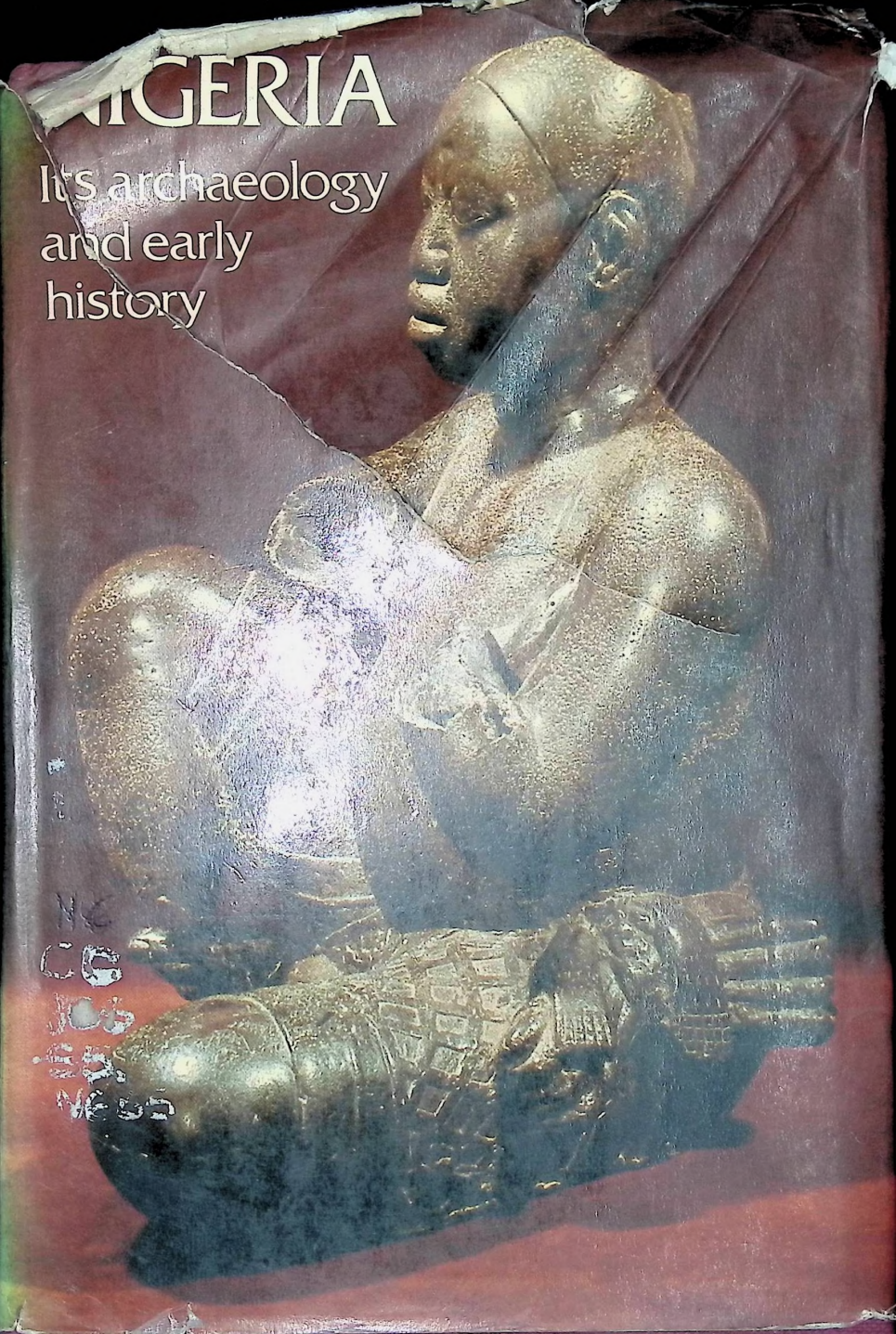
NIGERIA

It's archaeology and early history



PLES AND PLACES
ITOR: GLYN DANIEL

For Ione

Thurstan Shaw

NIGERIA
Its archaeology and early history

WITH 147 ILLUSTRATIONS

THAMES AND HUDSON

THIS IS VOLUME EIGHTY-EIGHT IN THE SERIES
Ancient Peoples and Places
GENERAL EDITOR: GLYN DANIEL

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Contents

You will never know where you are going
unless you know where you are coming from.

Fela Anikulapo-Kuti

Acknowledgments

I wish to thank all those kind colleagues who have assisted me with illustrative material for this book or have read all or part of the text in draft and made many helpful suggestions, especially Desmond Clark, Steve Daniels, Philip Dark, Nic David, Ekpo Eyo, Peter Garlake, Eric Peters, Angela Rackham, John Sutton and Richard York. I should also like to express gratitude for the support I received during the concluding stages of writing the book, in the form of a Richard Carley Hunt Memorial Fellowship, from the Wenner-Gren Foundation for Anthropological Research.

Introduction

Man is a creature who likes to have the facts of his life arranged in an orderly fashion; he likes to see the pattern and sense of things; he likes to have rational explanations for them. Whenever a settled group of people recognize themselves as an entity, they like to have some explanation of their origins, they do not like to feel they are without roots. Such groups, therefore, recount stories of how they came to live in their present area; these stories tell of migrations, or of divine creations, or of warfare, or of the leadership of a founder-hero. Such stories have an additional function; they serve to validate the people's right to the land they occupy or the privileged position of a ruling dynasty.

For example, there are the Yoruba stories of origin and traditions concerning the primacy of Ife, in which the god Oduduwa emptied a calabash full of sand upon the primordial ocean and set upon it a chicken whose scratching scattered the sand and formed the land masses of the earth; Oduduwa became the first ruler of Ife, gave beaded crowns to his children and sent them out to found kingdoms of their own (Ellis 1894, 89–92; Frobenius 1949, 161–3; Idowu 1962, 19ff; Smith 1969, i–xiii; Willett 1967, 121–2; Wyndham 1919, 1921).

When people pass from a preliterate to a literate stage, and become swept up into the orbit of a culturally or technically more advanced world after a long period of isolation, they tend to become dissatisfied with the old folk-tales and the old traditions of origin, and try to show their ancient connections with what are currently regarded as the more prestigious centres of civilization and progress. For example, the Roman poet Virgil tried to give lustre to the origins of upstart Rome and provide a justification for her imperial position by fictitiously tracing her beginnings to the ancient Kingdom of Troy. The same thing happened in England from the seventeenth century onwards. The writers of the time were not content with older, humbler traditions, but sought to connect the preliterate past of England with peoples of

known ancient history, especially of the Classical and Biblical worlds: in 1674, the Oxford Almanack headed the list of the Kings of England with Brutus, grandson of the Trojan Aeneas, who was said by Nennius in the ninth century AD to have settled with his followers in Britain. Brutus was then swept from power by a desire for a more Biblical origin and Japhet the son of Noah was said to have colonized Britain soon after the Flood. Thereafter Englishmen became in turn the descendants of the Phoenicians and even of the Egyptians (Millar 1972, 17–18).

Similarly, it seems, when the Yoruba came into contact with the wider world – in this case the Islamic world to the north of them – it became more respectable to be connected with that world. In the late nineteenth century, Samuel Johnson wrote that Oduduwa, at a date believed to be a considerable time after that of Muhammed, became a prince of Mecca; as a result of civil and religious strife there, he led his followers eastwards and finally settled at Ife (Johnson 1921, 3–5). Johnson was following an account given to Clapperton by Sultan Bello in Sokoto in 1824 (Denham *et al.* 1826, *Journal of an Excursion*, 165) who himself may have been following a seventeenth-century Arabic source (Eyo 1974b, 57). In either case the earliest source for this version is a Moslem one, favoured perhaps as bringing the Yoruba within the Islamic system of conceptualizing all relationships with other peoples in lineage terms (Crowder 1966, 29). Where we have written records, as in the Niger Delta, going back over four hundred years, we can see how oral traditions can change according to current political alignments (Jones 1963, 1965) but for Yorubaland we have no similar time-depth of written history to serve as a check on oral tradition.

After southern Nigeria had had prolonged contact with Europe and with European knowledge of the civilization of ancient Egypt, an even more prestigious source of origin for the Yorubas was discovered there. Just as in England Brutus was dethroned in favour of Japhet, so in Yorubaland Mecca was displaced in favour of ancient Egypt. The idea was started in the heyday of the British Empire and of the then current ideas of diffusion. Although Egyptian and African parallels had been noted for over two hundred years (De Brosses 1760; Bowdich 1821) it was only the present century that detected the hand of ancient Egypt behind every African 'divine Kingship', behind every African language with syllables superficially resembling ancient Egyptian ones, and behind every burial custom remotely paralleled in ancient Egypt. This obsession came from those

diffusionists who were so impressed by what they saw of ancient Egyptian civilization that they felt it must be the fount and origin of all civilizations; the ancient Egyptians were envisaged as explorers, missionaries, traders, colonists and rulers, bringing the enlightenment of ancient Egypt to a dark world (Smith 1915, 1933; Perry 1923). It is no coincidence that this particular theory of diffusionism emerged during the ascendancy of the French and British Empires in Africa, when western Europeans saw themselves as undertaking a 'mission civilisatrice' or what Kipling called 'the white man's burden', of spreading enlightenment to what he called the 'lesser breeds without the Law' (Kipling 1940, 323, 329) rather as they pictured the ancient Egyptians having done; certain it is that this particular diffusionist theory greatly appealed to colonial administrators and others, who joined in the hunt for things Egyptian in the territories in which they worked (Delafosse 1900; Johnston 1913; Talbot 1926; Meek 1931; Seligman 1934; Palmer 1936; Wainwright 1949; Jeffreys 1949, 1950; Meyerowitz 1960). In defence of the proponents of the theory of diffusion from Egypt one must remember that, when they were writing, archaeological knowledge about the other ancient civilizations of the Old World and about surrounding areas was scantier; chronology was much less securely based and it was not appreciated that the civilization of Sumer was older than that of Egypt.

It is somewhat ironic that the advocacy of Egyptian diffusionism on the part of colonial administrators was accompanied and followed by its enthusiastic espousal by African writers (Johnson 1921; Lucas 1948, 1970; Diop 1955, 1960, 1962; Biobaku 1955; Egharevba 1968, 1). These diffusionist arguments, however, have been pretty convincingly refuted (Westcott n.d.; Hodgkin n.d.; Parrinder 1956; Mauny 1960; Garnot 1961; Goody 1971, 19; Okediji 1972; Armstrong 1974). There are indeed a few stray pieces of evidence which suggest that sub-Saharan Africa was not completely cut off from Egypt and it behoves archaeologists to be aware of them and to evaluate them. But the emotional attraction of this idea has sometimes outweighed critical judgement and it dies hard (Diop 1973; Obenga 1973); ancient Egypt, which is part of Africa, had a great and glorious civilization, and it gives added lustre to African pride to trace cultural or even physical ancestry to that source. What does not seem to have been noticed is that the desire to gain some reflected glory from the splendour that was ancient Egypt is almost a tacit admission that ancient Nigerian

-e is lacking. But this is not the case; Nigeria has a great deal
cient culture which arouses the interest and admiration of
s and scholars in all parts of the world. Nigeria possesses her
glories and needs no borrowed light from other cultures.
s Britain no longer derives her cultural respectability and
ssurance from postulated connections with the Classical
Biblical worlds, so there is no need for Nigeria to try to do
ame from supposed origins in ancient Egypt.

wenty-five years ago there began a revolution in the writing
rican history, associated with the advent of trained African
rians. No longer is African history written entirely by
gners looking in upon the continent, no longer is it merely
tory of the activities of colonial powers coming to and so-
ning in Africa, it is history from the inside looking outwards,
hich the advent of colonial powers was merely a latter-day
lent; there is a search for historical identity (e.g. *Who are the*
rians? Arikpo 1957). Because the written documents for this
of history are either scarce or do not go back very far, the
African history began to place a new value upon other
ues of approach, such as the documents enshrined in oral
itions, praise songs and traditional ceremonies. It had long
realized that the systematic study of African languages
t contain clues concerning the history of their speakers, but
there grew a revived interest in historical linguistics. Above
it came to be increasingly manifest that archaeology would
e to supply much of the evidence concerning the African past
which there were no written documents (Shaw 1946). Thus
have now reached a point where a multi-pronged attack is
g directed against our ignorance of this past, an inter-
iplinary approach which should be more productive than
one method of research by itself, or even of the unco-
inated sum of them all (McCall 1964; Gabel and Bennett
7).

ven if we are a long way from a coherent picture, a great deal
rchaeological knowledge has been gained about Nigeria since
rld War II; it is the aim of this book to present a digest of it,
ether with something of the story of the inevitably slow and
e-by-little way in which this knowledge has been gained.
hin the confines of a comparatively short book it is
ossible to give all the evidence or do justice to controversial
cs; whenever possible, therefore, references are given where
se interested can delve deeper. Archaeology cannot do all that
tory can do with the aid of written documents: it uses an

entirely different category of evidence, the handling and elucidation of which can only be done by those with archaeological training and experience. The aim of both Archaeology and of History as disciplines is historical reconstruction; but because of the difference in the nature of the basic data used by each, the types of historical reconstruction they can make are different.

