



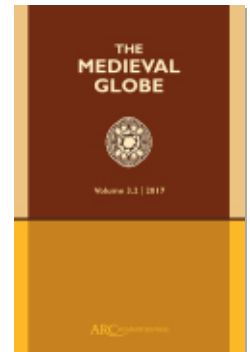
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Exchange of Sacrifices: West Africa in the Medieval World of Goods

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EXCHANGE OF SACRIFICES: WEST AFRICA IN
THE MEDIEVAL WORLD OF GOODS

SARAH M. GUÉRIN

Où vergier mainte bone espice, Cloux de girofle et requelice, Graine de paradis novele, Citoal, anis, et canele, Et mainte espice délitable, Que bon mengier fait après table.	In that orchard, many a spice: Studded cloves and liquorice, Grain of paradise, newly come, Zedoary, anise, cinnamon; And many a spice delectable Good for eating after table. ¹
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TOWARDS THE BEGINNING of the *Roman de la Rose*, Guillaume de Lorris (ca. 1200–ca. 1240) describes the marvellous garden of love, where apple trees grow pomegranates, nut trees sprout nutmegs, and where almond, fig, and date trees flourish within the cloistered walls. These fruits of the orient were joined by every imaginable spice good for cleansing the palate after a meal: cloves, licorice, zedoary, anise, cinnamon, and an exotic new spice, grains of paradise (“Graine de paradis novele”). Written in the third decade of the thirteenth century, Guillaume’s poem marks one of the first instances when this peppery seed (related to the ginger plant) is recorded in western Europe.² Also known as melegueta pepper, *Aframomum melegueta* remained an extremely popular spice at French and Burgundian courts for approximately two centuries. Unlike locally available licorice and anise, or the cinnamon and zedoary (also known as white turmeric) imported from the Indian subcontinent, or the cloves and nutmeg from the spice islands of Indonesia, grains of paradise are native to the rainforests of West Africa and so came to northern Europe by a completely different route.³

This long-distance relay network, which linked Guillaume’s France to the coastal rainforests of West Africa via trans-Saharan trade routes, also resulted in the flourishing production of Gothic ivories during this exact same period. From about 1230 to 1500, diptychs, polyptychs, and statuettes (Plate 5.1) made of African elephant ivory⁴ filled

1 *Le Roman de la Rose*, vv. 1389–94. Translation courtesy of Carol Symes.
2 Laurioux, “Spices”; Laurioux, “Modes culinaires.”
3 Brooks, *Landlords and Strangers*, 54–55; Brooks, *Western Africa*, 16 and Osseo-Asare, *Bitter Roots*, 70–105.
4 That is, the African Savannah elephant, not the smaller Asian elephant: Guérin, “Avorio d’ogni raggione,” 158–59.

church treasures and private chapels, while ivory boxes carved with courtly scenes and lavish toiletry sets adorned with flirtatious imagery were *de rigueur* for aristocratic households.⁵ The prevalence of these two materials, elephant tusk and piquant spice, witnesses a profound shift in the trade routes that provisioned European markets with artistic and culinary luxuries, and illustrates the central role that West Africa played in the medieval world system.⁶

It was Janet Abu-Lughod who recuperated the concept of a “world system,” coined by the sociologist Immanuel Wallerstein to discuss twentieth-century capitalism, and made it applicable to the medieval globe. Abu-Lughod demonstrated that a non-occidental world economic network thrived before the European-dominated system evolved in the sixteenth century.⁷ Her schema consisted of eight interlocking spheres, stretching from western Europe and centred on the Champagne fairs, through the Mediterranean and multiple Islamic systems, to the Far East. West Africa, however, sits forlorn and uncircumscribed on her diagram, while the trans-Saharan trade that furnished the Mediterranean basin, and all of its interconnecting systems, with the economic lubricant gold is conspicuously absent.⁸

Despite Abu-Lughod’s oversight, the trans-Saharan gold caravans are well-known historic territory, due in part to contemporaneous texts furnished by Arabic-speaking geographers.⁹ However, these depictions of sub-Saharan Africa are cursory and generally bigoted, mitigating the economic and cultural systems that interlocked with the Saharan one, at such important trading cities as Walata, Timbuktu, and Gao. A richer picture of West African history and its economic system is still being drawn, largely by archaeologists, and this paper seeks to aggregate recent research and to sketch out what these unwritten chapters of Abu-Lughod’s magnum opus might have contained.

When Abu-Lughod dismissed Africa (both East and West) from her consideration of the world system, it was because “Africa’s geographic reach was relatively limited. African merchants were largely local and African goods seldom made their way to China or Europe.” This view of the insignificance of

⁵ For example, the household of Philip V purchased a complete ivory toiletry set in 1316: Douët-d’Arcq, *Comptes*, 15.

⁶ For the use of “medieval” in non-European contexts, see Heng, “Early Globalities,” 236–38.

⁷ Abu-Lughod, *Before European Hegemony*, 8–20, and Figure 1.

⁸ *Ibid.*, 36.

⁹ The *Corpus of Early Arabic Sources for West African History*, edited and translated by Levtzion and Hopkins, is an invaluable tool in the field.

sub-Saharan Africa to the world system—that is, before the hideous development of the trans-Atlantic slave trade—is reinforced by contemporary textual sources. The Mamluk historian Al-'Umari, writing in Cairo in the mid-fourteenth century, noted that caravans set off from Sijilmasa across the Sahara with “valueless articles” like salt, copper, and cowries and “returned with bullion as their camels’ burden.”¹⁰ However, the goods sent south across the Sahara were emphatically not valueless to West African civilizations, whose particular regimes of value were dependent on local environments and culturally construed hierarchies. There are no universal commodity values. Indeed, Arjun Appadurai has articulated the finely attuned relationship of exchange as one of mutual sacrifice by both parties: “One’s desire for an object is fulfilled by the sacrifice of some other object, which is the focus of the desire of another. Such exchange of sacrifices is what economic life is all about.”¹¹

The following three sections each corresponds to a lobe of the West African economic system in which such mutual exchange of sacrifices took place. In the first, I present a snapshot of trans-Saharan trade in the thirteenth and fourteenth centuries and the commodities that traversed the desert, considering not only Mediterranean-bound cargo, but the material needs and even desires of West African communities. The second section focuses on the Empire of Mali, which arose in the mid-thirteenth century as climate change expanded the terrain between fixed caravan entrepôts in the semi-desert Sahel (“shores” in Arabic) and the retracting forest regions some 1000 km farther south: the zone that provided many goods for interregional exchange. Mali, as a political and economic entity, bridged that gap and profited accordingly. Finally, the last section concentrates on artistic products from the Savannah–Forest interface, today in Nigeria, and reveals unexpected relationships between ivory, one of the key exports from the Savannah regions, and copper alloys, a major commodity imported across the Sahara into the West African economic sphere.

