruins, across the vast desert tracts to the Niger River and then beyond into the desert mountains. Our base at Essouk was at a small encampment, with wells and several buildings, 2km from the ruins. While getting used to the harsh environment, setting up the project headquarters, and recruiting the team, we began making the short daily journey across the sands to the site. Our first visits involved simply getting a feel for the place by walking the ruins. We also began to get a sense of its daily use, watching shepherds from the surrounding

**BELOW, CLOCKWISE FROM TOP LEFT** One of the Islamic cemeteries surrounding the site. Arabic inscription on the surrounding cliffs. Visitors to the ruins during the 'Saharan nights' festival. A rock art image of women of ancient Tadmakka.





**LEFT** Tourists photographing rock art at Essouk.

location for the annual, local ‘Saharan Nights’ festival that celebrates the Tuareg past and Tuareg culture today. Talking to people during this festival, we were reminded of the range of ideas about Tadmakka. For the first time archaeology was about to give its angle.

We began to dig in mid-January 2005. Assisting us were local Tuareg shepherds, combining excavation with watching their flocks in the valley. After clearing the surface of wind-blown sand, and the collapsed walls of the site’s final buildings, we came into the first intact deposits. These were well-preserved remains, including complete abandoned

nomadic encampments bringing their animals to the site’s wells.

The site’s central area consists of stone-walled structures, including houses, merchant quarters, *caravanserai* and mosques, lying on both sides of a seasonal stream and on an island in its centre. Numerous cemeteries containing Arabic inscriptions surround this. Also, carved in the valley’s rocks, one finds Arabic and Tuareg inscriptions, and rock art. Arabic inscriptions at the site have so far been dated from the 11th to the 14th centuries AD.

Our first move was deciding where to dig. We surveyed the site looking for areas with multi-period occupation, but particularly including the site’s early trans-Saharan periods. Of likely interest were, firstly, areas where the ground was at its highest, possibly suggesting lengthy occupation remains; secondly, areas where we found accumulations of exotic trade goods, indicating trans-Saharan trade activity; and, finally, where the surface pottery included a variety of types that might indicate areas of multiple occupations – pottery of unknown cultures and dates scattered the entire site.

Thus we selected three locations associated with commercial and housing structures: two areas on the west of the site and one on the island. During our survey, Essouk was the

## THE TUAREG OF THE SAHARA



The Tuareg (‘Tamashek’) are the most recognizable Saharan peoples, being often romantically pictured with their camels and blue robes. Inhabiting large areas of Libya, Niger, Mali and Algeria, they number somewhere between 1.5-3 million. While strongly influenced by Islam, their roots are in pre-Islamic Saharan Berber culture. Increasingly, Tuareg live in towns, but traditional nomadic lifestyles of pastoralism and trade are still strong.

While originally from Libya, the Tuareg long ago spread throughout the Sahara – much movement took place in early Medieval times with increased trans-Saharan activity. The Tuareg controlled the Medieval trans-Saharan camel caravans, supplying desert salt to groups south of the desert (lacking significant salt sources), and exchanging this for, amongst other things, slaves and gold which were shipped to North Africa. Famously, the Tuareg led Timbuktu’s trade, a city still having significant Tuareg populations. While traditional trade still exists, trucks supply the Tuareg world with a range of consumer goods.

The Tuareg of Mali have in recent years been involved in struggles with their government, mainly composed of ethnically different groups from the south. The Malian civil war (ended in 1996) gained the Tuareg semi-autonomy, but tensions persist as many Tuareg want greater freedom. The ruins of Tadmakka are themselves somewhat symbolic of this struggle: while seen by the Tuareg as representing their glorious past, the Malian government see them as Malian and ‘World Heritage’. Recently Islamicist movements amongst the Tuareg have further fuelled divisions.





**ABOVE** Surface collection of artefacts during the survey of the site.

**ABOVE RIGHT** Jean-Pierre Tita, the head of the Mission Culturelle Essouk assisting in the excavations, looking into the emerging remains of Tadmakka.



room spaces. Over the first couple of weeks we dug down over 1.5m or so across the site. Kitchens, courtyards, and storage rooms were identified. We found objects still intact where they had last been used: copious pottery, bones, as well as ostrich eggshell, colourants, stone artefacts, and limited metal and glass. As Tadmakka began to re-emerge, local people came to visit.

Though the initial discoveries were interesting, there were no dateable artefacts to show this was early Medieval occupation. We also found nothing to indicate this had been a wealthy town. Were we digging in the right quarters of the site? Were the tales of Tadmakka's fabulous nature and rich trade just elaborate stories?

