

In each conquered region, the Inca established **administrative centers**, from which **tax collectors** gathered two-thirds of the crops and the manufactured products, like **beer** and **textiles**, half of it for the state, half for the gods and their priests. They established state workshops to produce official and consumer goods, and they seem to have encouraged significant **standardization of production**, for Inca arts and crafts show little variation over time and place. Inca religion apparently encouraged different gods and worship for different people. The **sun god** was the chief deity, and the **emperor** was considered his **descendant**; the nobility worshiped the military god Viracocha; while the common people continued to worship their own indigenous spirits, along with the newer sun god. The organization and the study of empire, however, take us to Part 3.

WEST AFRICA: THE NIGER RIVER VALLEY

Until 1977, all the cities in sub-Saharan Africa that were known to archaeologists had developed along patterns introduced from outside the region. **Meroe** and **Kush** on the upper Nile had adapted urban patterns from Egypt; **Aksum** in modern Ethiopia had followed examples of urbanization from both the Nile valley and from the trading powers of the Indian Ocean, including the Roman Empire; port cities along the East African coast, such as **Malindi**, **Kilwa**, and **Sofala**, had been founded by traders from across the Indian Ocean; the walled stone enclosures, called **zimbabwes**, built in the region of

modern Zimbabwe and Mozambique to house local royal rulers, had been initiated through contact with Swahili traders from the coast (see p. 381).

In west Africa, the first known cities, such as **Timbuktu**, **Jenne**, and **Mopti** along the Niger River, and **Ife** and **Igbo Ukwu** deeper south in the Yoruba lands near the tropical forests, had been built as centers of exchange. They were thought to be responses to the arrival of Muslim traders from north Africa who crossed the Sahara southward after the seventh century C.E. **Archaeologists** believed that **Africans**, like **Europeans**, had learned of city building from outsiders.

WEST AFRICA BEFORE URBANIZATION

The most important developments of pre-urban west Africa were **iron smelting**, apparently initiated by contact with north Africa; the development of **new artistic traditions**, especially by the **Nok** peoples; and the **spread of agricultural civilization** by the **Bantu people**. Iron smelting entered the archaeological record in west Africa suddenly about 500 B.C.E. In most places the technology jumped from stone to iron directly, with only a few examples of copper-work in between. Most archaeologists interpret this technological jump to indicate that iron working was introduced from outside, **probably from the Phoenician colonies along the north African coast**, and they find evidence for this idea in the rock art of the Sahara desert. Along the routes crossing the desert, rock engravings and paintings dating from between 1200 B.C.E. and 400 B.C.E. depict two-wheeled chariots that suggest trans-Saharan traffic.

THE EARLY AFRICAS

DATE	POLITICAL	RELIGION AND CULTURE	SOCIAL DEVELOPMENT
500 B.C.E.		<ul style="list-style-type: none"> Nok terra cotta sculptures 	<ul style="list-style-type: none"> Iron smelting Bantu adopting settled agricultural lives
250 B.C.E.	<ul style="list-style-type: none"> Jenne-jeno founded 	<ul style="list-style-type: none"> Copper and semi-precious stone ornaments from Niger 	
500 C.E.	<ul style="list-style-type: none"> Ancient Ghana recorded by Arab visitors 		<ul style="list-style-type: none"> Cities in Niger valley (400)
1000 C.E.	<ul style="list-style-type: none"> Foundation of Benin (c. 1000) 		
1200 C.E.	<ul style="list-style-type: none"> Ghana falls; Kingdom of Mali founded 		



The spread of Bantu About 1500 B.C.E. an extraordinary cultural migration began to transform sub-Saharan Africa. From their homeland near the Niger delta, groups of Bantu-speaking farmers began to move east and south, spreading cattle domestication, crop cultivation, and iron-working. By about 500 C.E. southern Africa had been reached, the original hunter-gatherers having been marginalized to remote regions such as the Kalahari Desert.

In northern Nigeria, the Nok peoples were producing terra cotta sculptures, especially of human heads, from about 500 B.C.E. Living in settlements along the Niger, near its confluence with the Benue in modern Nigeria, the Nok also built iron-smelting furnaces, dating to 500–450 B.C.E.