Trans-Saharan Trade and Its World of Goods

One of the most detailed discussions of the mechanics of caravan trade across the Sahara is that of Ibn al-Khatib, writing in Granada in the mid-fourteenth century. Aby 'Abd Allay Muhammad al-Maqqari of Tlemcen (Algeria) had visited Granada in May of 1356, and Ibn al-Khatib recorded notes on his family’s trading network,

¹⁰ Levtzion and Hopkins, *Corpus*, 276.

¹¹ Appadurai, “Introduction,” 3–4.

which had been established on either side of the Sahara in the mid-thirteenth century.¹² Al-Maqqari's ancestors,

according to what is stated in their biographies, became famous in trade. They established the desert route by digging wells and seeing to the security of merchants. ... The sons of Yahya ... were five. They made a partnership by which all had equal shares in what they possessed or might possess. Abu Bakr and Muhammad ... were in Tlemcen; 'Abd al-Rahman, who was their elder brother, was in Sijilmasa; 'Abd al-Wahid and 'Ali, who were their two younger brothers, were in Iwalatan [Walata]. They [all of the brothers] acquired properties and houses in those regions, married wives, and begat children by concubines. The Tilimsani would send to the Sahrawi [those in the Sahara, i.e. Walata] the goods which the latter would indicate to him, and the Sahrawi would send to him skins, ivory, nuts (*jawz*), and gold. The Sijilmasi were like the tongue of a balance, indicating to them the extent of rise or fall in the markets and writing to them about the affairs of merchants and countries. And so their wealth expanded and their status grew.¹³

Walata is a small oasis town, now in the deserts of southeast Mauritania, which gained importance in trans-Saharan trade just as the al-Maqqari family was consolidating their network in the mid-thirteenth century (see **Map 5.1**).¹⁴ Al-'Umari describes Walata as "the farthest point of inhabited country," after the gruelling 1500 km trek across the desert from Sijilmasa.¹⁵

Ibn al-Khatib and al-'Umari thus enumerate the standard commodities associated with medieval trans-Saharan trade. Yellow gold came from the alluvial deposits in modern Senegal and Mali, along the Fálémé and Niger rivers.¹⁶ The empires of Ghana (ca. 700–ca. 1100) and, as we will see, of Mali (ca. 1250–ca. 1500) controlled the trade in gold from these sites, making these sub-Saharan polities fabulously wealthy.¹⁷ "White gold," that is elephant ivory, did not have a

¹² Levtzion and Hopkins, *Corpus*, 306 and 418–19 (nn. 1–8).

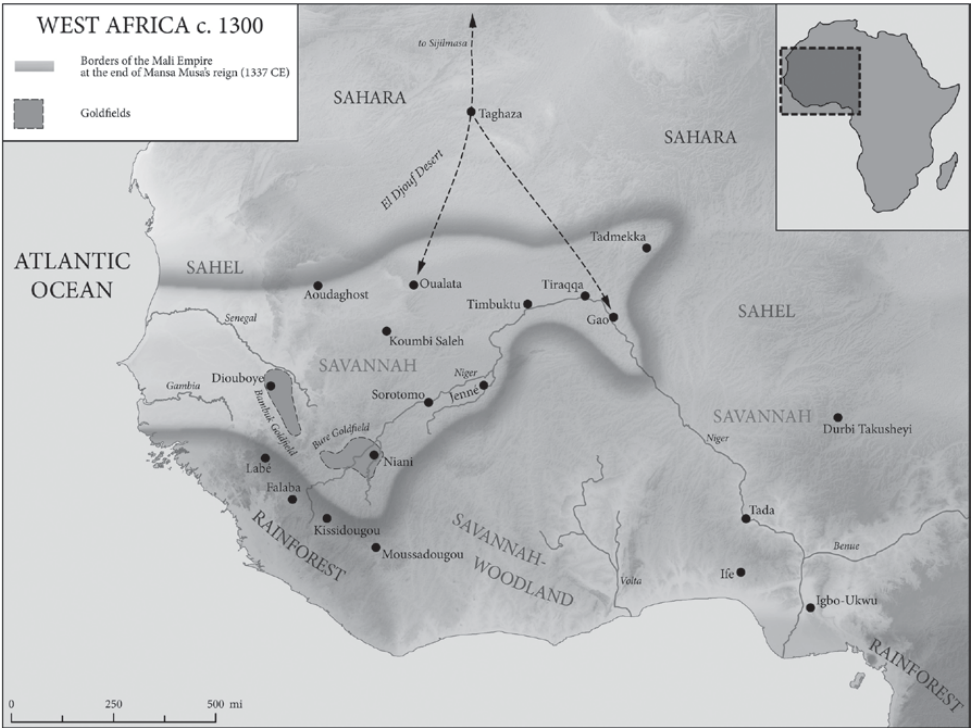
¹³ *Ibid.*, 306–8 l.

¹⁴ Lydon, *On Trans-Saharan Trails*, 84–85; Cleveland, *Becoming Walāta*, 3–7.

¹⁵ While al-'Umari based his text closely on previous geographers (notably Ibn Khaldun and Ibn Battuta), he also enjoyed access to Mamluk administrative records in Cairo when compiling his text: Levtzion and Hopkins, *Corpus*, 252–53 and 276.

¹⁶ Devisse, "Commerce et routes," fig. 14.17; Mauny, *Tableau géographique*, fig. 58; Walker, "Italian Gold"; Nixon et al., "New Light."