The creation of institutions to carry out research into the unwritten past and to preserve its material remains is a comparatively recent innovation in the countries between the Sahara and the Limpopo. Nigeria occupies a leading place in this development; whereas before World War II Ghana had in Achimota College a museum which was a repository for archaeological objects and a base for archaeological research, Nigeria developed the first effective government department concerned with the preservation of antiquities. This stemmed directly from Nigeria's exceptional wealth in artistic creativity, especially in wood, bronze and terracotta sculptures. The moving spirits who brought pressure upon the colonial government of the day to set up the necessary organization were an art teacher and an educationist. The idea of the conservation of traditional works of art was first conceived in 1933 by E. H. Duckworth, a former editor of *Nigeria Magazine* (Eyo n.d. (1969), 1). Kenneth Murray was appointed to the Nigerian Education Department in 1927 to advise on the impact of European education on African art. In the course of his work he made a large personal collection of Nigerian works of art, which he gave to the Nigerian Museum when it was established. When he began his work, most Nigerians were primarily interested in acquiring European culture and despised the arts and crafts of their parents as 'uncivilized'. He faced this apathy and hostility for years in a single-minded devotion to Nigerian art (Willett 1973b, 2). After the inauguration of the Nigerian Antiquities Service in July 1943, Murray was appointed Surveyor of Antiquities, and a museum for the stone heads of Esie was established there in 1945. Bernard Fagg, who had read Archaeology and Anthropology for his degree at Cambridge before joining the Nigerian Administrative Service and who had conducted an excavation in the Rop rock shelter during his leave in 1944, was transferred to the Antiquities Service. He was responsible for establishing the archaeological headquarters of the service at Jos and for building the museum there, opened in 1952. In 1954 the Ife Museum was opened and the Nigerian Museum in Lagos in 1957. Museums have subsequently been

established at Oron, Kano, Owo, Benin, Nri, Kaduna and Argungu.

It is perhaps not surprising, then, that initially there was an emphasis in the archaeological work of the Department of Antiquities upon the preservation and recovery of works of art rather than upon recovery of archaeological evidence of the kind from which fuller historical reconstructions can be made. With limited resources, excavation effort was concentrated on the Nok culture and in art centres such as Ife, Benin and Igbo-Ukwu. More recently the approach has broadened, and 1963 saw archaeology established as a recognized discipline in the universities of Ife, Ibadan and at Nsukka; it is now possible for Nigerians to take a full degree in archaeology and do postgraduate work in their own country. Inevitably it was foreigners who conducted the first archaeological researches in Nigeria; increasingly they are now being carried out by Nigerians.

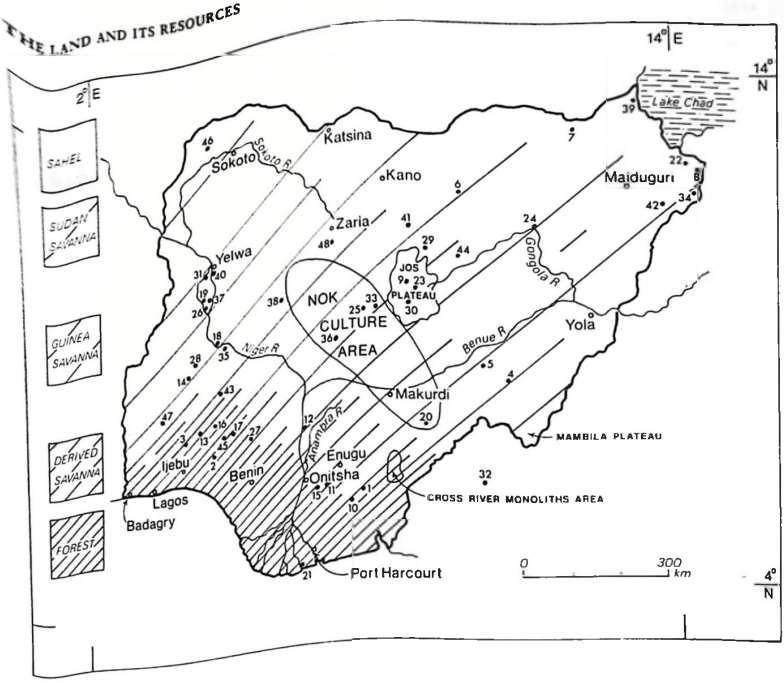
1 The land and its resources

An understanding of man's interaction with his environment provides one of the keys to his history. This is not geographical determinism; but it is a recognition that his environment did set certain limits upon the achievements of early man, and that geographical factors which persist over long periods of time are likely to assert and reassert themselves in a manner which helps to give a constant 'personality' to a country. For example, one of the most important political facts of modern Nigeria is the contrast between 'the North' and 'the South'. This is not a new factor, peculiar to twentieth-century political development; it is a contrast which goes back for thousands of years.

Climate

What happens in the air above Nigeria is more important in determining the possibilities and limitations of life than the character of the land itself; in other words, climate and meteorology are more important than topography, geology and soils. This is because the most influential factor in moulding ways of life in Nigeria, ever since it was first occupied by man, has been the vegetation; and the character of the vegetation is primarily determined by the climate (Church 1957; Buchanan and Pugh 1955; Grove 1967; Udo 1970).

Nigeria lies between the Equator and the desert zone to the north; to the south lies the Atlantic Ocean; on its other three sides it is surrounded by the great land mass of the African continent. Over the equatorial latitudes of the Atlantic lies the moisture-laden maritime air mass; over the desert zone the dry continental air. Where the two approach each other, the Inter-Tropical Convergence Zone runs east/west across West Africa, a weather front where the two systems meet. When the sun is over the Tropic of Cancer in July, the Inter-Tropical Convergence Zone is situated north of Nigeria's northern boundary; in



1 Map of Nigeria, showing vegetation belts, the areas of distribution of the Nok Culture and the Cross River monoliths, and a selection of places of archaeological significance

1 Afikpo
2 Apomu
3 Asejire
4 Beli
5 Biepi
6 Birnin Kudu
7 Birnin Gazargamu
8 Daima
9 Dutsen Kongba
10 Etiti Ulu
11 Ezira
12 Idah
13 Ife
14 Igbetti
15 Igbo-Ukwu
16 Ilesha
17 Iwo Eleru
18 Jebba
19 Kagogi
20 Katsina Ala
21 Ke
22 Kursakata
23 Mai Idon Toro
24 Ngalda
25 Nok
26 Old Bussa
27 Owo
28 Oyo Ile
29 Pingeli
30 Rop
31 RS 63/32
32 Sabga
33 Samun Dukiya
34 Shilma
35 Tada
36 Taruga
37 Warra
38 Wushishi
39 Yau
40 Yelwa
41 Zenebi
42 Bama
43 Esie
44 Geji
45 Igbara Oke
46 Leka
47 Odo Ogun
48 Turunku

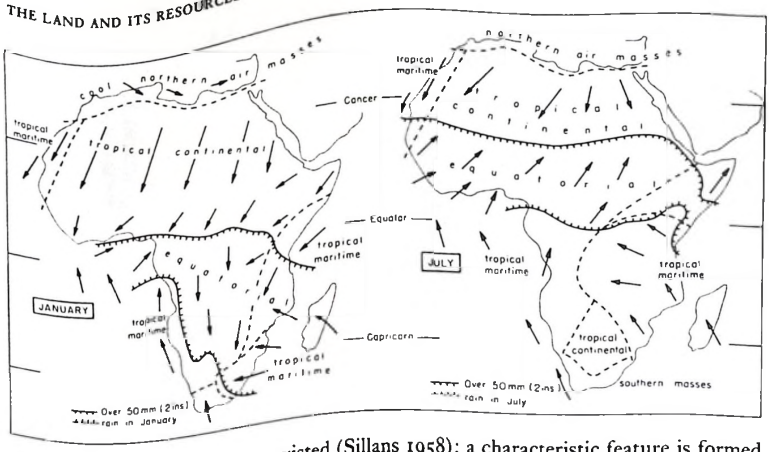
January, when the sun is over the Tropic of Capricorn, it lies along the coast to the south. What happens is that the heavier 2
maritime air mass drives a wedge underneath the lighter dry continental air; there is a fluctuating boundary which can shift considerably from day to day on either side of its general seasonal position. Maritime winds blow from the southwest and bring rain; dry continental winds, the harmattan, blow from the northeast and bring the fine dust of the desert. The result of this situation is that the heaviest rainfall is at the coast, with a gradient of lessening rainfall right up to the northern boundary. Rainfall is markedly seasonal, the northern third of the country having six months with less than 25 mm of rain.

Vegetation

This rainfall pattern determines the natural vegetation. Along 1
the coast and following its configuration there is a belt of tropical rain forest whose northern limit lies roughly 200 km from it; this accounts for the boundary running southeast/northwest from the River Niger between Onitsha and Idah to a point north of Ife. The fact that from this point the limit of the forest swings around to run southwestwards right down to the coast west of Badagry is accounted for by 'the Dahomey Gap' – the only break in the otherwise continuous coastal forest belt from Cameroun to Sierra Leone; this gap is probably occasioned partly by the configuration of the coast, since Cape Three Points creates a rain shadow on its northeastern flank, partly by the upwelling near Accra of a cold ocean current which creates a localized anticyclone.

Mangrove swamps replace the forest along the tidal lagoons of the coast, and this type of vegetation, intersected by numerous creeks and channels, creates another highly specialized environment over a large area in the Niger Delta; here only a very restricted range of crops can be grown, the most important natural resources are fish (including shell-fish) and communication has to be by water. Settlements tend to be concentrated on the sandbanks of former shore-lines.

North of the rain forest lie the savannas – the Guinea or woodland savanna in the south, the Sudan or open savanna farther north. In between the rain forest and the Guinea savanna is a zone of varying width sometimes referred to as 'derived savanna', sometimes as 'savanna forest mosaic'; it is controversial whether this is a man-made zone or whether it has



2 Air masses and precipitation over Africa in January and July. Arrows indicate the directions of the prevailing winds at low altitudes

3 (*opposite, above*) The geology of Nigeria. The wide extent of the crystalline Basement is at once apparent, as is also the significant distribution of Cretaceous sedimentaries in the Niger and Benue Troughs

4 (*opposite, below*) Soil map of Nigeria. Soils derived from Basement rocks are shown by vertical shading; those derived from sedimentary rocks by horizontal shading; and those derived from the sandy drift deposits of the Sudan zone by stippling. The Northern Sands include the Kano, Zurmi and Damaturu Groups. The Miscellaneous category comprises the swamp soils of the south and the poorly drained clays and dry sands of the Chad Basin

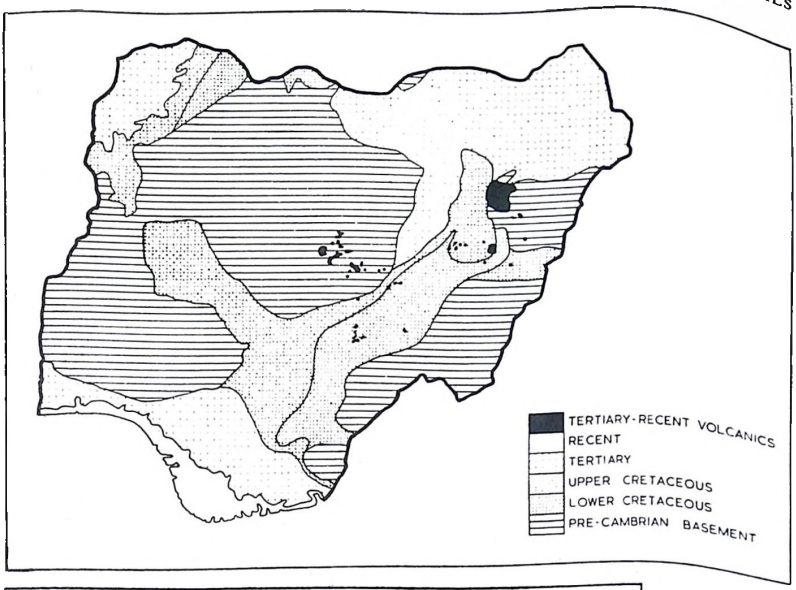
always existed (Sillans 1958); a characteristic feature is formed by galleries of forest along watercourses, flanked on either side by savanna.

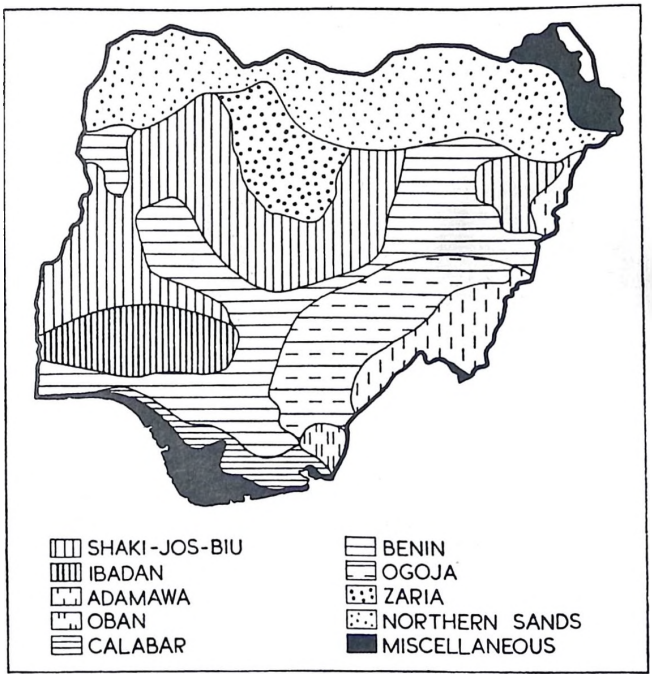
In the extreme north of Nigeria, along the border with the Republic of Niger, particularly in Bornu, the open savanna gives way to the sandy sahel, with sparse grass and acacia trees, which farther north, outside Nigeria's boundaries, in turn merges into the Sahara desert.

The foregoing is the basic pattern for the whole of Nigeria, but it is modified in two areas by altitude, which produces the grasslands of the Jos and Mambila Plateaux.