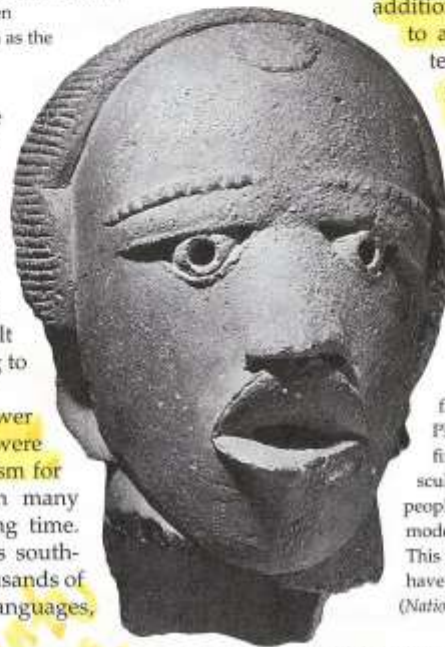
Meanwhile, also in the lower Niger, some Bantu peoples were giving up nomadic pastoralism for settled agriculture, although many remained nomadic for a long time. They began great migrations southward and eastward over thousands of miles, introducing their languages,

their knowledge of iron production, and their experience with settled agriculture. In one thousand years, 500 B.C.E. to 500 C.E., the Bantu carried their languages, their new, settled way of life, and their metallurgical skills almost to the southern tip of Africa.

JENNE-JENO: HOW DO WE KNOW?

Neither the Nok nor the Bantu built cities. Other people of the Niger River, however, did. In excavations that began in 1977 and continue today, Susan and Roderick McIntosh, archaeologists at Rice University in Houston, Texas, uncovered Jenne-jeno, “Ancient Jenne,” the first known indigenous city in sub-Saharan Africa. The Jenne-jeno settlement began about 250 B.C.E. as a small group of round mud huts. Its herding and fishing inhabitants were already using iron implements, and the village grew to urban size by 400 C.E., reaching its peak of settlement by about 900 C.E.

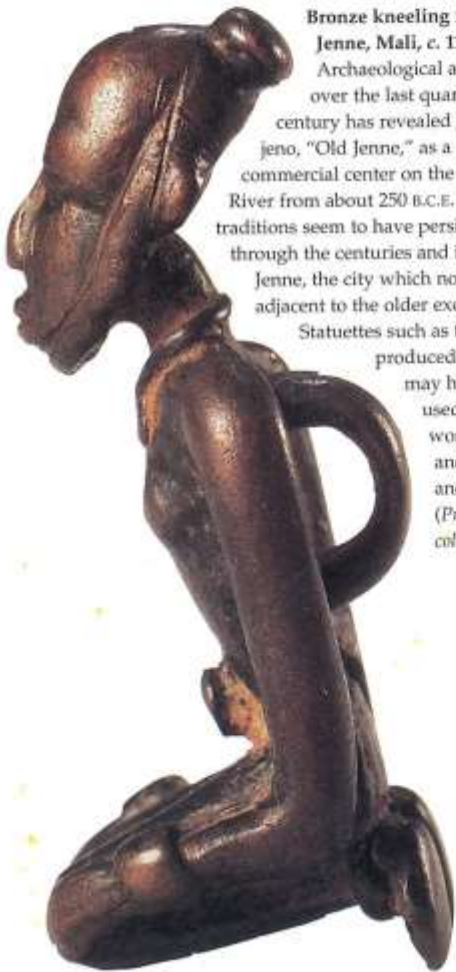
The physical form of the city was different from that of the other six centers we have studied. A central inhabited area of some 80 acres (32 hectares) was surrounded by a city wall 10 feet (3 meters) wide and 13 feet (4 meters) high with a perimeter of 1½ miles (2 kilometers). Near this central area were some forty smaller, but still substantial additional settlements. They extended to a radius of 2½ miles (4 kilometers). “Conservative estimates of between 7,000 and 13,000 persons for Jenne-jeno and between 15,000 and 27,000 for that site plus the 25 satellites within a one-kilometer radius just begin to tell the true story of mid-to-late first millennium population density.”