¹⁷ Levtzion, *Ancient Ghana and Mali*; Keech McIntosh, "Reconceptualizing Early Ghana"; Kea, "Expansions and Contractions."



Map 5.1. Trade routes and climatic zones in West Africa, ca. 1300.
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fixed place of origin given the inherent mobility of its source, and it is particularly unstable across the medieval period. And it was the African Savannah elephant (*Loxodonta Africana*) that was prized across the Mediterranean world. It is the only species that produces the large tusks so desirable for figural carving, with diameters well above 11 cm, in contrast with the smaller Forest elephant (*Loxodonta cyclotis*), with correspondingly petite tusks.¹⁸ Skins, both bovid hide for arms (shields of oryx leather were coveted around the Mediterranean) as well as those of reptiles (crocodiles) and carnivores (leopards and lions), were important prestige commodities. Al-Maqqari’s mention of “nuts” (*jawz*) among the trade goods is one of the few instances when grains of paradise are mentioned in trans-Saharan trade, demonstrating that the al-Maqqari network had access to Forest

¹⁸ Grubb et al., “Living African Elephants.”

as well as Saharan commodities.¹⁹ Among other goods, including likely ebony and indigo,²⁰ there were undoubtedly slaves, whose traces are notoriously difficult to follow in the archaeological record.²¹

Although al-'Umari considered them "valueless articles," salt, copper, and cowries were essential to the health—physical, spiritual, as well as economic—of sub-Saharan communities. The importance of salt, especially in a hot climate, is incontrovertible and there are few natural sources in West Africa. In fact, the paramount importance of this mineral might have provided the initial impetus for interregional, including trans-Saharan, trade.²² The mines at Taghaza, Mali (the bed of an ancient salt lake), were a key source of both rock salt and the mineral fixative alum, which was also increasingly important for the northern European textile industry. Taghaza is also, not coincidentally, the mid-point on the Sijilmasa-Walata route.²³ Copper, sometimes called "red gold," came from mines not only within the Sahara itself (e.g. Akjoujit, Mauritania; Tessalit, Mali; or Azelik/Takedda, Niger)²⁴ but also from around the Mediterranean basin and—as we will see—far beyond. Used in West Africa primarily for artistic and ritual purposes—locally available iron was preferred for weapons and tools—copper and its alloys have recently been shown to have been valued for their spiritual malleability. In a number of sub-Saharan cultures, copper responds particularly well to the secret technologies of blacksmiths.²⁵ Cowrie shells, of a mollusk most prevalent in the Indian Ocean, were used as currency in many parts of the Islamic world, including West Africa. Their passage to North Africa via the Red Sea and Egypt, and thence to West Africa by trans-Saharan caravan, thus truly bespeaks West Africa's involvement in the world system.²⁶ The trade of gold for cowries, therefore, could be considered as an exchange of monetary instruments between distinct value regimes, rather than al-'Umari's vision of an exploitative system in which mere trinkets are exchanged for pure bullion. To the salt, copper, and cowries traveling across the Sahara should be

19 Mauny, "Notes historiques," 708–9.

20 Levitzion and Hopkins, *Corpus*, 97–98: for al-Zuhri on Saharan goods available at Sijilmasa ca. 1100.

21 Keech McIntosh and McIntosh, "From Stone to Metal," 112–13; Stahl ("Political Economic Mosaics") notes, however, the intensification in the slave trade after the sixteenth century.

22 McDougall, "Sahara Reconsidered"; McDougall, "Salts."

23 Levitzion and Hopkins, *Corpus*, 178 (no. 37); Guérin, "Avorio d'ogni raggione," 168–69.

24 Herbert, *Red Gold*, 15–19.

25 McNaughton, *Mande Blacksmiths*; Garenne-Marot et al., "Cuivre, alliages."

26 Johnson, "Cowrie Currencies."

added cloth, both luxurious silks and quotidian woollens alike, porcelains, glazed ceramics, and especially glass beads.

At both ends of the route managed by the al-Maqqari brothers, goods were funnelled into the medieval world system. The Mediterranean-oriented Tlemcen was connected with Europe and Asia, as far as the Indian Ocean and China. A similar scope holds for Walata and the other trade entrepôts on the southern shores of the Sahara. The goods exchanged in these Sahelian centres originated across West Africa, from modern Senegal and Sierra Leone to modern Niger and Nigeria. The organization of intra-continental trade across these regions in the thirteenth and fourteenth centuries was therefore another lobe of the world system.

Climate Change and the Empire of Mali: Bridging Sahel and Rainforest

The Medieval Climactic Anomaly impacted West Africa as it did the rest of the globe.²⁷ From roughly 700 to 1500, West Africa experienced a significant cycle of humidification and desertification which shifted its ecological zones profoundly, encouraging floral and faunal populations to migrate with their expanding habitats, and then forcing them to move again when these habitats contracted. During the wet period that lasted from approximately 700 to 1100, the trans-Saharan caravan routes were consolidated and thrived because a wetter and greener Sahara facilitated trade. This period corresponds to the so-called “ivory century” in the Mediterranean basin, when the craft of ivory carving flourished in al-Andalus, Byzantine Constantinople, Fatimid Egypt, and in the lands of the Germanic Ottonian Empire.²⁸ The wet period allowed the large mammals of the Savannah grass- and woodlands to live comfortably much farther north than they do today. Generally, the semi-desert Sahel is too dry and its vegetation cannot easily support the Savannah elephant. But when the trans-Saharan trade routes were gaining prominence in the ninth and tenth centuries, the caravan cities along the Niger River, such as Gao and Tiraqqa (eclipsed later by Timbuktu), may

²⁷ Brooks, *Western Africa*; Brooks, *Landlords and Strangers*, 7–25; Brooks, “Ecological Perspectives”; McIntosh, *Peoples of the Middle Niger*; McIntosh et al., eds., *The Way the Wind Blows*; Keech McIntosh, “Reconceptualizing Early Ghana”; Nicholson, “The Methodology of Historical Climate”; Talbot, “Environmental Responses”; Keech McIntosh and McIntosh, “West African Prehistory”; McCann, “Climate and Causation”; Lézine et al., “Sahara and Sahel.”