Geology and soils

The all-important pattern of vegetation may or may not be modified by the soils of a given area, type of soil itself being related to the underlying rocks, as well as to rainfall and drainage. A large part of Nigeria consists of the crystalline rocks of the Precambrian Basement Complex, with Cretaceous sediments in the Niger and Benue valleys, Tertiary and Recent sediments in a zone along the coast, and in the northwest and the northeast. Across the northern part of the country sandy soils have been produced as a result of 'drift' deposits derived from former extensions of the desert farther south. Soils tend to be richer in mineral constituents where they overlie the Basement Complex and are less rapidly exhausted when put to agricultural production than those on sedimentary rocks. The acidity of


TERTIARY-RECENT VOLCANICS
RECENT
TERTIARY
UPPER CRETACEOUS
LOWER CRETACEOUS
PRE-CAMBRIAN BASEMENT


SHAKI-JOS-BIU
IBADAN
ADAMAWA
OBAN
CALABAR
BENIN
OGOJA
ZARIA
NORTHERN SANDS
MISCELLANEOUS

many of the soils can also affect the data available to the archaeologist, since, in the southern part of the country particularly, it commonly makes the preservation of bone unlikely or at best chancy.

Fauna

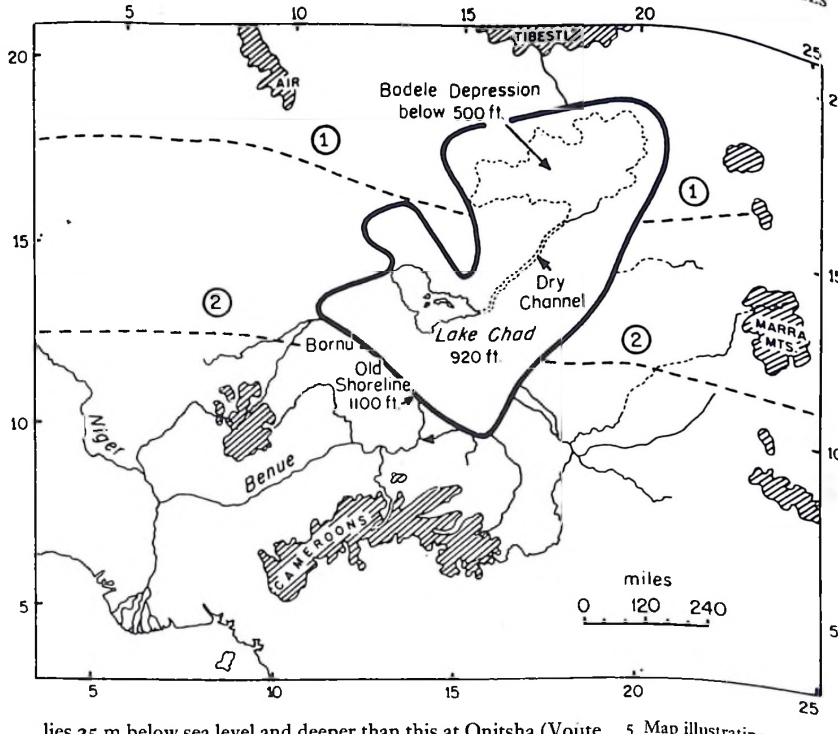
Naturally the different vegetation zones harbour different kinds of fauna, an important matter for prehistoric man. The savannas carry much more game than the forests, chiefly because they provide more food for grazing animals, and these in turn attract predators. Some animals, such as the elephant, are common to both savanna and forest, while others, like the buffalo, have different varieties specially adapted to one or the other. The desertic regions to the north of Nigeria support a number of species, such as certain gazelles, specially adapted to waterless conditions, but these do not occur in Nigeria today and would only have done so in the past if the climate had been very much drier (Dorst and Dandelot 1970).

Climatic changes

This leads us to ask the question: has the climate of Nigeria always been the same and have the vegetation zones always been in the same place?

It has long been known that during the last geological epoch, the Quaternary (roughly the last three million years), there were long periods when it was much colder in northern temperate latitudes and the Arctic ice-sheets extended southwards over northern Europe and America (Sparks and West 1972). At one time it was supposed that wet, or 'pluvial', periods in the tropics corresponded to glacials in high latitudes (Wayland 1934; Leakey 1952, 7; Clark 1957, xxxi; Nilsson 1952), but the relationship between the two is still not clear (Simpson 1934, 1957; Flint 1959; Bakker 1967; Butzer 1971, 312–15; Butzer *et al.* 1972).

Approximately coincident with the last maximum of the last glaciation in northern Europe, beginning around 20,000 BC, it appears that West Africa was much drier than at present (Burke *et al.* 1971). During this time the rivers were discharging into an ocean which was some 100 m below its present level because so much water was locked up in the polar ice-sheets; thus the Benue cut its bed 60 m below the present one at Yola, 20 m below mean sea-level at Makurdi, while the sunk channel of the Niger at Jebba



5 Map illustrating climatic differences in the past. Dotted line 1 indicates the southern limit of shifting desert sand-dunes today; dotted line 2 indicates the southern limit of 'fossil' dunes, now fixed by vegetation. The continuous black line shows the former extent of Lake Chad ('Palaeochad' or 'Megachad')

lies 25 m below sea level and deeper than this at Onitsha (Voute 1962; Faure and Elouard 1967). The Senegal also flowed in a channel well below its present level, but at its mouth it was blocked by vast sand dunes, as was also the course of the Middle Niger. Lake Chad was dry at the time and sand dunes formed over its floor and in parts of northern Nigeria, especially east of Kano, indicating a mean annual rainfall at the time of less than 150 mm where there is now more than 850 mm. Although only the events at the mouth of the Senegal and around Lake Chad have any kind of absolute dating attached to them, the other evidence fits best in terms of a generally dry period around 18,000 BC. If sand dunes were forming at the latitude of Kano, the savanna and forest belts must have been depressed far to the south; in fact botanical evidence indicates that most of the forest disappeared except in relict areas of the highest rainfall such as coastal Liberia, part of coastal Ivory Coast and southeastern

Nigeria (Booth 1958; Lawson 1966, 92). There would also have been a double reinforcement effect. At a time of low sea level, the Nigerian coastline would have been anything from 20 to 50 km farther to the south, and such rains as did come would begin to fall there and be exhausted sooner. Secondly, it has been maintained (Aubréville 1949, 333–8) that the presence of the coastal forest belt and its transpiration helps to refurbish the moisture of the southwest winds passing over it and to maintain their rain-bearing capacity in the savanna lands and beyond. Once the forest disappeared, this replenishment would no longer take place and a steeper gradient of lessening rain from south to north would result.

Before this dry period Lake Chad had been more extensive and the level higher, probably around 40,000 BC (Grove and Warren 1968; Servant *et al.* 1969). This high lake is marked by the Bama Ridge, on which Maiduguri stands; the ancient lake stood at a height of some 50 m above its present level and had an extent twelve times greater; at times it overflowed and drained down the Benue.

Following the dry period of 20,000 years ago, conditions began to get wetter again around 10,000 BC: the Mali Niger joined up with the Nigerian Niger and Lake Chad again became vast. During this period the forest would again have spread northwards from the relict areas near the coast where it survived during the preceding dry period. At Igbo-Ukwu, at present on the northern limit of the rain-forest zone, there were old land surfaces with spreads of charcoal dated to the eleventh and seventh millennia BC (Shaw 1970a, 58, 91). If the charcoal was the result of natural bush-fires and not of the activities of Stone Age hunter-gatherers it may indicate a savanna-type vegetation surviving to this era at this latitude (6° N).

From about 5500 BC the climate fluctuated, but the lakes in the southern Sahara became progressively more saline and Lake Chad began shrinking to its present size. After 3000 BC the Sahara entered its final phase of desiccation, to bring it to its present desert state (Monod 1964; Faure 1966; Conrad 1969; Hagedorn and Jakel 1969: Maley *et al.* 1970; Camps 1974). As we shall see, the climatic and cultural history of the Sahara had a considerable importance for the prehistory of Nigeria.

Disease

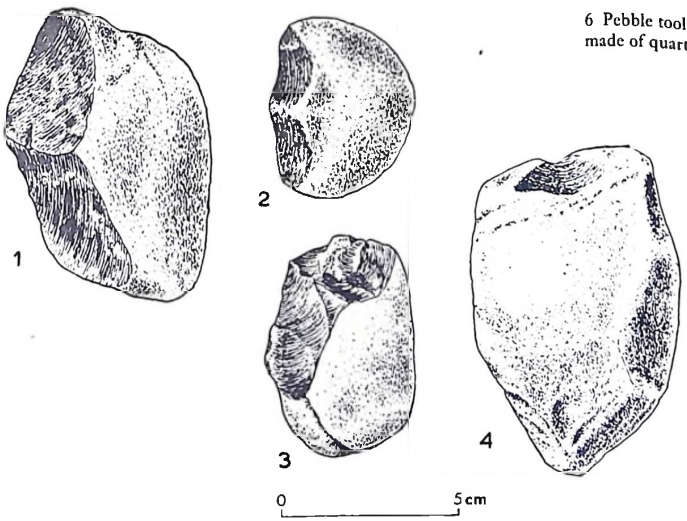
Another important element in the environment to which man had to adapt in Nigeria was the presence of a number of endemic diseases and parasites, affecting both human beings and animals. The most lethal was malaria, causing high infant mortality, but with its incidence affected by human interference with the environment and by human adaptation to the disease. Human sleeping sickness affects the Nigerian 'Middle Belt' most, but animal trypanosomiasis makes the breeding of horses and cattle a difficult business in the southern half of the country. The distribution of the vectors of these diseases, tsetse flies, is affected by rainfall and vegetation and may well have extended further north in wetter times in the past and been correspondingly more restricted in the drier periods.

2
The first Nigerians

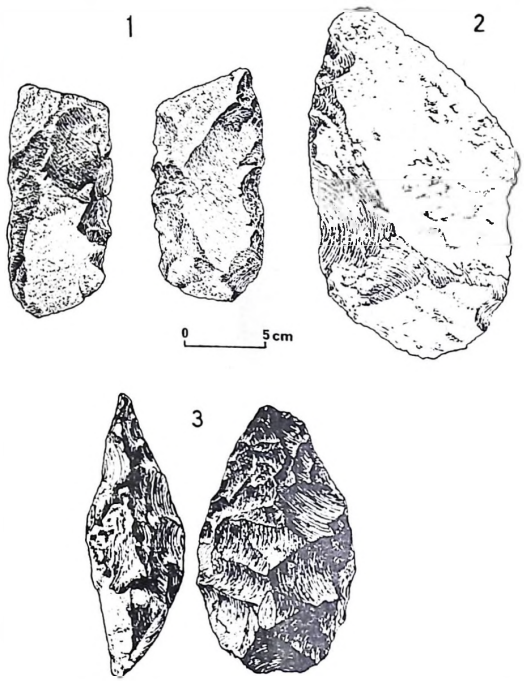
'Tchadanthropus' and Oldowan tools

The earliest hominids who were ancestral to man evolved in the eastern part of Africa, and the fossil evidence we have for this, going back for more than five million years, comes from Ethiopia, Kenya, Tanzania and the Transvaal. There is no comparable evidence from Nigeria. This could be on account of unfavourable conditions of preservation (Clark 1968, 37), but may genuinely represent an absence of early hominid forms and the fact that it was the ecological conditions of the eastern parts of Africa which favoured the evolution of man (Kortlandt 1972). On the other hand, the West African evidence may be so deeply buried that it simply has not come to light. The Chad formation, covering the relevant time span, extends to a depth of 600 m and there are no natural gorges in it to expose the successive beds, as in the fortunate case of Olduvai in Tanzania; but that this formation may contain palaeontological material of great importance is suggested by the finding at a depth of 60 m in a well in Bornu of the fossilized bones of an extinct species of hippopotamus (*Hippopotamus imaguncula*; Tattam 1944). The nearest place to offer early hominid evidence is in the Republic of Chad, where the cranio-facial portion of a skull was found 200 km west-southwest of Largeau. Christened 'Tchadanthropus', this was first published as belonging to the genus *Australopithecus* (Coppens 1961), the type of early hominid of which many examples have been found in eastern Africa; later it was attributed (Coppens 1965) to a more advanced type of hominid, also known from eastern Africa, but more recently still it has been regarded (Coppens 1966) as well on the way to the earliest accepted type of human, known as *Homo erectus*, with a brain-case nearly twice as large as that of *Australopithecus* and two-thirds the size of modern man's. Unfortunately there were no stone tools or other cultural material associated with Tchadanthropus.

Apart from utilized and roughly trimmed chunks and flakes, the earliest and simplest types of stone tools made by man consist of pebbles or lumps flaked by striking them with another stone to form crude chopping and cutting tools; they are known as Oldowan-type tools, after Olduvai Gorge, in Tanzania, and are often referred to as pebble-tools, or pebble-choppers. The Oldowan tool-kit was probably primarily used for obtaining the meat and marrow from the carcases of animals hunted, since man by this time had become more carnivorous than his pre-hominid ancestor, and although able to chew raw meat, did not have teeth capable of tearing through skin or of crushing bones (Clark and Haynes 1970; Isaac 1971). Such pebble-choppers, being the simplest type of serviceable stone tool, had a very long history and are known from many later industries as well. Therefore one cannot tell from their form alone how old they are. In the Oldowan industries of eastern Africa they are dated, from the geological beds in which they occur, to the time range $1\frac{1}{2}$ to $\frac{1}{2}$ million years ago, and the comparable Karari industry from east of Lake Turkana is probably older. Although many pebble-choppers have been found in Nigeria, none are unequivocally dated by their associations to such a remote period. Four such tools, all in an abraded condition, came from a gravel terrace 6 m above the River Taraba covered by $1\frac{1}{2}$ m of laterite at Beli in the Muri Division of Gongola State (Soper 1965, 177); although this provenance suggests some antiquity, it does not establish these tools for certain as contemporary with the Oldowan industries of eastern Africa.