### Finding al-Bakri's Tadmakka

Suddenly, after a couple of weeks' digging, things began to change. About 1.5m-2m down we began to enter a different world in each of the three areas of the site. Architecturally there was a striking difference – we found high quality structures both in stone and mud, including buildings decorated in red ochre and white plaster. We also found more and more trade

goods, including beads, glass, glazed ceramics, cowrie shells (a currency in pre-colonial Africa) and some North African silver and copper coins. While we were cautious in our interpretations, this material appeared to be early Medieval, from the time of al-Bakri. Radiocarbon dating of the organic material carbonized in the clay fabric of pots subsequently confirmed this, yielding dates over a range of 950-1100 AD: we had indeed found al-Bakri's Tadmakka.

By comparing the pottery on the surface with the excavated material, we could see that remains from this early historic period were present across the eastern area of the site, indicating its great extent already at that early period. The architecture matched al-Bakri's glowing reports in the 11th century that Tadmakka was the best built town in this part of the world, while the extent and variety of trade goods found were just what one would expect from the merchant centre he described. In addition to common trade goods from North Africa, such as beads and metal-wares, we also found fragments of porcelain and silk, rare luxury items from as far as eastern China.

In addition to learning about the town and its trade, we began to understand the lives of its people. For example, we found evidence for huge shipments of pots from the Niger River, which would once have held goods for local consumption (probably including goods such as shea butter oil). We also discovered evidence

**RIGHT** Before and after: the surface of excavation 'unit EKA' and the intact remains (a storage room/kitchen) found below this surface from the final phase of Tadmakka's occupation.



## ACROSS THE SITE, TADMAKKA'S RUINS BEGAN TO REVEAL THEMSELVES



for various craft traditions: pottery, weaving and common iron production, but also high quality copper and gold working. We even reconstructed people's diets, which included the expected mix of mutton, beef and goat but also, more surprisingly, wheat, either produced locally under irrigation or imported, a luxury commodity originating north of the Sahara.

We were finally uncovering Tadmakka's fine buildings, the exotic goods al-Bakri's contemporaries handled, and the lives lived there. Certainly this was home to Tuareg merchants, as well as merchants from North Africa and from further south, but probably also the occasional residence of powerful local nomadic ruling classes. While difficult to demonstrate archaeologically, the historical records and the inscriptions at the site indicate this was

**ABOVE, CLOCKWISE FROM TOP LEFT** Wall exposed below the surface of 'unit EKB' – a wall of a merchant quarters facing onto an alleyway. Another layer of Tadmakka reveals itself in 'unit EKA' below the street of the final phase. Grave found below buildings on the island. Latrine pit with stone surround – associated with the merchant complex excavated in unit EKB.

also a religious centre of extreme importance, just like Timbuktu in later years. This fabulous Tadmakka would have been a nodal point with the central world of Islam as well as of trade. In the vast desert, where now all is quiet, we were bringing al-Bakri's Tadmakka back to life, revealing remains of a thriving merchant centre that existed 200-300 years before Timbuktu became famous.

### Deeper into the past

Having dug through the deposits dating to al-Bakri's time, we had already removed some 3m of deposits. Where would the deposits end? Would we reveal anything of the site's legendary early past?

Of our three excavation areas, 'unit EKC' on the island had become undiggable since we





came into the remains of an old well; ‘unit EKB’, at the eastern edge of the site, had also already given out, having been placed where hard bedrock was frustratingly close to the surface. All our hopes, then, were on ‘unit EKA’ in the centre of the site. Having recorded the elaborate buildings found there, with our hearts in our mouths we removed these to discover what lay beneath: we were elated to discover that the buildings continued. We were in the remains of an even earlier Tadmakka which we were convinced was the time of the legends.

As we dug further into this new world, now below 3m, the excavations became more challenging. Firstly, the depth made it ever more difficult to get in and out and shift soil. We recruited more people and had a solid 7m wooden ladder built. Secondly, the weather was beginning to heat up, making digging ever more tiring. Regardless, we were determined to get to the bottom.

We discovered layer after layer of room spaces – here a kitchen, there a thoroughfare;

**ABOVE** Deeper down in unit EKA, in the era of al-Bakri, the quality of construction of ancient Tadmakka began to show itself – a seating platform coated with red ochre forming part of an antechamber.

and spaces whose real functions will probably never be known. We found the newer buildings were built on the walls of old ones, creating the impression of continuous high walls rising up from the excavation unit’s base. Good quality architecture was still in evidence, but now we found far fewer trade goods. As we dug, we expected every layer to be the last – but still the walls went down, past 4m.