²⁸ “Ivory century” was coined by Horton, “Swahili Corridor.” See also Cutler, “Resemblance and Difference”; Guérin, “Forgotten Routes.”

have supported significant elephant populations.²⁹ One last troupe of elephants still wanders these now inhospitable territories, ranging over some 24,000 square kilometers every year in search of water and vegetation for meagre survival.³⁰ Indeed, the poor environment available to these last Sahelian elephants does not allow their tusks to grow to their full extent, as they would in richer environments.

Recent excavations at Diouboye (Senegal), along the Falemé river and within the Bambuk region known for its riverine gold, have uncovered evidence of a Mande community focused on hunting to provision the trans-Saharan trade.³¹ At this site, active from about 1000 to 1400, the remains not only of medium-sized bovids but also of such dangerous beasts as leopards and crocodiles suggest the community's involvement in sourcing goods important to interregional exchange. In addition to several small ivory beads, excavations have uncovered elephant bone: an exceptionally rare find indicating that the Diouboye community was engaged with provisioning trans-Saharan trade, not only with leather and exotic skins but with ivory. Its location along the river which was the source of gold for the empires of both Ghana and Mali further demonstrates the region's active diversification of exports and contribution to the flow of trade.

While elephants might have thrived closer to the terminal cities of the trans-Saharan caravans during the wet period, the intensified dryness of the thirteenth and fourteenth centuries makes this nearly impossible.³² As the limits of the Sahara moved southwards, the Sahel also extended south nearly two degrees of latitude, shifting the natural habitat for the elephant population accordingly. The rainforests that provided many trade goods receded to modern Liberia, Sierra Leone, and territories directly adjacent to the coasts. Quixotically, it was precisely in this period, when the rainforests were at their greatest remove from the termini of the trans-Saharan caravans, that grains of paradise were first described by Guillaume de Lorris. That is because a newly expanding empire controlled much of West Africa between the Sahel and the rainforests, and so played an increasingly important role overseeing interregional trade.³³

The rise to power of the Empire of Mali began in the thirteenth century, as the Mandinka royal family (1240–1450), whose homelands have been tentatively

²⁹ For cultural recollections of the elephant, see Arnoldi and Ezra, "Sama Ba."

³⁰ See Blake et al., *Last Sahelian Elephants*; Mauny, "Préhistoire"; Bouché, "Évolution."

³¹ Dueppen and Gokee, "Hunting on the Margins." My thanks to Stephen Dueppen for this reference.

³² Brooks, *Western Africa*, 79–82.

³³ Levzion, *Ancient Ghana and Mali*; Keech McIntosh, "Reconceptualizing Early Ghana"; Brooks, *Landlords and Strangers*, 97–119; Brooks, "Ecological Perspectives."

identified as territories around modern Niani in southern Guinea,³⁴ spread their control over large parts of West Africa. Eventually, the empire bridged all four climatic zones: Sahel, grass and woodland Savannas, up to the border of the rainforests. The empire's founding is remembered in the *Sunjata* epic, an oral history telling of the semi-mythical exploits and adventures of the first *mansa* (king or emperor), Sunjata Keita (fl. 1230s), and his companions.³⁵ Ibn Battuta (ca. 1304–1368/9), the great traveler from Tangiers, visited the Kingdom of Mali and described it as stretching from the Atlantic in the west to the land of Limiyyun to the southeast, downstream from Gao.³⁶ The rulers of Mali closely supervised trade throughout their empire with import and export taxes on merchandise, and they extended their control over the Savannah gold fields.³⁷ In addition to the Bambuk area in eastern Senegal, Mali encouraged development of the Bouré gold region near the modern border between Guinea and Mali.³⁸ The gold trade drove Mali's continued involvement in trans-Saharan routes, and brought remarkable wealth. While gold might have provided much of that wealth, it was the control of other resources, namely iron for arms and horses for transportation, that enabled the *mansas* of Mali to control this vast territory.

Recent excavations at an abandoned settlement along the Niger River, 23 km west of Ségou, demonstrate the means and materials with which the Empire of Mali wielded power.³⁹ Local tradition has long identified the site, known as Sorotomo, with Silamakanba Koita, one of the comrades of Sunjata Keita, and radiocarbon dating of the earliest settlement layers confirm an early to mid-thirteenth-century date. Illustrative of the means of governance within the vast Empire of Mali is the strong archaeological presence of horses at Sorotomo.⁴⁰ Not only were significant skeletal remains of small-scale horses found,⁴¹ the topography manifests an unusually high

34 The location of the capital remains much disputed. Levtzion (*Ancient Ghana and Mali*, 62) named Niani as the capital, but excavations in 1968 were inconclusive: see Filipowiak, "L'Expedition archéologique." See also Hunwick, "Mid-Fourteenth Century Capital"; Conrad, "A Town Called Dakajalan." For the Mandinka linguistic homelands, see Bird, "Development," especially 153.

35 Many versions have been recorded, edited, and translated: e.g. Conrad, ed. and trans., with Condé, narrator, *Sunjata*.

36 Levtzion and Hopkins, *Corpus*, 287.

37 Levtzion, *Ancient Ghana and Mali*, 115.

38 Mauny, *Tableau géographique*, 294–98; Walker, "Italian Gold," 36.

39 MacDonald, et al., "Sorotomo."

40 Local traditions link the site and Silamakanba Koita with the possession of a substantial cavalry: MacDonald et al., "Sorotomo," 54.