6 Pebble tools from Beli, made of quartz



7 Acheulian tools. *Nos 1–6* from Mai Idon Toro, *7–8* from Pingell. *1* Oblique-edged cleaver, of basalt. *2* Oblique-edged cleaver, of granite. *3* Ovate biface, of chalcedony. *4, 5* Keeled picks, *4* of basalt, *5* of granite. *6* Pointed ovate biface, of chalcedony. *7* Large biface, of felsite. *8* 'Ficron' type biface, of rhyolite.

'Acheulian' tools

Homo erectus made his appearance more than a million years ago (Clark 1975, 185) and began making very much more refined tools than the Oldowan pebble-choppers. These are called 'Acheulian', after St Acheul in northern France where they were first recognized, although we now know that the ones from there are not as old as the oldest of this type from Africa. The common Acheulian tools are flaked from both sides and hence are called 'bifaces', the term which has come to replace the older term 'handaxe' – unsatisfactory because it is uncertain whether such tools ever served the function of an axe. They are often made out of very large flakes which have been struck from the parent rock for the purpose. Acheulian bifaces are commonly oval or pointed oval in shape, anything from 10 cm to 30 cm long, flaked all or three-quarters of the way round to make a sharp cutting edge; a similar tool, with a straight transverse cutting edge at one end is known as a 'cleaver'. The later Acheulian bifaces are works of

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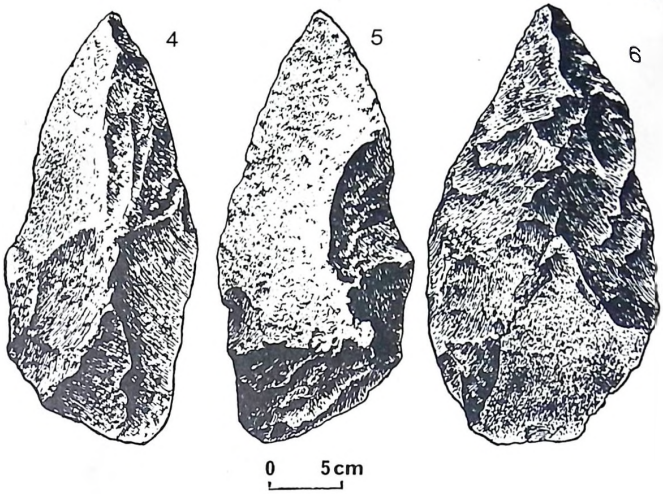
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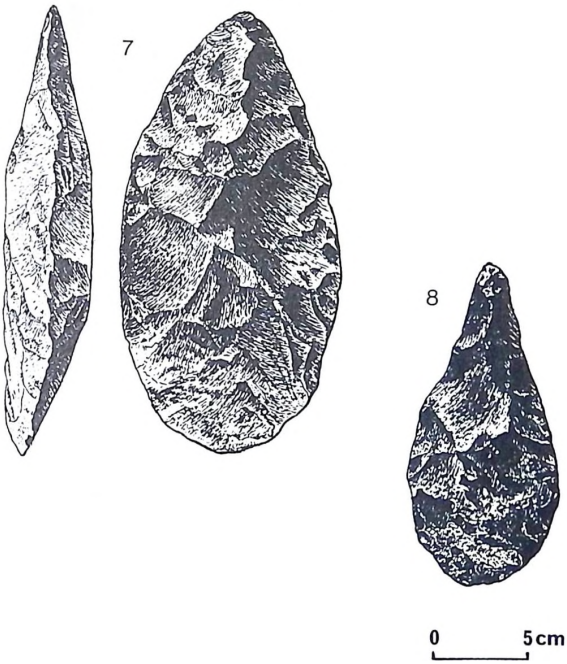
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beautiful craftsmanship flaked to achieve thinness by means of a technique which was an advance on using another stone as a hammer; instead, a cylinder of horn, bone or hard wood was used. The Acheulian tool-kit also included heavy-duty picks (in which the emphasis was on a sturdy point rather than on a cutting edge), scrapers, serviceable flakes, and spherical stones probably used for pounding vegetable foods or breaking open bones for the marrow. Tools of wood and bone, which have rarely survived, were undoubtedly made; for example, it is most likely that the wooden thrusting spear was used in hunting. The chase would have been an important economic activity pursued by the men, while the women and children contributed the greater bulk of the food supply by gathering wild nuts, berries, fruits, edible leaves and roots. Food was shared, and a home base, however often it had to be moved, was established. Social organization would have been in bands of about twenty-five persons (Lee and Devore 1968, 155, 245–8; Birdsell 1968, 235), not too large to be supported by the stretch of country over which they ranged, which may have been an area anything from 300 to 3000 km² (Clark 1970, 100). With only primitive water-carrying equipment (perhaps animal stomachs or skins, skulls, ostrich eggshells or bottle gourds, but no pottery vessels), Acheulian tool-makers would have had to remain within daily access of water; this probably explains why so many Acheulian tools became embedded in river gravels and lake deposits. It may have been necessary to follow the annual migrations of game or to seek vegetable sources of food in different places at different times of the year. The survival rate was probably considerably lower than the birth rate, not so much from disease (since small bands of hunter-gatherers are less subject to disease than larger aggregates of settled agriculturists) but because of the need for mobility; a mother on the move can only carry, in addition to her other gear, the offspring who are born at intervals of three or four years. Increasing effectiveness in this way of life probably accelerated mental and social evolution, and especially the need to refine communication, leading to the development of language. By the end of this phase, anyway, man had the use of fire.

Much of this picture has been built up from the excavation in other parts of Africa of the home bases or butchery sites where hunted animals were disposed of by groups of *Homo erectus* using Acheulian type tools (Clark 1975, 185–6). No such site has been excavated in Nigeria, although large numbers of Acheulian tools have been found. Their distribution is, however, very restricted.

None have been found south of the east/west line formed by the Rivers Taraba, Benue, and Niger above the confluence. Far and away the greater number come from the Jos Plateau or near it. This is largely on account of the tin-mining in the area, as a result of which Acheulian material has been recognized for fifty years (Braunholtz 1926; Balfour 1934). The implements come from alluvial deposits, with the result that specimens deriving from different spots, different ages or different activities may have been mixed together, and we cannot be sure to what to attribute the differences observed in different places (Isaac n.d. [1973]). Over most of the Jos Plateau, Acheulian material is found in the tin-bearing gravels ('tin-wash') occurring in deeply-cut channels subsequently filled by aggradation; but at Mai Idon-Toro, where the River Forom approaches the edge of the plateau, it has downcut its bed below the level containing Acheulian material, which therefore is situated in a terrace above the river, at two levels (Bond 1956, 196). Acheulian tools were much commoner in the upper tin-wash and the industry contained a much higher proportion of cleavers to bifaces than that from the lower tin-wash, although the geological evidence suggests no great lapse of time between the two layers (Soper 1965, 182).

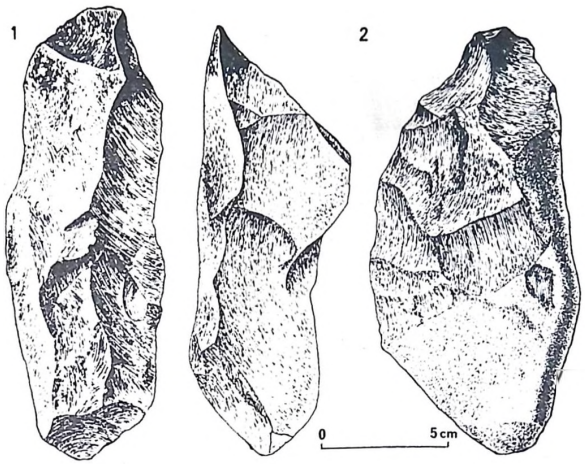
To the west of the Jos Plateau the alluvial deposits of the Nok valley have also been exploited for tin. After the original cutting of the valley, the earliest infill contained Acheulian implements. This deposit was in turn cut through by a second phase of erosion, and the subsequent infill is thought to be the source of Middle Stone Age implements (see p. 35). This was later cut through by the last cycle of erosion and it is the infill following this which contains the terracotta figurines and associated material of the iron-using Nok culture (see p. 70). Because the Nok valley has produced Acheulian and Middle Stone Age material in addition to the Iron Age culture to which it gives its name, it is necessary not to confuse them and to realize that there are long stretches of time separating the three. Carbonized wood from the gravels which produced Acheulian implements yielded a radiocarbon date of more than 39,000 years before the present (Barendsen *et al.* 1957), but this is only a minimum age: they could be older. Out of a collection of over 500 cleavers, bifaces and picks from Nok, over 80% were bifaces and less than 10% each of cleavers and picks, while from the northern edge of the Plateau at Pingell, out of 233 of these Acheulian tools, 70% were bifaces, 25% cleavers and less than 5% picks.

Outside the Plateau, Acheulian tools have been found on an extensive scatter of gravel about 5 km north-northwest of Ngalda near the northern loop of the River Gongola, and a few specimens between the Plateau and the Cameroun border.

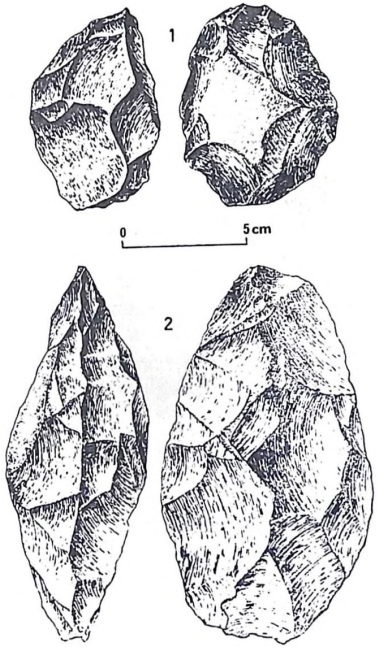
Many questions remain unanswered concerning the Acheulian tools found in Nigeria: apart from the minimum age already quoted, their dating is uncertain; we do not know the significance of the difference in composition of the largest collections; and although it looks as if the known distribution is a genuine one, there must remain doubts as to how our knowledge has been affected by the incidence of tin-mining. The gravels in which Acheulian material occurs in the Jos Plateau area have been associated with the aggradation belonging to the first of the three erosional-depositional cycles recognized, but it is not clear how this is to be related to Nigeria's climatic history as derived from fossil dunes and former lake levels. Typologically at least, most of the Acheulian material in Nigeria looks 'late'. During the main phase of the last glacial maximum in northern latitudes about 70,000 years ago much of the Sahara was wetter than at present, and large quantities of late Acheulian material have been found there down to about 16°N latitude. The arid zone was pushed to the south of this, but the greater altitude of the Jos Plateau would have given it some immunity from extreme aridity and it may have been a southward extension of the Acheulian area in the Sahara, a promontory into the drier lands, providing the kind of open grassland or lightly wooded territory favoured by the makers of Acheulian tools. Perhaps they discovered the area as a result of hunters following the seasonal movement of game, and this was the pattern of their occupation of the area. The deposition of gravels has usually in the past been taken to indicate a period of heavy rainfall, but may in fact represent the onset of drier conditions when vegetation cover lessens and permits increased erosion and run-off from valley sides, with the result that seasonal floods deposit gravels but the perennial flow of the river is not sufficient to carry them away.

'Sangoan' tools

In many parts of sub-Saharan Africa a complex of industries came into being, following the Acheulian, which retained some of the tool-kit of the latter, such as pick and biface forms; however, the cleaver disappears and spheroids become rare; there is a much greater emphasis on the picks, often of heavy and



8 Sangoan type picks, of quartz, from west of Nassarawa



9 Sangoan tools in quartz. *1* 'Push-plane', from Keffi. *2* Biface, from Nassarawa

massive form; and high-backed heavy-duty scrapers occur, as well as choppers, often made of flaked pebbles. This type of industrial complex has been called the 'Sangoan', after Sango Bay on Lake Victoria where it was first recognized. There have been changes in the use of the term (Clark 1971) and it has been disputed whether there is a true Sangoan in West Africa at all (Wai-Ogosu 1973). Elsewhere in Africa, the Sangoan is allocated to dates between 45,000 and 35,000 BC (Clark 1970, 250; 1969, 191) but there is no independent dating for this type of material in Nigeria. It has been found in the valley of the upper Sokoto and its tributaries, but most plentifully in the stretch of country south of the Jos Plateau and north of the tropical rain forest, associated with river valleys; for example, it occurs in gravels at heights of 10–20 m above modern river level around Jebba (Davies 1964, 113–14; Soper 1965, 184–6), and includes a very Acheulian-looking biface. If these gravels were laid down when the river was graded to the 'Upper Inchirian' high sea-level (Faure and Elouard 1967) the presence in them of unrolled Sangoan type implements suggests a date of about 30,000 BC, when the level of the sea was high because of melted ice-sheets during an interglacial episode in northern latitudes; the rolled specimens could be contemporaneous or older. It is possible that the distribution of Sangoan material in the Sokoto basin and in the 'Middle Belt' of Nigeria, generally in a riverine and woodland situation, represents a way of life adapted to dry conditions before 40,000 BC (after which Lake Chad began to fill up and spread). Elsewhere in Africa, the Sangoan has been seen as an adaptation to increasingly dry conditions (Clark 1960, 149). Perhaps game became scarcer and the men of the time had to keep near the perennial rivers and adapt their diet to an increase in vegetable products obtained from gallery forests. This seems to be reflected in the tool-kit, especially in the emphasis on picks, which may have served to dig up edible roots and tubers. We need to learn much more about the industries to which the name of Sangoan has been given in Nigeria.