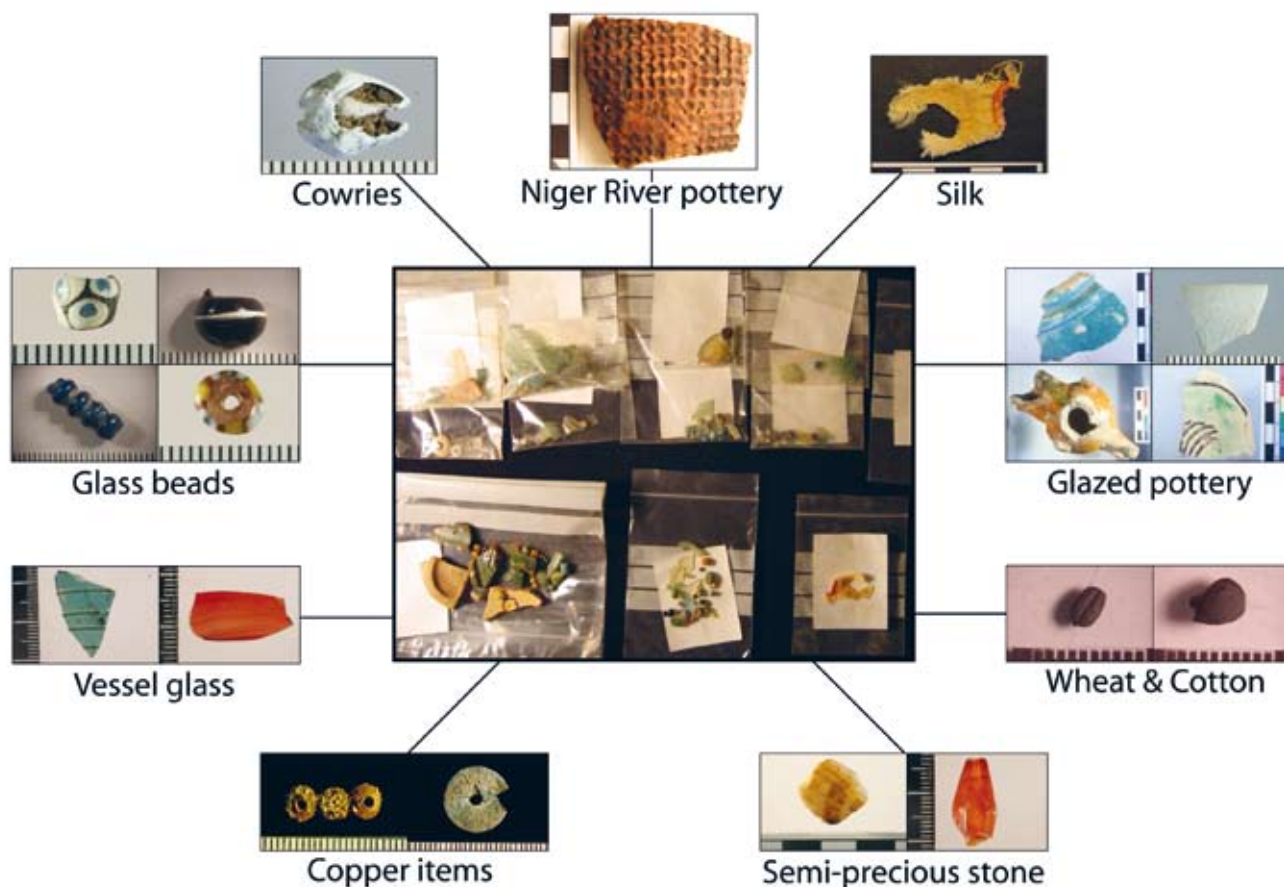
Now, we started to use buckets on ropes to get soil out. We found more room spaces, each with their own characteristics and different remains within. The rate of discovery was overwhelming. Finally, at some 5m down, and 15 room spaces deep, we hit the base of the walls.

At the lowest level of the walls, we were in a complete room space with well-finished walls containing two doorways, and with a fine sieved sand floor. Given the solidity and elaborate finish of the structure, we were certain that the doors would once have led into other rooms of a larger complex, and, almost certainly, a larger settlement – it was mind-boggling to think of this buried, forgotten world stretching out either side of us at 5m below the ground. However, while we had reached the base of the walls within the unit, we were not finished yet – we had still not reached sterile soil.