41 In the eleventh century, Al-Bakri described the horses used by West African polities as "very small": Levtzion and Hopkins, *Corpus*, 81; Law, *Horse*, 25–26.

number of ponding areas (*mares*): trough-like reservoirs used for watering livestock. The possession and mobilization of horses, especially a cavalry at the ready for raids, attacks, and long-distance communication with an imperial centre, is the clearest sign of dominion. The nearby Souloukoutou iron mines likely supplied another intrinsic element of empire. Iron, the most common metal found in West Africa, smelted into weapons and horse tackle,⁴² may explain Sorotomo's location and represent another source of Silamakanba Koita's power.⁴³ Although the empire relied on iron weaponry to expand and maintain power,⁴⁴ the process of smelting iron had an increasingly deleterious effect on the landscape, exacerbating the recession of woodlands in the dry period and pushing Mali's zone of influence southwards.⁴⁵

The southward expansion of Mali was therefore driven by climate change, worsened by environmental degradation; but it was also the intentional result of rulers' efforts to supply rainforest goods for interregional trade, including ebony, grains of paradise, and kola nuts. With the onset of the dry period in the twelfth century, a number of new trading centres were accordingly established along the border of the rainforest, defining the edge of Mali's zone of influence: Labé (Guinea), Falaba, (Sierra Leone), Kissidougou (Guinea), and Moussadougou (Côte d'Ivoire).⁴⁶ Rainforest exports were exchanged at these sites for iron and iron goods, gold, and cotton cloth.⁴⁷ While the trading entrepôts of the Sahel were mixed societies blending Arab, Berber, and Songhai populations,⁴⁸ Muslim Mande traders were placed in power by the *mansa* in the rainforest market towns, becoming overlords of local populations (including Lobi, Senufo, and Kulango). Known as Dyula (or Jula), the horse-mounted traders developed both a distinct dialect of Mande, incorporating a large number of loan words, and a strongly accommodationist strand of Islamic theology.⁴⁹ It was they who provisioned the Empire of

42 For the iron horse bridle found at Koumbi Saleh, perhaps the capital of Ghana, see Berthier, *Recherches archéologiques*, 78–79.

43 MacDonald et al. are cautious, since no evidence of iron smelting was unearthed during excavations, although only two test units were dug: "Sorotomo," 56.

44 A number of Mandinka-style lance heads have been found throughout the territories conquered by the Empire of Mali: Blandin, "*Fer Noir*," 45 (no. 1) and 143 (nos. 1, 3, and 4); McNaughton, *Mande Blacksmiths*, 112–14.

45 Brooks, *Landlords and Strangers*, 78–80.

46 Ibid., 69–73.

47 Brooks, "Ecological Perspectives," 34.

48 The Soninke traders who specialized in the gold trade were known as Wangara: Massing, "Wangara."

49 Wilks, "Juula."

Mali, and the rest of the western hemisphere, with African forest goods, including ebony and grains of paradise. The receding woodlands and rainforests of the dry period thus compelled the Empire of Mali to stretch its reach, bridging forest and Sahel with the horse-mounted and iron-armed Dyula. It emerged in the thirteenth century as an economic and political entity controlling trade across West Africa, even as the distances between these zones increased dramatically due to climate change.

The Savannah–Forest Interface and Northwestern Europe: Ivory for Copper

The Dyula presence was especially strong along the southwestern edges of the Savannah woodlands. Trade and communication to the southeast, beyond the limits of the empire, was greatly facilitated by the Niger River, which connected trans-Saharan entrepôts along the Niger River Bend to the Savannah and Forest zones of the Niger Delta. Archaeological finds illustrate how the smaller kingdoms and polities throughout this region were similarly actively engaged in long-distance trade. Works of art from Durbi Takusheyi and Tada, sites in the Savannah and Savannah–Forest interface respectively, emphasize not only culturally contingent material hierarchies, but also the astonishingly wide compass of these communities' specific material desires and their integration into the medieval world system.

A cluster of eight burial mounds at Durbi Takusheyi, in the Savannahs of Northern Nigeria, illustrates the reach of Mali's trading network in the fourteenth century.⁵⁰ Three of these were high-status tombs, replete with the goods closely associated with trans-Saharan trade: metalwork from the central Islamic lands, glass beads from an impressive number of far-ranging locales, cowrie shells from the Indian Ocean, copper-alloy bracelets and anklets, and a number of pieces of solid gold jewellery likely from Senegal.⁵¹ Large ivory bangles were found in all three of the high-status graves, fashioned from the tusks of Savannah elephants roaming nearby. The tumuli of Durbi Takusheyi picture for us a community in direct contact with elephant populations, the source of trade routes that spanned some four thousand kilometres to the ivory workshops of France, and they demonstrate how export goods were appreciated. The juxtaposition of local ivory jewellery together with carnelian, foreign glass, brass, and cowries indicates the high status of ivory, a sense of its value. The elite deceased at Durbi Takusheyi were

⁵⁰ Gronenborn et al., "Durbi Takusheyi"; Gronenborn, "States and Trade"; and Gronenborn, ed., *Gold*. Radiocarbon dating placed tombs 4 and 5 ca. 1300–1325, while tumulus 7 is uncertainly dated between the fourteenth and sixteenth centuries.

⁵¹ For the Mamluk bowl, see Ward, "Plugging the Gap"; Silverman, "Material Biographies."

buried with luxury goods from close by, from elsewhere in West Africa, and from across the entire eastern hemisphere.

In addition to ivory, a wide variety of copper-alloy objects were found in the Durbi Takusheyi tombs: finished imported goods, anklets and bracelets cast locally, and the raw material itself in the form of ingots—the long slim rods appropriate for trade (**Figure 5.1a**). Three brass ingots were found with the male individual from tomb 5, and in form they are surprisingly close to those in the abandoned shipment of around 2,085 brass bars that Théodore Monod found, together with thousands of cowrie shells, in the so-called el Djouf, or “empty quarter,” of northern Mauritania, a site called Ma’den Ijâfen.⁵² Monod photographed and documented the abandoned caravan, dated to between 1000 and 1280, but he was not able to excavate properly and the site has yet to be relocated.⁵³

Monod did, however, retrieve twenty-five of the brass rods, and an analysis of their lead isotopes⁵⁴ revealed that the copper ore was not likely extracted from any of the suspected North African sources, such as the Moroccan copper mines near Igli.⁵⁵ Instead, the closest match is a seam of copper ore stretching across modern Belgium and the German Harz region!⁵⁶ Although these are preliminary findings, it seems that the brass ingots abandoned at Ma’den Ijâfen, though they never reached their final destination, had already come a long distance indeed. An initial report on the copper-alloy items from Durbi Takusheyi states that the ingots found in tumulus 5 similarly share isotopic ratios with a number of western European ore deposits,⁵⁷ also linking the burials on the Nigerian Savannahs to the mining centres of northern Europe. Furthermore, while there is great diversity of isotopic ratios among the copper-alloy objects from Durbi Takusheyi, the man buried with the ingots cast his impressive anklets (**Figure 5.1b**) from his own

52 Monod, “Ma’den Ijâfen”; Lintz et al., eds., *Maroc médiéval*, nos. 56 and 57; Lydon, *On Trans-Saharan Trails*, 74–76.