8, 9

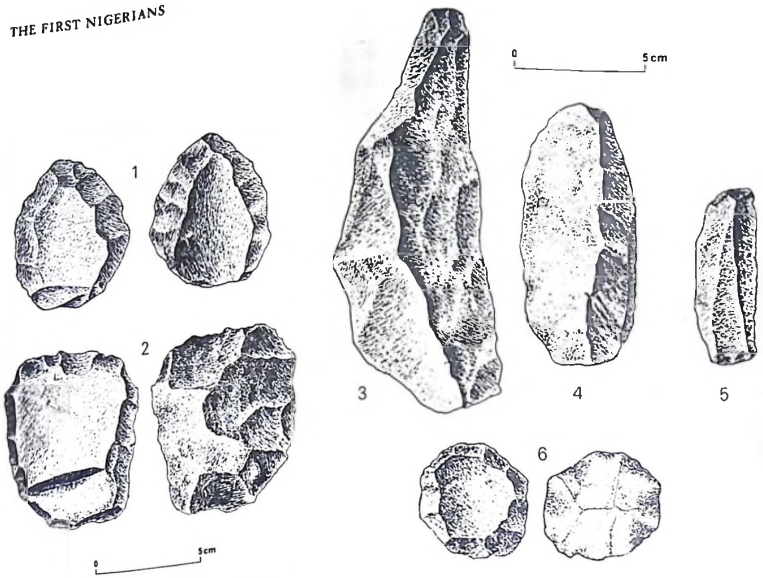
Before the flooding of the Kainji reservoir, on the west bank of the Niger between Bussa and Yelwa there could be found large numbers of stone artifacts of a unique industry. Locally occurring quartz pebbles provide the raw material for a prolific industry in which the majority of the implements are simple choppers and irregular cores made from pebbles; irregular disc-cores and flakes struck from them are fairly common, and occasional rough bifaces and steep scrapers also occur. The

presence in these assemblages of disc-cores suggest a later date than the true Oldowan, whose pebble choppers are similar, and the fact that all occurrences are at heights above 12 m above river level suggest they belong to a time when the River Niger was running at this height. This may again be related to the Inchirian high sea-level of 30,000 years ago; accordingly this industry may be roughly contemporaneous with the more Sangoan-looking material downstream made from quartzite around Jebba, but the form of its tools was partly determined by the nature of the quartz pebbles used as raw material (Soper 1965, 188).

The 'Middle Stone Age'

The term 'Middle Stone Age' is used to describe a group of industrial complexes between the Early and Late Stone Ages which were until recently put in the time span 35,000 BC to 10,000 BC. Radiometric dates and more intensive work in southern Africa have now shown that there at any rate (Vogel and Beaumont 1972; Clark 1975, 187) the Middle Stone Age began as far back as 50,000 BC, and that it gave way to the Later Stone Age earlier than had formerly been thought. Unfortunately in Nigeria at the time of writing, while we have a number of occurrences of tools of Middle Stone Age type, we possess no satisfactory information from excavated occupation sites in the period, and the little dating evidence that we have is also meagre and unsatisfactory.

The industries of the Middle Stone Age in other parts of Africa show greater localization and specialization than those of the Early Stone Age, and there are more regional variants. These localized specializations may be due to some differences in age or in cultural traditions, but it may also be due to adaptive responses to ecological differences undetectable in the archaeological record; for example, elephants can set in motion locally a 300-year cycle which will change an area of forest into savanna before it reverts to forest again (Buechner and Dawkins 1961; Clark 1975, 189). From now on also, changes may have been man-made as well as being due to natural causes; for example, bush-burning may have been employed as a hunting technique; and this may have altered the distribution pattern of plants and animals. With an improved technology, intelligence and communication, the people of the Middle Stone Age responded sensitively to such changes, adapting the ways in which they exploited the natural resources around them; this would explain



10 Middle Stone Age tools. *1* Levallois core, of felsite, from Zenebi. *2* Disc core, of felsite, from Zenebi. *3–5* Flake-blades, of felsite, from Zenebi. *6* Disc core, of quartz, from Gusau

the range of variation in tool-kit. In other parts of Africa outside Nigeria we now have evidence that *Homo erectus* had been replaced by *Homo sapiens*, with a brain size equal to that of modern man; in East Africa, an early form of modern man has been shown to be present by 40,000 BC (Leakey *et al* 1969).

In the Middle Stone Age industries of Nigeria there are fewer large and heavy-duty tools such as bifaces, picks and choppers while the number of smaller light-duty tools, such as points and
10 scrapers made on flakes increases. These flakes are commonly produced by the 'Levallois' or 'prepared core' technique; in this method of stone-working, a piece of stone has flakes struck off it all around the centre in such a way as to provide a flat platform to receive a final decisive blow to detach a flat oval or triangular flake, whose shape has been predetermined; this flake will bear on its upper surface and on the platform the flake-scars made in the preparatory process, and the striking platforms of such flakes
11 are sometimes referred to as 'facetted butts'. Quite often the cores are prepared into a triangular shape, resulting in a final flake with a facetted butt at one end and sides converging towards a point at the other. Such intentionally produced triangular points are very suggestive of spear points, and may

perhaps have been used to tip not merely a thrusting spear but a throwing spear or dart also.

The three most important collections of Middle Stone Age material made in Nigeria all come from the Jos Plateau or near it as the result of tin-mining. At Rop it seems to have been mixed in the alluvium with Acheulian material and is only distinguished typologically, not stratigraphically (Soper 1965, 189). At Nok however, as we have seen (p. 29), the Middle Stone Age material was stratified in between the earlier Acheulian material and the later Iron Age material, in the second infilling of the three erosional/depositional cycles of the valley.

The Lirue Hills are a northern outlier of the Jos Plateau, and from them at Zenebi the River Gaya descends in a series of falls to the plain below. During tin-mining in the gravel fan at the foot of the falls, typical Middle Stone Age material has been recovered, in both rolled and unrolled conditions, as well as from the area above the falls. It looks as if this was a factory site, since cores and flakes are common but finished implements are rare; it was a good place for Middle Stone Age people to make their artifacts as the falls brought down pebbles and boulders of felsite, which was their favoured flaking material.

Many other sites in the northern states have produced Middle Stone Age material either collected on the surface, from quarry pits for road material or from erosion gulleys (Soper 1965, 190–1); no sites have been excavated. While all these archaeological occurrences may not necessarily belong to the same industrial complex of the Middle Stone Age, the character of the majority of them aligns them more with the 'Mousteroid' or 'Levalloiso-Mousteroid' industries of northern and northeastern Africa than with anything in eastern, central or southern Africa. As in the case of the Acheulian, the distribution of Middle Stone Age material may indicate a period when the savanna lands of Nigeria were drier than at present but not so dry as during Sangoan times, perhaps during the period beginning 30,000 years ago when falling sea-levels indicate the onset of the last severe cold period in northern latitudes and a corresponding progressive desiccation of the savanna lands of West Africa. At Zenebi a piece of wood from an unrecorded position in the gravels yielded a radiocarbon date in the mid-fourth millennium BC (Barendsen *et al.* 1957); although this is later than one would expect for the contained industry, theoretically it could indicate a survival in a limited area of this cultural tradition and way of life after the advent of people with a Late Stone Age technology

11 The manner in which a pointed flake struck off a carefully prepared Middle Stone Age core, such as that shown in Ill. 10 *no. 1*, could have been hafted to make a spear-head

and economy, evidenced not far to the south on the Jos Plateau. Bifacially-flaked leaf-shaped projectile points are rare in Nigeria, and few have been found with satisfactorily established stratigraphical associations, but they may well belong to the end of the Middle Stone Age period. Such points are characteristic of the 'Stillbay' and 'Lupemban' industries of eastern and southern Africa and of the Zaire basin respectively, both belonging to the generalized 'Middle Stone Age' group. One such bifacial point was found at the very bottom of an excavation in a rock shelter at Rop, the rest of which contained Late Stone Age material; the author found one, together with large numbers of small quartz and quartzite flakes but no recognizably Late Stone Age forms on the University of Ibadan farm; another has recently been reported as a surface find behind the Yelwa Club south of Jos (York 1976). A rather nondescript flake industry assigned to the Middle Stone Age, a description of which has not been published, was found stratified below later material as a result of the construction of the Asejire Dam (Oyenuga and Ozanne 1968), and at Odo Ogun a comparable industry was found associated with an angular pediment gravel regarded as resulting from an arid period in southern Nigeria around 18,000 BC (Burke *et al.* 1969).

Thus their stone tools bear witness to the presence of Early and Middle Stone Age people in Nigeria, but they and their way of life must remain rather shadowy and inferential until it is possible to identify their camp and butchery sites and recover their skeletal remains – if indeed they are anywhere preserved in Nigeria.

3 Hunters, gatherers and fishers of the Late Stone Age

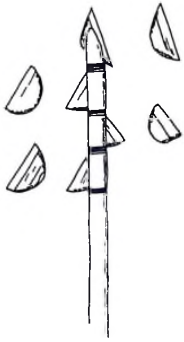
In the previous chapter we traced the record of the earliest inhabitants of Nigeria, going back some hundreds of thousands of years, up until about 15,000 years ago. We have observed a slow development of tool-making techniques, from rough choppers held in the hand to spears tipped with stone points made to a carefully designed pattern. We have seen how the distribution of these Early and Middle Stone Age groups varied in relation to the climate, vegetation and ecology of the time, and the way these groups exploited the resources of their environment. Total population was small, organized in bands of a couple of dozen or so persons; the bands had to be mobile, and during the dry season they were dependent on permanent sources of water. By the end of this period, however, the fully human physical type of *Homo sapiens sapiens*, to which all existing races of mankind belong, had emerged; he had an intimate knowledge of his environment, a knowledge which he was able to pass on to his children by means of language; he was more resourceful and adaptive than any other animal and thus equipped to make use of a wider range of habitats; language helped to give him the power of abstract conceptualization and he had begun to formulate religious ideas. There was a sexual division of labour, with men hunting and women and children gathering; there was a home base and social organization, with arrangements for the care of children over a prolonged infancy; there was considerable leisure, giving opportunity for the beginnings of the arts of the dance and of story-telling, of modelling in clay and of body adornment.

With the advent of the Late Stone Age, some 15,000 years ago, the pace of cultural change quickened, although it remained very slow compared to modern times. There were more regional variants, as population increased, and as increasing control over environment resulted in ever more specific adaptations to different ecological niches. During this time were laid the

foundations for the revolutionary step that was taken in the later part of the period, in which a change was made in the economic basis of subsistence from food collection to food production, from hunting and gathering to agriculture and stock-raising.

A more efficient hunting weapon was discovered with the invention of the bow. Previously, the advent of the throwing-spear, as opposed to the thrusting-spear, had improved the hunter's capacity to tackle swift or dangerous animals with less danger to himself, but the bow and arrow improved this situation still further. In addition it brought within the hunter's range a wider selection of creatures to be subject to his predatory skill, particularly birds and arboreal animals. The bow may have assisted the penetration and colonization of the forests, hitherto not so attractive to the hunter of the more plentiful game of the savannas. Arrows were probably tipped with poison, so that the hunter only needed to shoot to wound, not necessarily to kill immediately. The invention of the bow and arrow was undoubtedly assisted by the revolution in tool-making technique seen in the principle of hafting – fixing a wooden handle or shaft onto a stone tool – illustrated by the stone-tipped throwing-spear. This principle of making composite tools out of different materials is one we are so accustomed to that we take it for granted, but when first practised it represented a considerable advance in technology.

Following the hafting revolution the archaeological record is quite often deficient in whole tools and has to be content with the imperishable parts which have survived. For example, actual bows and arrows are very rarely preserved from this period (Fagan and Van Noten 1966, 255) and all we have are the small pieces of stone, or sometimes of bone, which were used as arrow points or as arrow barbs. Such very small pieces of stone are often carefully shaped from small flakes or blades by having one edge blunted by a steep retouch; this blunt edge was slotted into the arrow shaft, or the wooden or bone part of some other kind of composite tool, leaving the sharp edge or point protruding. Such tiny stone tools, not more than one or two centimetres long, are known as 'microliths', and they are characteristic of the Late Stone Age in Africa. Because some people have judged the material culture of the Late Stone Age simply on what has survived, and because microliths, particularly when made predominantly of quartz as is the case in Nigeria, are much more difficult and tedious to examine and classify than the larger tools which preceded them, the stone-work of the Late Stone Age has



12 The way in which microliths were hafted to make the points and barbs of arrows

sometimes been regarded as in some way 'degenerate', or even called 'deplorable' (Davies 1974, 27). In fact, it is nothing of the sort; it is extremely economical, and a new and efficient technique was devised for producing from suitable silicious stones, sometimes only available in small sizes, the small flakes and blades used as blanks for making microliths. In this technique the core was held in some manner, perhaps between the operator's heels (Clark 1963, 173), and blades were detached by striking it with a punch, the end of which had previously been carefully and exactly located on the core. The craftsmanship of binding and hafting, the evidence for which is rarely preserved, may well have been of a high order; we do know of the use of resin which held microliths firmly after it had set.