Digging now below the walls, we came into dense deposits containing post-holes: evidence either of tents or shack-like structures, perhaps part of a tented encampment or the edges of a slightly earlier permanent settlement whose remains lay outside the excavation area. We dug down over 1m more to remove three such layers, each containing postholes. Soon, though, the archaeology began to thin out. After seven weeks of furious but careful digging the trench hit bottom at 6.5m deep: pure sand.

Looking up, from the bottom of the deposits to where we had begun, was astounding. We were certain that, deep at the bottom of the trench, we were back into the time of legends. Indeed, the radiocarbon dating of pottery from the earliest ‘urban’ levels suggested the earliest walls we recorded dated to at least the 8th century AD. Not only had we discovered al-Bakri’s Tadmakka, we had found a much earlier urban occupation, just as the fables had claimed.

Our single field season had produced material that dated to some 200-300 years before the first



historical records even mention the site. Moreover, this was also the earliest known evidence of a significant permanent settlement in the West African trans-Saharan trade zone – and by at least 200 years!

### A golden find

Yet while we sensed this early Tadmakka was built for trade, on initial inspection there appeared to be very few cross-Saharan trade goods at these lower levels to support this idea; indeed, only a few semi-precious stones provided signs of long-distance trade. This was perplexing. However, once the material

**ABOVE** Examples of types of trade goods found amongst the material excavated at Essouk.

**BELOW** Deep digging in excavation 'unit EKA' – the remarkable consistency of stone wall construction can be seen as walls were built on previous walls.

found within the buildings was analysed, a picture of trade unravelled, at first calmly, then spectacularly.

Thus, we discovered that some of the pottery found in the oldest, lowest, building was associated with the sub-Saharan world far to the south. This suggested wide-ranging links, either immigrant traders or slaves. In addition, this oldest building contained evidence of wheat, a North African tradition likely associated with traders and also a luxury consumable indicating wealth. Added to this, a corroded piece of iron was found to be an Islamic-world door-key, suggesting some sort of cross-Saharan trading presence, and the need to lock up property. The material indicated that 8th century Tadmakka was already home to a mixed population, possessing wealth and connections to the trans-Saharan system.

Among the remains from a slightly more recent, 9th century, room space, we were then confronted by three peculiar ceramic pieces that took our discoveries to a whole new level. The ceramic fragments (dated to c.850-900 AD) were each an inch or so thick, and had regular circular depressions in their surface. We submitted them to Prof. Thilo Rehren of UCL Institute of Archaeology who clearly



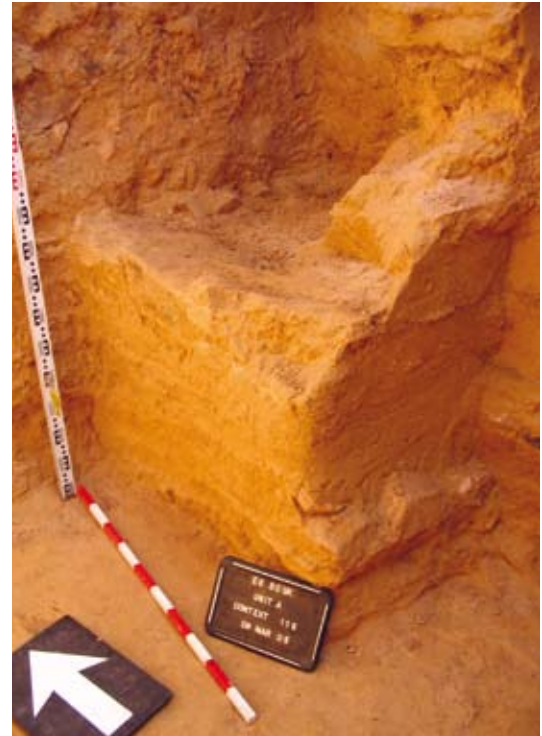


identified them as coin moulds. Inspection of one of the mould fragments fortuitously revealed gold droplets on its surface. This was the conclusive evidence we wanted: gold coin moulds.

These moulds would have been used to create small balls of gold which would then have been made into gold coin blanks, the first stage of a gold coinage. In line with al-Bakri's statements about Tadmakka's gold coins, these would almost certainly have been blank coins for trade at Tadmakka, but ultimately for export, to be stamped or re-melted on arrival in North Africa. None of this had been expected. The gold coins of al-Bakri's 11th century Tadmakka have almost never been discussed by scholars, no doubt because many have thought them a fiction. Yet we had found evidence of gold coin production at Tadmakka – and, moreover, long before the time of al-Bakri.