53 Bedaux et al., “Recherches archéologiques,” 147; Garenne-Marot and Hurtel, “Le Cuivre,” 326; Castro, “Examen métallographique,” 497 and 510.

54 At the Smithsonian, Willett and Sayre studied three datasets of lead isotopes from West African copper alloys: ore samples, archaeological and ethnographical artifacts, and lead isotope ratios from previous analyses of West African materials, which were statistically coherent with the Smithsonian lab results. I am aware of the preliminary nature of such meta-analytical studies and urge further tests. Willett and Sayre, “Lead Isotopes.” See also Gale and Stos-Gale, “Lead Isotope Analyses.”

55 Levzion and Hopkins, *Corpus*, 69. Ibn Battuta also mentioned Takedda (Azelik, Niger) as a source of copper: Levzion and Hopkins, *Corpus*, 302. See also Herbert, *Red Gold*, 16–19.

56 For Ma’den Ijâfen isotopes, see Willett and Sayer, “Lead Isotopes,” 67.

57 Gronenborn, ed., *Gold*, 105.

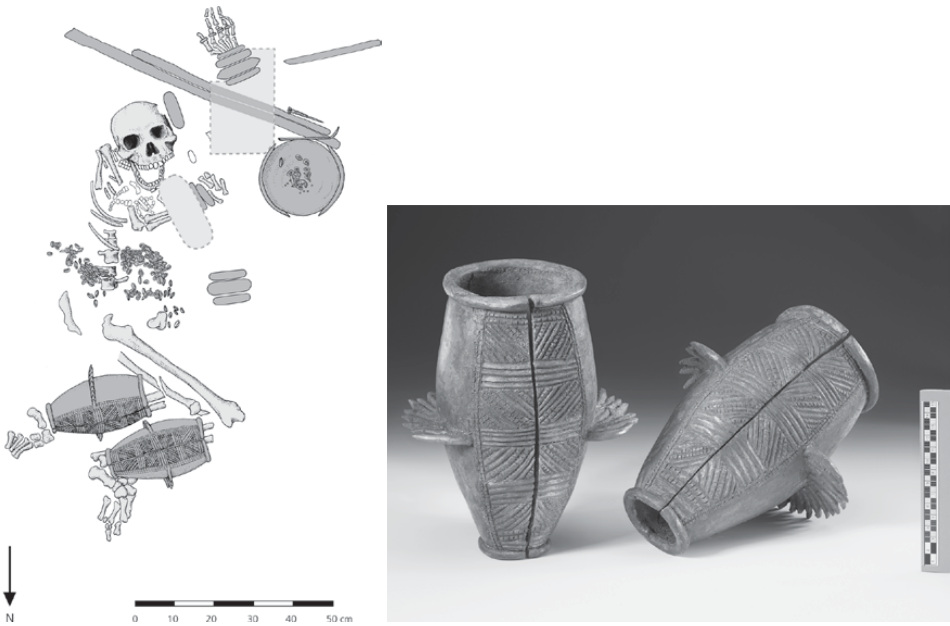


Figure 5.1a–b. Drawing of tumulus 5 at Durbi Takusheyi, Nigeria, ca. 1300. Copper-alloy (brass) anklets from tumulus 5, height: 24 cm each. Images courtesy of Detlef Gronenborn, the Römisch-Germanisches Zentralmuseum Durbi Takusheyi project.

stock of this same material: ingots and anklets shared the exact same composition and isotopic signature. This individual—for whom the brass trade was clearly important and whose identity it must have defined—fashioned them (or had them fashioned for him) from the materials of prestige trade items, to accompany him to the grave. The local and the foreign, the elephant ivory around his wrists and the European copper around his ankles, both expressed his status and identity within his community.

The meeting of European copper and Savannah ivory in the tombs of Durbi Takusheyi is a clear example of the community's active local engagement in global trade. The number of ivory bangles reveals a society not only with ready access to the African Savannah elephant, but one that appreciated the aesthetic potential of their tusks, using their ivory as an esteemed material for personal adornment. The community valued the main product that was exported, ivory, simultaneously transforming imported *raw* resources (like the brass) into culturally significant items. Indeed, the technique of lost-wax casting used for such items as the brass anklets from Durbi Takusheyi appears to have been an independent, indigenous

development among the kingdoms of the Niger River Delta.⁵⁸ The remarkable finds of Igbo-Ukwu (Nigeria), near the mouth of the Niger River—including some 685 objects in copper and bronze, in addition to thousands of glass beads, terracotta sculptures, cowrie shells, and regalia—date to between the eighth and the early eleventh centuries (Figure 5.2).⁵⁹ Not only do these artifacts stand witness to a highly sophisticated artistic tradition, the analysis of the Igbo-Ukwu bronzes reveals two significant sources for the copper ore.⁶⁰ The first, found in the earliest of these pieces, was identified with relatively local ore deposits in modern-day Nigeria, along the Benue Rift.⁶¹ A second source, observed among the later bronzes, is from North African copper deposits in Tunisia and Algeria, thus products of the trans-Saharan trade.⁶²

At Igbo-Ukwu, therefore, lost-wax casting was first practised based on regionally available, indigenous resources. The subsequent success of the art form in the next generations, and the increased desire for its products, evidently surpassed the locally available resources, encouraging long-distance, interregional trade. The impetus for long-distance networks thus came from an endogenous development at Igbo-Ukwu. Thurstan Shaw suggested that this long-distance trade was largely balanced by leveraging locally available elephant tusks to obtain the desired goods. It is worth noting that in addition to the copper-alloy riches, three large-scale elephant tusks were included in the high-status burial chamber unearthed at Igbo-Ukwu, echoing the association between copper and ivory seen at Durbi Takusheyi.⁶³