In the savanna

Microliths were first recognized and reported in Nigeria in 1931 by a missionary, Mr I. D. Hepburn, at Wana, in Plateau State (Braunholtz 1946); subsequently surface finds of microlithic material have been reported from a number of other places north of the forest zone (Soper 1965, 192–3). However, being surface finds, the age and association of the Wana microliths remained unknown until Bernard Fagg excavated the southern sector of a rock shelter at Rop, nearly 50 km south of Jos, in 1944 (B. E. B. Fagg 1944, 1972). The commonest recognizable form of microlith at Rop was the 'crescent' or 'lunate' (now usually called a 'segment', i.e. 'segment of a circle') which is a blade or flake blunted in a semicircular arc along one side, leaving the other sharp straight edge and the blunted curving edge to meet in a sharp point at either end. Such an implement can be hafted 13
either as an arrow point or as an arrow barb. In addition to the microliths excavated from the Rop rock shelter, there were two fragments of ground stone axes, two bored stones, a grooved stone, a piece of rubbed haematite and a large number of sherds of pottery (Angela Fagg 1972a). This assemblage confirmed for 14
Nigeria the kind of thing which had been found four years previously in Ghana in the excavation of a rock shelter at Abetifi (Shaw 1941, 1944). These excavations took place in the days before radiocarbon dating, but at the back of the shelter the remains of a human skeleton were found buried at a shallow depth, and after the advent of the radiocarbon process a date was obtained from this of 25 BC ± 120 (B.E.B. Fagg 1965). A recent re-examination of the shelter has confirmed that, contrary to one

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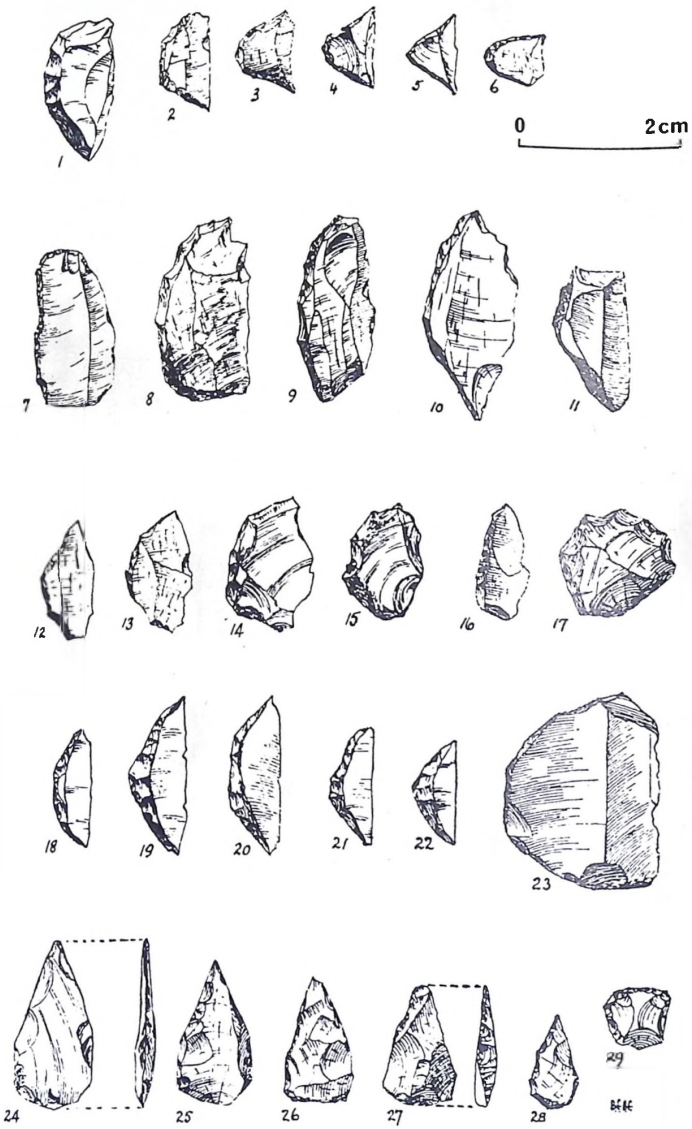
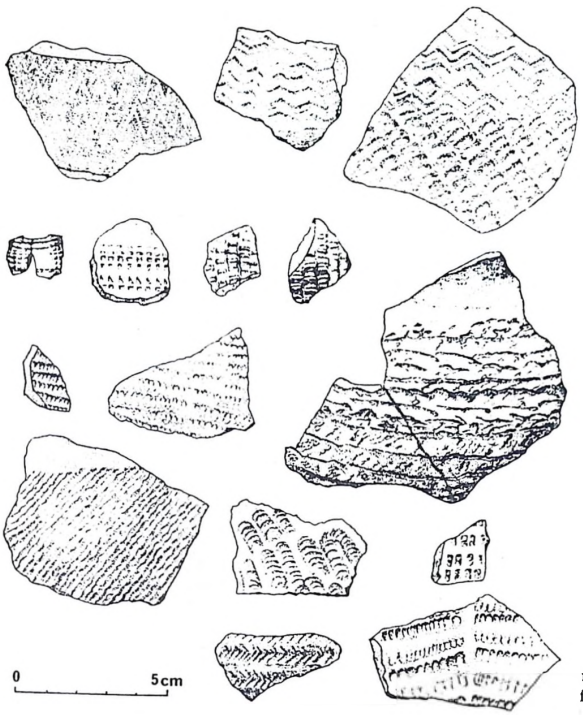


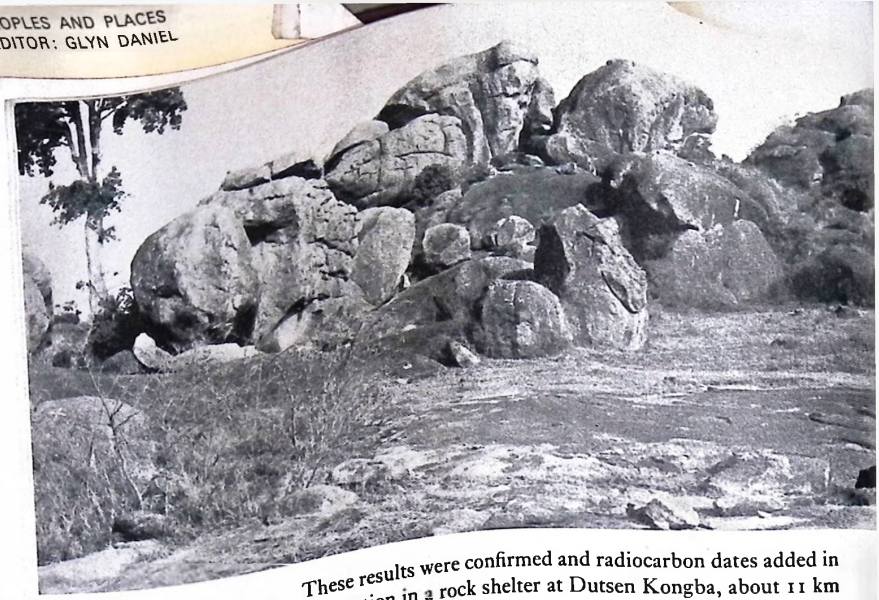


13 (*opposite*) The microlithic industry from Rop rock shelter, mostly of quartz

14 Decorated pottery from Rop rock shelter

suggestion, the skeleton is not intrusive (David 1976). The type of wear on the teeth suggests that the owner lived on a starchy diet (Gaherty 1968).

In 1964 further excavation at Rop was undertaken by the Antiquities Department in the northern part of the shelter (Eyo 1972; Rosenfeld 1972). It appeared that in this sector there were two cultural layers separated by a sterile layer. The lower contained tools of bigger proportions than usually constitute a microlithic industry, non-geometric, rather crude and amorphous, with scrapers and segments the commonest types; this lower layer had no pottery; the upper, ceramic, layer was rich in microliths, which include geometric forms. The new excavations appear to confirm the difference in stratigraphy in the two sectors of the shelter, and also produced an interesting find in the form of a horse's tooth firmly stratified in position in the microlith level. This is the earliest instance of horse so far found south of the Sahara (David 1976).

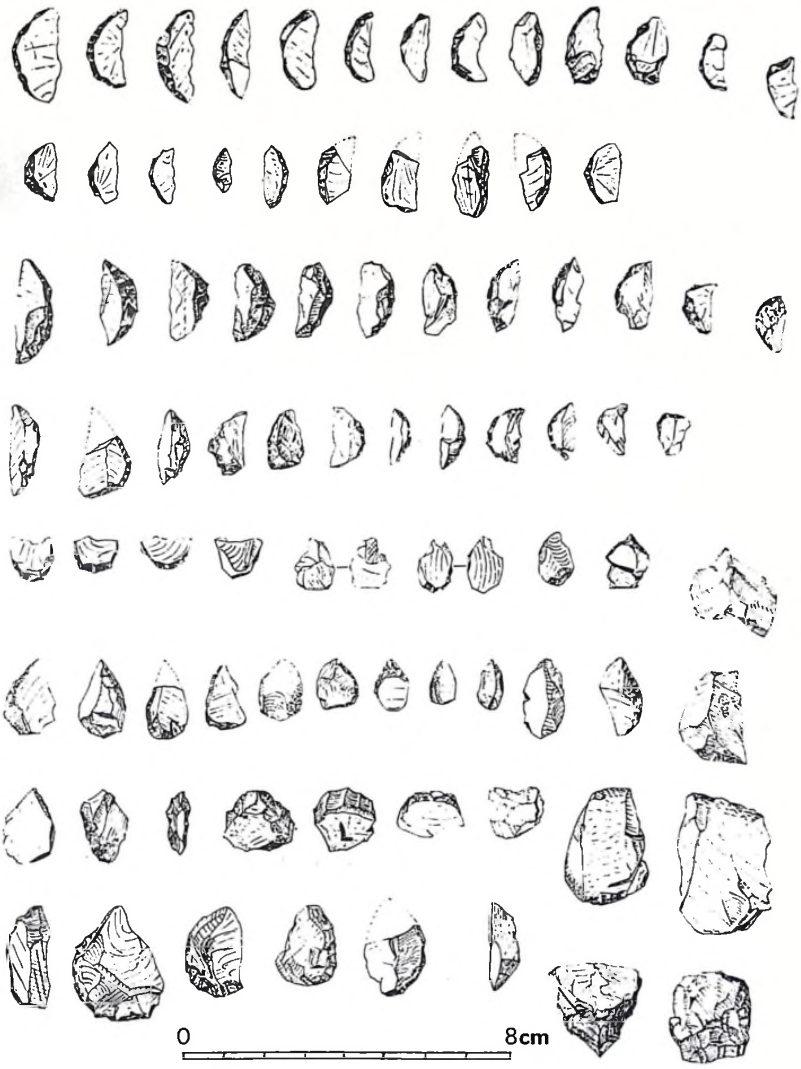


15 Dutsen Kongba, on the Jos Plateau. This is a rocky outcrop typical of many rising above the grasslands of the Jos Plateau. It contains a rock shelter which, when excavated, yielded remains of the Late Stone Age

These results were confirmed and radiocarbon dates added in an excavation in 2 rock shelter at Dutsen Kongba, about 11 km west of Jos, conducted by the Antiquities Department in 1973. Ground stone axes had been collected previously from the shelter floor and surrounding area, but in the excavation none were found stratified in the shelter deposit; a prolific microlithic industry was discovered in a band about 1 m thick at its deepest and occupying most of the shelter area. Three phases of occupation were recognized. Phase A dates to the fourth or fifth millennium BC and has fewer artifacts than the succeeding Phase B, and no ceramics. Pottery makes its appearance in Phase B early in the fourth millennium BC, and this makes it the oldest pottery in Nigeria; decoration, when present, is effected by means of comb-stamping – repeatedly pressing into the wet clay surface the teeth of some comb-like instrument. The date of the end of Phase B is not clear, but Phase C represents the Iron Age levels of the present era. The microlithic industry is homogeneous and similar in many respects to that from Rop. Recognizable forms (segments, points, scrapers, borers) constitute less than 0.5% of the chipped stone artifacts, the greater part of which consists of cores and unmodified flakes. The industry is interpreted as the product of a nomadic hunting community who used the shelter as a factory site at regular intervals from the fourth millennium BC onwards (York 1974).

16 (*opposite*) Microlithic industry from Mejiro Cave, Old Oyo

Farther south, in the savanna, well away from the Jos Plateau, Mejiro Cave was excavated in 1956–7 by Frank Willett in the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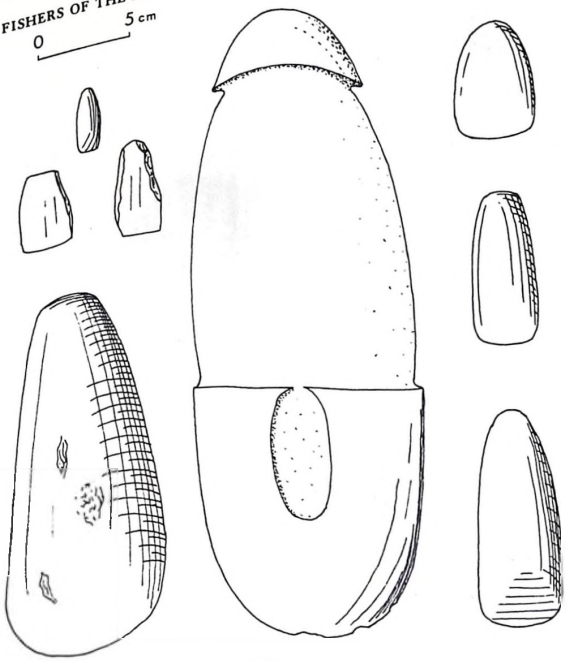


17 Ground stone axes from the Jos Plateau

course of his investigation of the ancient town of Old Oyo, in northern Yorubaland. Here also a microlithic industry similar to that from Rop was found, but with no associated ground stone
16 axes or pottery (Willett 1962).