Head from Jemaa, Nigeria, c. 400 B.C.E. The Nok were a nonliterate farming people that occupied the Jos Plateau in northern Nigeria during the first millennium B.C.E. Their distinctive sculptures—of elephants, snakes, monkeys, people, and even a giant tick—are all boldly modeled and skillfully fired in terra cotta. This powerful lifesize head would probably have formed part of a full-length statue. (National Museum, Lagos, Nigeria)



Pirogues, Niger River. For hundreds and even thousands of years fleets of graceful pirogues, like these photographed near Jenne, have carried the cargoes of the 2600 mile long Niger River valley — gold, ivory, textiles, grains, fish, and slaves — as well as the goods imported from the Sahara and beyond — salt, ceramics, glass, and copper — to waiting customers and merchants.



Bronze kneeling figure, Jenne, Mali, c. 1100-1400.

Archaeological activity over the last quarter century has revealed Jenne-jeno, "Old Jenne," as a commercial center on the Niger River from about 250 B.C.E. Its traditions seem to have persisted through the centuries and into "new" Jenne, the city which now stands adjacent to the older excavation.

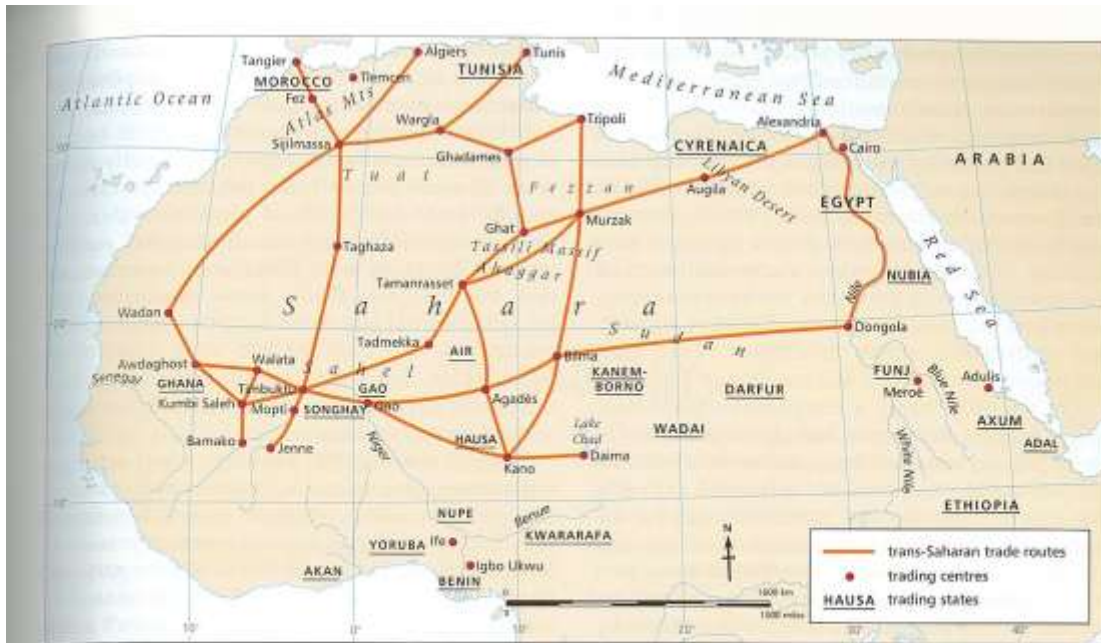
Statuettes such as this one, produced in Jenne, may have been used in worship of and for ancestors. (Private collection)

(R. McIntosh, p. 200). By the year 1000, the settled area may have included 50,000 persons.

Excavations through numerous levels revealed that the people of Jenne-jeno ate fish from the river, rice from their fields, and beef from their herds. They probably drank the cows' milk as well. At least some wore jewelry and ornaments of imported copper and semi-precious stones. Dozens of burial urns, each up to 3 feet (1 meter) high, yielded human skeletons arranged in fetal position. The urns date from 300 to 1400 C.E., and their burial inside and adjacent to the houses suggests a reverence for ancestors. Statuettes in a kneeling position set into walls and under floors further suggest the probability of ancestor worship.