In the thirteenth and fourteenth centuries, the Yoruba kingdom of Ife was flourishing in the Forest zone of the Niger River Delta. Ibn Battuta seems to have known of Ife, describing it more or less correctly as the kingdom beyond the last territories of the Empire of Mali: “Yufi is one of the biggest countries of the Sudan, and their sultan is one of their greatest sultans.”⁶⁴ Ife is known today for the astonishing group of naturalistic, lost-wax cast, copper-alloy heads that were unearthed

58 Picton, “West Africa”; Craddock and Picton, “Medieval Copper”; Craddock and Hook, “Copper to Africa.”

59 For the dating controversy, see Shaw, *Igbo-Ukwu*; Shaw, “Those Igbo-Ukwu Dates.”

60 Chikwendu et al., “Nigerian Sources”; Craddock et al., “Metal Sources”; Willett and Sayre, “Lead Isotopes,” 57.

61 Willett and Sayre, “Lead Isotopes,” 58–60; Chikwendu et al., “Nigerian Sources.”

62 Willett and Sayre, “Lead Isotopes,” 60–61.

63 Shaw, *Igbo-Ukwu*, 284–85; Insoll and Shaw, “Gao and Igbo-Ukwu,” 17–18.

64 Levitzion and Hopkins, *Corpus*, 287.



Figure 5.2. “Roped” pot on a stand, from Igbo-Ukwu, Nigeria: ninth or tenth century. Leaded bronze, height: 32.3 cm. Lagos, Nigerian National Museum (79.R.4). Image courtesy of Bridgeman Images.

in the palace compound of the Ooni (ruler) of Ife in 1938.⁶⁵ This was a secondary burial, so instead of a dating based on archaeological context, thermoluminescence has been used to place the corpus in the fourteenth and fifteenth centuries.⁶⁶ Rather than the compelling heads from the palace compound,⁶⁷ however, it is the seated figure from Tada ([Plate 5.2](#))—a small Nupe trading village about 200 km due north of Ife along the banks of the Niger River—that offers the perfect illustration of trade, exchange, and material desire.⁶⁸ Dated to 1325 ± 60 years, the Tada figure is thus contemporary with the burials at Durbi Takusheyi, with the

⁶⁵ Drewal and Schildkrout, eds., *Dynasty and Divinity*.

⁶⁶ Willett, “Ife,” 233–34; Willett and Fleming, “A Catalogue.” See Aitken, *Thermoluminescence Dating*.

⁶⁷ Blier, “Kings”; Blier, “Art in Ancient Ife”; Blier, *Art and Risk*. See also Abiodun, *Yoruba Art*, especially [chapter 7](#).

⁶⁸ Divergent iconographic readings of the seated Tada figure have been offered. Blier reconstructed the traditional Ogboni association hand gesture: “Art in Ancient Ife,” 73–74; Blier, *Art and Risk*, 52–59 and plate 5. However, Abiodun (*Yoruba Art*, 229–35) interprets the Tada figure as a diving priest.

flourishing of the Empire of Mali, and, not insignificantly, with the apogee of Gothic ivory carving in western Europe.⁶⁹

Seated on the ground, with one leg bent and the other foot tucked underneath, the 53.7 cm high sculpture displays remarkable attention to naturalistic details of the figure's anatomy and physiognomy. Although unanimously attributed to the workshops at Ife due to stylistic and technical similarities,⁷⁰ the seated figure was not found among the sites and shrines of the Ife heartlands. Rather, it was removed in 1979 (along with seven other copper-alloy figures) from a "sacred hut" at Tada to the National Museum, Lagos.⁷¹ Isotopic analysis of the nearly pure copper from which the seated figure was cast indicates that the ore came neither from a local Nigerian source, a North African one, nor from the Harz region that constituted the ingots at Ma'den Ijâfen and Durbi Takusheyi. Instead, the copper ore seems to come from the Massif Central, a mineral-rich outcropping of the earth's crust in southern France.⁷² The copper from which the Tada figure was cast may thus come from the very territories which so desired Savannah elephant ivory at exactly this same moment—elephant tusks that were in turn carved into figures for Christian worship. For example, the abbey of Frigolet, 70 km or two days' journey from the southern limits of the Massif Central, had (at the time of the French Revolution) an ivory Virgin and Child (Plate 5.1).⁷³ Such large-scale (37.8 cm) ivory statuettes were frequently used in this period in liturgy and private devotion, and were the focus of pious veneration.⁷⁴ These two communities, Frigolet and Tada, can therefore be posited as being in a mutually dependent chiasmic relationship—each

69 Willett and Fleming, "A Catalogue," 138–39.

70 Analysis of the clay core demonstrates a closely related manufacture with the Ife bronzes: Slater and Willett, "Neutron Activation."

71 The first photograph published was in Hermon-Hodge, *Up Against It*, plate facing 196. Palmer, as Lieutenant Governor of Northern Nigeria, did not visit Tada: Palmer, "Gabi Figures" and "Ancient Nigerian Bronzes." Colonial district officer S. W. Walker observed the figures *in situ*: Walker, "Gabi Figures."

72 Willett and Sayre, "Lead Isotopes," 62–68. The two objects from the Ife corpus are formed of nearly pure copper with high levels of arsenic, with the Tada figure (0.95%) and the Obulafon mask sitting slightly outside the core statistical spread for the Massif Central. A branch of the cupreous deposits closer to Marseilles is similarly high in arsenic (Cauuet, "Les Ressources") and was not tested by the project. It might yield a closer match: Werner and Willett, "Composition," 144–45. For mining in medieval France, see Hoffmann, *An Environmental History*, 215–27; Blier, *Art and Risk*, 77–82.

73 Gaborit-Chopin and Levy-Hinstin, "La Vierge."

74 Guérin, "Meaningful Spectacles," and Guérin, "Activation et glorification."

providing for the other raw materials for the production of ritually important figural sculpture. They can be seen, materially and artistically, as equal partners in an exceptionally long-distance, intercontinental trade network. They were an exchange of sacrifices.