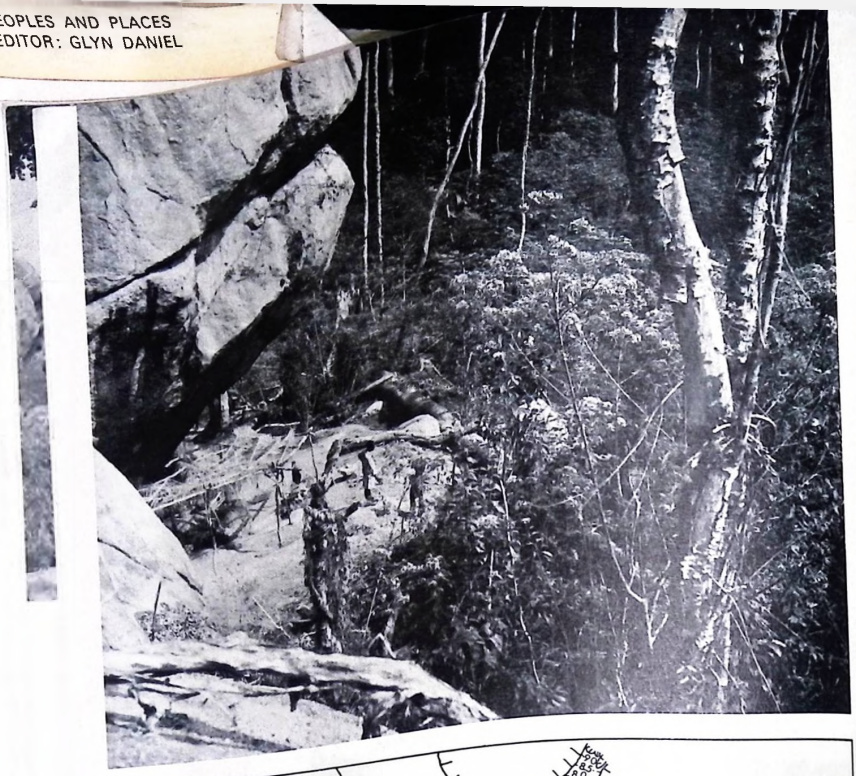
From such finds it became clear that Late Stone Age people, using the bow in their hunting, and with a microlithic tradition of stone-working, roamed widely over the savanna and plateau lands of Nigeria north of the equatorial forest. It appeared that in some cases they had pottery and ground stone axes, in others not. The appearance of pottery is a new technological development, which would have somewhat lessened dependence upon permanent water supplies and allowed home bases to be established less close to these. Ground stone axes were another important technological development, greatly improving the capacity to work in wood and to deal with timber. They were hafted, and differed little from an iron adze or small axe except that the blade was made of stone instead of metal. The technique
17 of grinding stone, as opposed to chipping and flaking, which throughout the history of the Stone Age had hitherto been solely

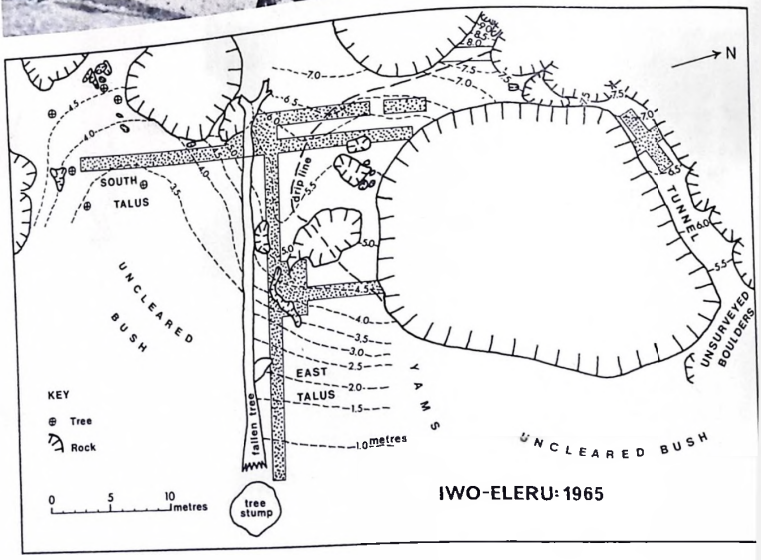
used in the fashioning of implements, may have begun as the result of rubbing down pieces of coloured stone to make pigments, or in the process of grinding wild grain for food, for which we have early evidence in other parts of Africa (Wendorf 1968; Hobler and Hester 1969). A ground stone axe is made by grinding to a cutting edge the two opposing faces of a rough-out made by chipping or pecking. The grinding is done on an abrasive rock with sand and water; grooves thought to have been used for this purpose have been recorded in Fernando Po (Kennedy 1962) and perhaps in Nigeria (W. Fagg 1959) but are not to be confused with rock hollows resulting from food preparation. Tough rocks were chosen for the purpose, sometimes traded over considerable distances from the place of their quarrying.

In the forest

Now, although it had become clear that Late Stone Age hunters and gatherers were in occupation of the savanna lands in Nigeria, there were those who said that the forest was too difficult an environment for people without iron tools. (Livingstone 1958, 551; Gray 1962). Yet large numbers of ground stone axes have been found in the forest, believed, as in Europe before the advent of archaeological ideas (Balfour 1912, Oakley 1964, 86–7), to be thunderbolts (*ara oko, edu ara* or 'Sango stones' in Yorubaland, *ughavan* in Benin (Connah n.d.), *gaterin haderi* in Hausaland, and *okwute-igwe-nni* and *onike egbeigwe* in Iboland, used in rain-making ceremonies). The hypothesis that the presence of these ground stone axes in the forest implied a Late Stone Age occupation needed testing, and a site at the rock shelter of Iwo Eleru, 24 km from Akure and 60 km south of the northern boundary of the forest, was found to test it. 18–20

The results of the excavation revealed that the shelter had been used, probably not continuously as a permanent habitation but at frequently recurring intervals, for some ten thousand years prior to our era. There was a microlithic industry throughout, although its character changed with the course of time. It will be recalled that at Rop, the more pronouncedly and formally microlithic industry was reported to come from the upper, later, ceramic layer; at Iwo Eleru the opposite was the case, with the highest frequency of geometric microlithic forms in the lowest layers and their incidence declining in the upper ones; the trend in scrapers was in the opposite direction, their

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KEY
Tree
Rock
fallen tree
tree stump
0 5 10 metres
IWO-ELERU: 1965

18 (*opposite, above*) A rock shelter in the forest, Iwo Eleru, near Akure in Ondo State. Vegetation typical of areas in the forest which have been cleared for farming

19 (*opposite, below*) Plan of excavations at Iwo Eleru rock shelter; excavated areas stippled

20 (*left*) Iwo Eleru rock shelter at the time of excavation. It yielded Late Stone Age remains extending over a period of some 10,000 years, and the oldest Nigerian skeleton yet discovered; in fact at present it is probably the oldest recognizable negroid yet found in Africa

incidence increasing with time. The commonest material used throughout was locally obtainable quartz, but from the beginning a small amount of a much superior chalcedony was used, probably obtained not less than 17 km away; the proportion of this material increases steadily throughout the occupation (Shaw 1969a, n.d.).

In the upper layers of the deposit, left behind by the later users of the shelter, there occur pieces of sillimanite and ground stone axes made from it; sillimanite is a tough, fibrous rock of limited occurrence, admirably suited for the making of ground stone axes but not known to occur within 44 km of Iwo Eleru. The use of this material and the making of ground stone axes may have begun some time after 4000 BC. Not long after this, pottery, decorated by comb-stamping, makes it first appearance, and later still chalcedony implements of trapezoidal shape which have a pronounced gloss along the cutting edge. In the Middle East such gloss occurs upon pieces of flint which were slotted into a bone or wooden handle to make a sickle used in the reaping of wheat or barley. The Iwo Eleru trapezoids could have been mounted and used in a similar way, but not on wheat or barley;

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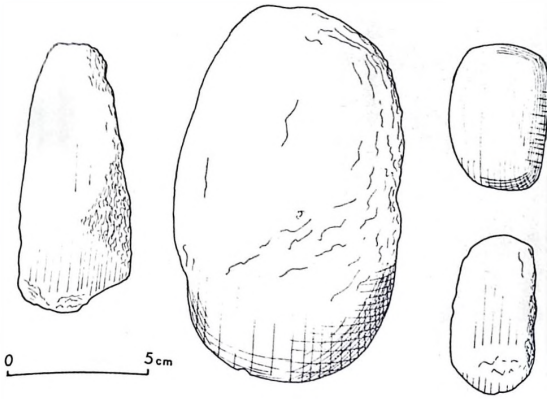
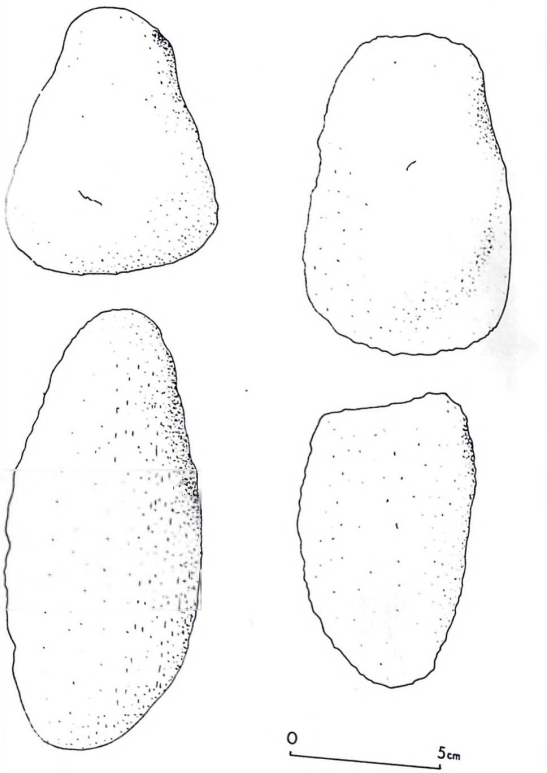


21 Iwo Eleru: ground stone axes excavated from the upper layer of the rock shelter deposit



22 Iwo Eleru: hoe-like stone tools excavated from the rock shelter

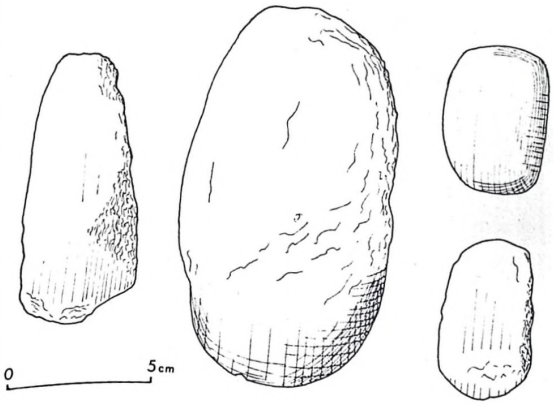
23 (*above*) Iwo Eleru: Late Stone Age tools of chalcedony (enlarged 2½ times; the large example on the right measures just under 3 cm wide). Mounted as shown in Ill. 24, their trapezoidal shape and sharp cutting edge would make them well adapted to cutting reeds, grass or cereal stalks

24 (*left*) How chalcedony trapezoids could have been slotted into a stick and held in place by binding or mastic (first two trapezoids on the left). Such use would explain the gloss along the cutting edge seen in Ill. 23

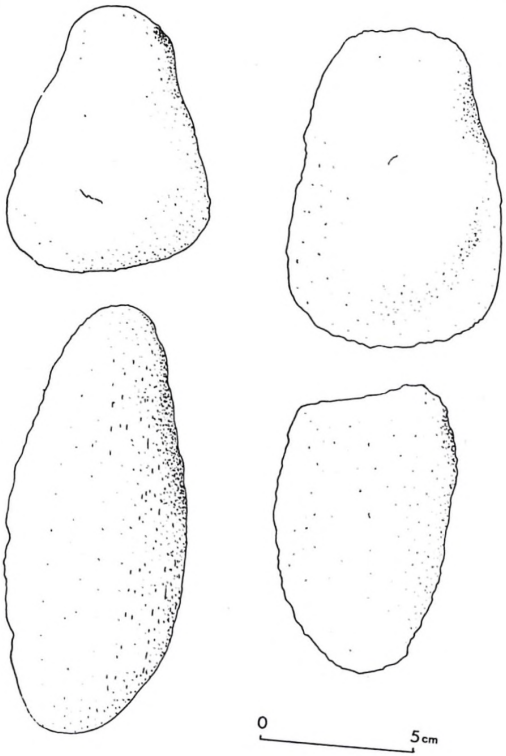
edge gloss has been produced experimentally by slicing ripe sorghum (Shiner 1973), but other substances can also produce gloss (Tringham *et al.* 1974) so this evidence is not conclusive.

Now the question has to be asked: though Iwo Eleru is certainly in the forest now, has it always been? We saw (pp. 20–2) that around 18,000 BC the forest only survived in refuge areas near the coast, and the Iwo Eleru occupation begins around 10,000 BC. We know that by this time Lake Chad was filling up again, but had the forest regenerated to the latitude of Iwo Eleru by this date?

The dominance of microliths and the absence of core-tools and a heavy-duty tool kit in the lowest levels of Iwo Eleru could be interpreted as indicating a way of life in a savanna environment, and the later appearance of the heavier tools and the decline in microliths as indicating increasingly forested conditions. The appearance of pottery after about 3000 BC may be connected with a movement of people or ideas southwards out



21 Iwo Eleru: ground stone axes excavated from the upper layer of the rock shelter deposit



22 Iwo Eleru: hoe-like stone tools excavated from the rock shelter

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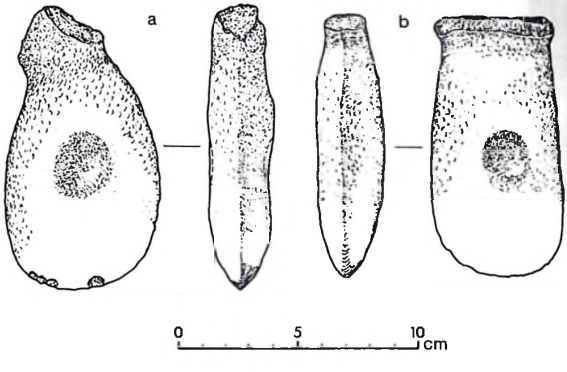
of the Sahara, which in the moister conditions there of the sixth and fifth millennia BC had been occupied by pottery-using cattle pastoralists; they suffered some aridification of their environment in the first half of the fourth millennium BC and had to move out when the final desiccation of the Sahara set in during the third (Mori 1965, 215–40).