**ABOVE** View of an infilled doorway leading beyond the excavated area at 5m below the surface.

**ABOVE RIGHT** Foundational pillar (dried mud construction) associated with the earliest building recorded at Essouk.

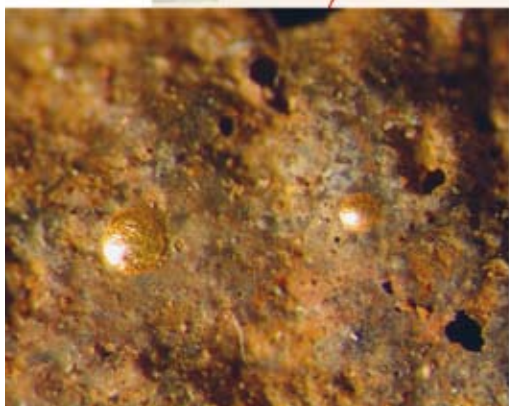


These artefacts are the only evidence of coin production in West Africa in pre-colonial times. They clearly show that 9th century Tadmakka traders were getting gold from the south and converting it to coins, and thus were already part of a complex and sophisticated trade system. This 9th century trade was built upon the 8th century era of trade we see evidence for at Essouk – while we found no evidence for the gold trade in the 8th century, almost certainly further excavations would show this.

We had found the earliest known evidence of a developed trans-Saharan trade. It was finally clear that, at least 200 years before it is mentioned in the histories, trade was flowing across the Sahara between North and West Africa. At 5m below the ground, in the desert, we had proved this.

### From legend to reality

Thus, the new evidence from Tadmakka shows that a developed trans-Saharan network came into operation almost immediately after Islam came to North Africa in the 8th century AD, rather than 200-300 years later as has long been the assumption. Because neither the Tuareg, nor the first Islamic North African traders left



**ABOVE AND LEFT** Image of an Essouk gold coin mould fragment and a close-up view of gold droplets found on its surface. Gold dust was placed in the depressions of the mould, melted into a ball and struck to produce coins.

any written records of this trade, history had almost completely forgotten early Tadmakka and its story, even though it was remembered by the Tuareg in their oral legends.


That this early trade happened does not seem so surprising in retrospect. The Tuareg were in the desert before Islam arrived, lived there and traded there and knew its routes and networks. The Tuareg would have controlled the lands from the first centres of Islam in Northern Africa almost to the Niger Bend. Islam's arrival offered new trading opportunities. These nomads involved in Saharan trade in copper, salt and grain would have been well placed to link into these new opportunities. The Tuareg have always believed that Tadmakka was the West African focus of a trans-Saharan trade from this time and archaeology has now shown this to be true.

Al-Bakri's account of the legendary Tadmakka was, therefore, lodged in reality. And we now know he was also describing a place that had been built on hundreds of years

of earlier flourishing trade.

Yet, while Tadmakka was originally at the forefront of things, its name came to be displaced by another: Timbuktu. By the 13th century, forces had shifted in the trade. The Empire of Mali was by this point on the rise, promoting ever greater levels of commerce, and it was Timbuktu that became Mali's main trading centre. Through this it rose and rose and its name became great. With the fall of Tadmakka in the 14th century (as shown by the excavated evidence), likely mainly due to the shifting of routes to Timbuktu, Tadmakka became all but forgotten. The Tuareg became associated with a new centre.

It is wonderful that archaeology has finally enabled us to prove Tadmakka's importance, verify its legends, and revive its name, a name that would have been heard throughout the earliest cross-Saharan trading world, a name that would have been in the mind of every trader in North Africa. Tadmakka: the legendary place where fortunes could be made across the desert. Tadmakka: the glorious Tuareg ancestral trading capital before Timbuktu.

As for us, our work is over for now – but I feel certain that this most spectacular of sites will attract many more generations of archaeologists. 

## FURTHER INFORMATION

Further details on the project's finding can be seen at <http://www.ucl.ac.uk/archaeology/aha/nixon/index.htm> and a full excavation report has been published in 2009 in *Azania: Archaeological Research in Africa*, 44 (2).

For those interested in looking further into the Tuareg region of Mali useful information and links can be found at: [www.kidal.info](http://www.kidal.info).

## ACKNOWLEDGEMENTS

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## SOURCE

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