Yet in contrast to the Gothic ivories, whose modes of interpretation were largely grounded in biblical exegesis rather than the vicissitudes of trade, the seated Tada figure may have been conceptually associated with the actual mechanisms of exchange. When the bronze sculptures were first observed by S. W. Walker, *in situ* at Tada, the seated figure was still being ritually washed every week in the waters of the Niger River and scrubbed with its gravel. Eva Meyerowitz confirmed this observation seven years later, in 1941: “the priest seems to have devoted particular attention to this figure, which is taken to the Niger every Friday where it is vigorously scoured with water and river sand.”⁷⁵ Frank Willett visited Tada in the late 1950s and interviewed the chief priest of the shrine, who corroborated earlier testimonies regarding the practice of ritually washing the statue in the Niger every Friday (a practice discontinued, Willett notes, in 1949).⁷⁶ The priest also indicated that the community associated the seated figure with “the fertility of the people, of their crops and of the fish in the River Niger on which they live.” Visiting Tada in 1936, the anthropologist S. F. Nadel described the shrine that housed the copper-alloy statues as “quite close to [the river] bank, and next door to the chief’s house ... Inside [the] hut the 8 figures [are] arranged like in museum. Surprising cleanliness and order ... The square inside is covered with pure, new sand from [the] river which is regularly renewed and cleaned.”⁷⁷ River and shrine are thus closely associated, inter-permeating the other’s space, reinforcing the identification of the statue with the river.

That these ritual practices were of some longevity is testified to by the abraded and corroded surface of the copper—though whether the wear is the result of decades of scouring or centuries is difficult to assess. Another piece of evidence does, however, suggest greater antiquity: the educator and linguist M. C. English reported that the ceremonies surrounding the ritual washing were not performed in the indigenous Nupe language but in Yoruba, the language of Ife.⁷⁸ The rituals

⁷⁵ Walker, “Gabi Figures,” 169–72; Meyerowitz, “Ancient Nigerian Bronzes,” 92 and plate A.

⁷⁶ Willett, *Ife*, 51; Willett, *Treasures*, 146.

⁷⁷ London, Archives of the London School of Economics, Papers of Siegfried Nadel (1903–1956, anthropologist), 2; and Nupe: Field Notebooks, Second Series, 1935–1936. See Nadel, “Field Diaries,” ed. Blench.

⁷⁸ English, *Outline of Nigerian History*, 52. I thank Deb Stewart, librarian at the Penn Museum, for help in locating this citation.

surrounding the seated Tada figure, its association with fertility and prosperity, and its deep link to the river may reach far back into the region's history, when Tada was a trading outpost for the Yoruba-speaking Ife kingdom. Thurstan Shaw has already noted the propitious location of Tada at the interface between Savannah and Forest, an ideal riverine entrepôt for the exchange of goods from the two climatic zones.⁷⁹ It was this very fluvial network that delivered the materials from which the figures were cast: a remarkable crystallization of the forces that engendered its own existence, underscoring the ties between the sculpture's materiality, its ritual function, and its origin in an interconnected world system.

Conclusion

We have undertaken a brief journey over a vast terrain in order to assess the complexity of the interregional trade networks linking West Africa to Europe and the Mediterranean world in the thirteenth and fourteenth centuries, and thereby integrating West Africa into the world system. The heyday of grains of Paradise in French and Burgundian cuisine coincides with the flourishing production of Gothic ivories carved from African elephant tusks. During these centuries, the changing climate of medieval Africa had a direct effect not only on the availability of such trade goods, but on the political structures that arose to manage and monopolize regional and interregional trade. I have shown how local, sub-Saharan communities contributed to these trade networks, and suggested how and why certain goods and materials were desired in those communities, impelling the communities south of the Sahara to participate in interregional trade. If cultures around the Mediterranean littoral were enticed across the Sahara by the promise of gold, what material was precious enough to exchange for pure gold bullion? The finds at Durbi Takusheyi and the sculpture of Ife suggest that copper alloys are part of the answer.

The remarkable copper-alloy casts of Nigeria, from Igbo-Ukwu in the eighth through eleventh centuries, and those of Ife from the thirteenth and fourteenth centuries, demonstrate the trajectory of increasing desire for copper alloys on the Niger River delta. As the demand for copper increased, the sources for copper ores moved further afield—to the Sahara and North Africa. By the fourteenth century, the Niger Delta seems to have been sourcing its copper ore from western Europe as well. The Tada figure, cast from copper ore perhaps taken from the mines of the Massif Central, can thus be juxtaposed with Gothic ivory statuettes carved

⁷⁹ Shaw, "A Note on Trade."

from the tusks of African elephants at exactly the same moment. Remarkably the seated figure at Tada was ritually associated with the trade route itself, its weekly washing in the Niger River assuring the community's prosperity by means of this thoroughfare.

Thus copper and ivory reached a sort of trade equilibrium. Not one of direct exchange, but an equilibrium reached through the mediation of several "lobes" of a world system. The desire for copper alloy had a rippling effect across four separate interlocking zones of influence: the Forest zone, the Empire of Mali, trans-Saharan caravans, and the Mediterranean. And remarkably, the very locales that responded to the need for copper alloy appreciated the main export product from the Savannah-Forest interface: elephant tusks. In heeding the local use and significance of materials in a sub-Saharan context, a picture of a vastly different regime of value has emerged. In an economy where gold and ivory are plentiful, such materials as the biologically necessary salt or the spiritually potent copper alloys fulfill real needs and desires. Desires significant enough, compelling enough, to trade for gold and ivory. It was, to paraphrase Appadurai, a worthwhile sacrifice to exchange gold and ivory for copper and salt.

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Abstract Although excluded from Abu-Lughod's description of the medieval world system, West Africa nevertheless played a central role in this economic network via the trans-Saharan routes linking the Mediterranean with Africa south of the Sahara. In the thirteenth century, these links were extended and strengthened under the Empire of Mali, which structured trade between trans-Saharan entrepôts and the Savannah regions where prized African elephants thrived. The carved ivories produced in contemporary Europe would not have been possible without these networks, which also supplied local communities with the materials they themselves prized, some of which were regional products, some of which were imported from northwestern Europe. In particular, works of art produced at the Savannah-Forest interface in modern Nigeria demonstrate sub-Saharan Africa's connection to the world system in the years around 1300.

Keywords copper, ivory, gold, trans-Sahara, trade, West Africa, grains of paradise, world system, Empire of Mali, Tada, Durbi Takusheyi