This part of the religious and cultural heritage of Jenne-jeno seems to have endured. The McIntoshes believe that these statuettes were the forerunners of similar sculptures used in Jenne as late as 1900 in sacrifices and prayers to and for ancestors. Although not built primarily as a shrine center, Jenne-jeno included religious functions as an important part of its activities, as its modern counterpart does today. The McIntoshes also found similarities between the arrangement of the huts of Jenne-jeno 1000 years ago and the grouping of family huts today. In ancient times as in modern, they argue, the husband-father lived in one large central hut while one of his wives occupied each of the surrounding huts.

Jenne-jeno must have engaged in trade because even in 250 B.C.E. its inhabitants were using iron and stone that had to be brought from at least 30 miles (48 kilometers) away. Sandstone for their



Trade across the Sahara Ivory, gold, hardwoods, and slaves were the magnets which drew trading caravans south across the arid Saharan wastes, often following routes established before the desert had formed. These routes linked the classical cultures of the Mediterranean and southwest Asia with an array of rich trading states strung along the Sahel/Sudan axis.

grinding stones had to have been imported from at least 60 miles (97 kilometers) away, while copper and salt came from hundreds of miles away. The McIntoshes discovered one gold earring, dating to about 750 C.E. The nearest site of gold mining was 500 miles (800 kilometers) away. Perhaps the people of Jenne-jeno traded the fish of the Niger and the rice of their fields for these imports. Some Jenne-jenites may have become professional merchants.

Innovation in architectural concepts may also have come to Jenne from external contacts. By about 900 C.E. some rectangular houses began to appear among the circular ones, perhaps introduced through contact with northern peoples.

Outside contacts increased with the introduction of camel transportation across the Sahara about 300 C.E. and with the Muslim Arab conquest of north Africa about 700 C.E. (see p. 347). Especially after 1200 C.E., Muslim traders crossing the Sahara linked the savanna and forest lands of the south to the cities of the Mediterranean coast. Most scholars have argued that these external contacts and trade possibilities encouraged the growing importance of new cities like Timbuktu, Jenne, Niani, Gao, Kano, and, further south, Benin. The McIntoshes suggest an opposite perspective: These cities pre-date the

northern connections, and, indeed, their prosperity and control of the trade routes and the gold further to the south encouraged the northerners to dispatch their camel caravans across the Sahara.

By 1100, the settlements peripheral to Jenne-jeno began to lose population. Some of their inhabitants apparently moved to the central settlement. In another century the rural population also began to decline. By 1400, Jenne-jeno and its satellites were no more. Why? Roderick McIntosh cites several possible, but not certain, causes: "growing warfare and slave raiding..., changes to family structure and land rights..., migrations..., and ... new forms of social stratification" (R. McIntosh, p. 203).

STATE FORMATION?

Could the settlements of the Middle Niger at Jenne-jeno be an example of early urbanism without a strong centralized government? Without a state? The McIntoshes certainly think so. They suggest that the population at Jenne-jeno lived in neighboring clusters that were functionally interdependent rather than in a single urban center with a prominent core marked by large scale, monumental architecture as was found in most of the other centers of

primary urbanization. They see this settlement pattern as "a precocious, indigenous, and highly individual form of urbanism" (R. McIntosh, p. 203). They suggest that Jenne-jeno rose on the basis of trade and expanded into geographically neighboring, interactive settlements, but without a hierarchical social structure, without "overt signs of chiefly power" (S. McIntosh, p. 396), without a government. In contrast to primary urbanization in all the other regions of the world we have examined, Jenne-jeno may have experienced relative equality and cooperation among its citizens rather than competition, dominance, and coercion. *consensus*

On the other hand, a comparative assessment might suggest that Jenne had developed only to about the stage of the Olmec settlements, and had not yet created the kind of centralized authority that emerged clearly and powerfully among the later Maya. Had Jenne-jeno persisted longer and grown larger, perhaps centralization and stratification would have developed. Indeed the presence of a central settlement surrounded by smaller adjacent settlements suggests that some hierarchy was already emerging. Did Jenne-jeno represent an alternative kind of urbanization, as the McIntoshes argue, or was it a settlement that was on its way to full-scale conventional urbanization? These are the kinds of questions of comparison that archaeologists—and historians—love to debate.