Whatever the vegetational history of Iwo Eleru may have been, it is significant that a rock shelter at Afikpo, in the forest zone of south-eastern Nigeria, produced no microliths at all in a Late Stone Age occupation that lasted from 3000 BC up to the first century AD and had pottery throughout (Hartle 1968); the axe and hoe-like implements reported, sometimes with a somewhat waisted outline, suggest a tool-kit adapted to forest conditions.

Ground stone axes were hafted by inserting the butt end through a hole in the stick used as a handle. Even if the butt end of a large axe-head is left protruding and the stone axe-head is bound firmly to the handle, the axe-head tends to work loose. If, however, the axe-head is waisted or grooved around its middle or has knobs (lugs) on the butt end, it can be more securely lashed to the handle. This form of ground stone axe has been found particularly in southeastern Nigeria (Kennedy 1960, Jeffreys 1957), but there are also examples from northern Nigeria and they belong to a family of axes known in the Republic of Niger and the southern Sahara (De Beauchêne 1966, 7). The lugged axe, also known in East Africa (Leakey 1943), may be a locally developed answer to the problem of axe-heads working loose; in the absence of corroborative evidence, it seems doubtful whether their resemblance to ancient Egyptian copper axes can be used to



25 Necked and lugged ground stone axes, with pecked depressions, from Ikpe Ikot Nkun, Cross River State

support the claim that there were Egyptian prospectors in southeastern Nigeria three or four thousand years ago (Kennedy 1960, 57–8).

On the coast

Just as there were special adaptations in the Late Stone Age to life in the forest or life in the savanna, so there were special adaptations to life on the coast, where in some places advantage was taken of the abundant shell-fish of lagoons and estuaries, to exploit them as a source of food. In the Ivory Coast there are large mounds of shells dating back to the second millennium BC which are the refuse of the people who had learned how to make their livelihood out of this specialized environment (Mauny 1973). Nothing quite comparable has yet been discovered along the Nigerian coast, but preliminary reconnaissance and the first excavations in the Niger Delta are beginning to show that in this area also shell-fish have long been exploited as a source of food (Anozie 1973). Just when the Niger Delta was first colonized and a way of life evolved to exploit its highly specialized type of environment, is one of the problems awaiting Nigerian archaeology.

In the sahel

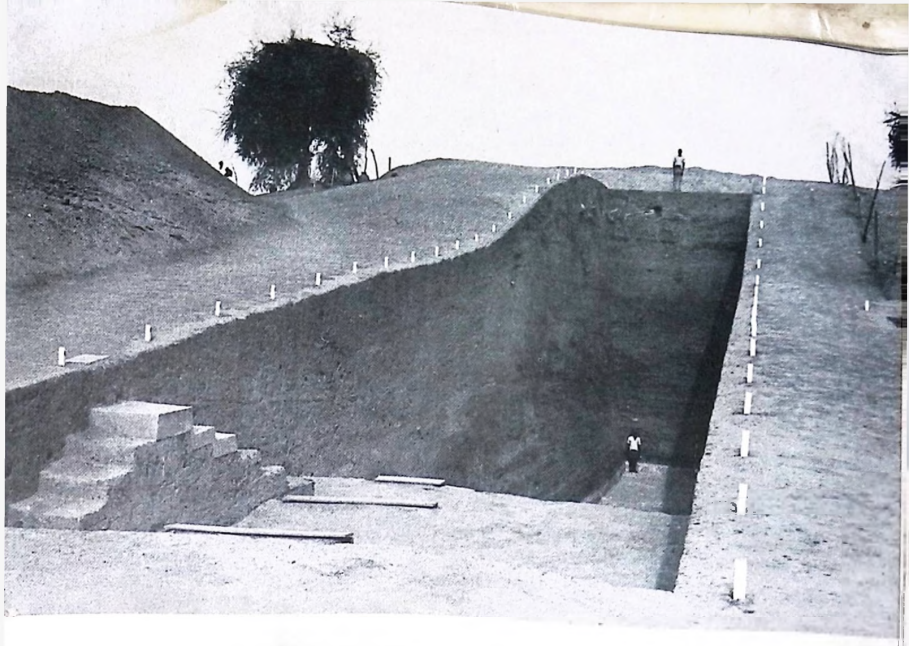
While the Late Stone Age people had to make one type of adaptation in the south along the Atlantic coast, they had to make an entirely different one in the extreme north of Nigeria, in the sahel zone which borders on the Sahara. The area around Lake Chad, being one where routes making the shortest traverse of the Sahara cross the east/west corridor south of the desert, has been characterized as a kind of crossroads, and for this reason its archaeological importance has long been recognized. However, it was not until 1964–1970 that a scientific investigation of the prehistory of this northeast corner of Nigeria was undertaken when Graham Connah turned his attention from Benin to Bornu, initially under the Department of Antiquities for a preliminary survey, subsequently from the University of Ibadan in conjunction with the Northern History Research Scheme. One of the sites investigated in this programme lies just to the northwest of Bama, which stands on the ridge marking the shore-line of the maximum extent of the lake. A mound nearly 3 m high ('Bornu 38' for reference) spreads down from the ridge

and radiocarbon dates indicate that it was occupied from the beginning of the second millennium BC to the middle of the first. No structures were revealed, but pottery was fairly plentiful, most of it plain, some with comb-stamped decoration. There were pieces of ground stone axes, a number of bone tools of simple type including bone points, a few quartz flakes and a good deal of broken material from grinding stones. There was an impression of cultural homogeneity throughout the mound (Connah 1970).

A large mound at Kursakata, situated some 110 km northwest of Bama, 3 km south of the present town of Ngala, and only about 24 km south of Lake Chad itself, had a depth of deposit of nearly 6 m. A test shaft was sunk from the highest point and the bottom layer yielded a radiocarbon date of 930 BC ± 140. No iron was found below a depth of 3 m and the lower levels produced pottery and animal figurines comparable to the earliest from Daima (see below; Connah 1971b). Because the land is so flat, even the small annual rainfall of 500 mm, concentrated into three months in the year, causes flooding; settlements therefore have to be on a slight eminence above the plain. Much of this plain is made up of clay land, known locally as *firki*, left behind by the retreating Lake Chad.

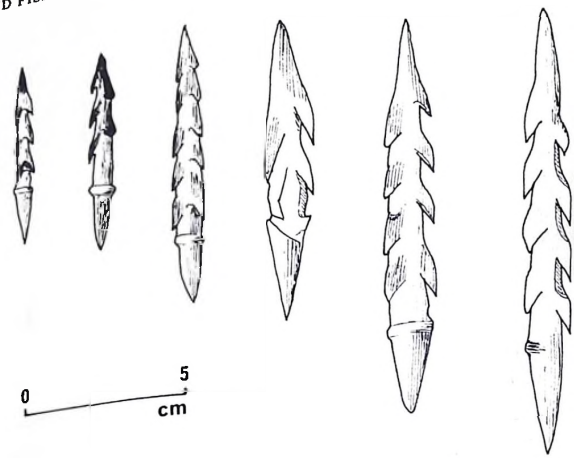
Shilma is a flat settlement site, situated nearly 50 km south of Kursakata; it is made up of the remains of a very low mound situated on the *firki* itself. A vast surface scatter of pottery and other material covers an area of more than 30 hectares. Two test pits showed that the deposit was less than 1 m thick consisting largely of hard bands of clay, which may have been hut floors. The cultural material was not unlike that from the Bama site; test pits yielded pottery, rare quartz flakes, grindstones, and many bone points, and in addition there were a number of pieces of bone harpoons and animal figurines modelled in clay; two radiocarbon dates lie in the eighth century BC (Connah 1970).

The site of Daima lies some 37 km to the north-northeast of Shilma and about 30 km east-southeast of Kursakata. It consists of an even larger mound rising up above the surrounding *firki* to
26 a height of some 11 m. The first settlers at Daima probably camped on the open *firki*, perhaps only seasonally at first. In order to lift themselves out of the floods of the rainy season they seem to have dumped thick deposits of clay onto the site and elevated their hut floors with it; this suggests all-the-year-round occupation. The huts were probably constructed of woven grass over a light timber framework, as no mud wall fragments could



26 Excavation in the settlement mound at Daima, Borno. There is virgin yellow sand at the bottom and above this nearly 11 m of accumulated occupation debris, the oldest dating to about 600 BC. The layers above this extending upwards represent some 1500 years of occupation

be recognized, only the occasional post-hole through the clay floors. The radiocarbon dates indicate that this settlement began rather later than Kursakata and Shilma, around 600 BC (Connah 1967a, 1969a). Material equipment which has survived includes ground stones axes and a block of stone with polished grooves in it, probably caused by its use for grinding and sharpening stone axes. Stone was precious in this community, as none occurs naturally on the flat clay plains and it all had to be imported. The material of the ground stone axes came from the Mandara Hills at least 130 km to the south, that for the coarser-grained querns (milling stones) from volcanic plugs on the shores of Lake Chad 90 km to the north. The only other stone artifacts are pieces with small shallow rounded grooves sometimes described as 'bead-polishers', but since there were no stone or ostrich egg-shell beads in these lower levels of the mound at Daima, it seems much more likely that they were used in the manufacture of objects made of bone. Plain double-ended points of bone were probably mounted as arrowheads; tools of spatulate shape may have been used in leather-working, while pointed tools made from the ulnas of a large animal (probably cow) look very much like daggers. Bilaterally barbed projectile heads were probably initially shaped by smoothing splinters of bone on a carved stone, after which the barbs were cut with great care and skill. These



27 Bone projectile heads with two rows of barbs excavated from the lower levels of the mound at Daima, Borno

28 Part of a flexed burial excavated in the earliest phase of the mound at Daima. The right femur has been removed to show the barbed bone projectile point driven into the groin, probably the cause of death

27 objects may well have been used as harpoon heads, since they are made in such a way as to allow the attachment of some form of string, enabling them to be recovered even after becoming detached from the shaft. At Daima, however, a burial in which the skeleton contained such a projectile point embedded in the groin provided grim testimony that this was not the only use to which they were put. It must have entered the unfortunate's
28 abdomen and been the cause of his death. The dead were buried within the settlement, in a crouched or flexed position, often

with the head pillowed on the hands in a sleeping posture, but without grave goods.

Small fired clay figurines of squat, often legless, animals were made, most commonly of cows. The earliest deposits were rich in animal bone, most of which was of cattle, but sheep and goat were present also (Fagan 1973). The hunting of wild game does not seem to have been an important element in the economy. The pottery was best represented by a fine ware with burnished red surface, often with toothed-comb or roulette decoration.

The Late Stone Age occupation of Daima provides culturally homogeneous material up to the middle levels of the mound, when a change occurs. Iron makes its first appearance, and although there are many elements of cultural continuity, the figurines of flat and concave-based, medium-legged and upright animals are replaced by long-legged and spiky ones, while for the first time we find figurines of humans. The radiocarbon dates are difficult to interpret in such a way as to pin down the date of the change very precisely; AD 500 has been suggested (Connah 1968, 317), but it may well be earlier.

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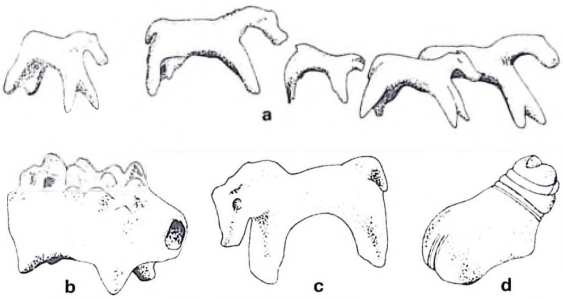


29 Terracotta animals excavated from the Daima mound. L 7–9 cm. a) Running animals from the later levels, probably sheep or goats. b) Pig, with decorative spikes. c, d) Cattle: the later example (c) probably represents the humped zebu type

Rock gongs and rock paintings.

The excavations at Dutsen Kongba described above (p. 42) may throw some light on the antiquity of those ringing rocks which have been given the name of 'rock gongs'. In many places in Nigeria, particularly where there are granite outcrops, pieces of rock may be so disposed that if they are struck with another stone they will give out a ringing sound. Where rock gongs are repeatedly struck on the same spot, this naturally makes an abraded area; sometimes these abrasions are quite fresh, indicating recent use, sometimes weathered over. Up to thirteen

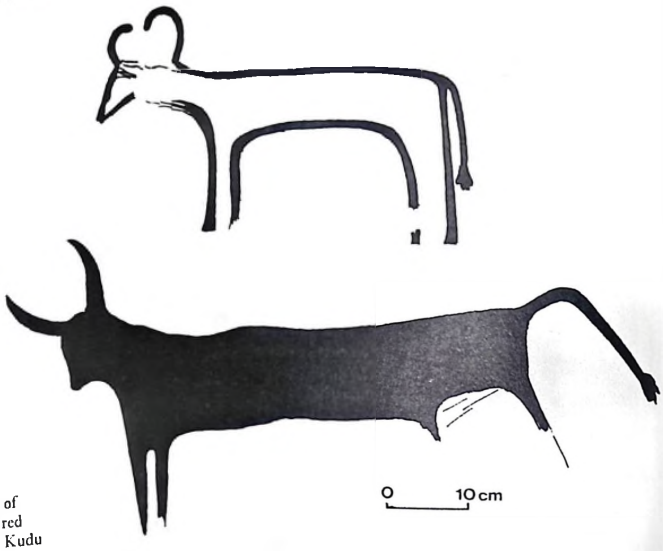
notes at intervals of a semi-tone have been recorded. Rock gongs were first observed in connection with the recording of rock-paintings on a number of rocky outcrops at Birnin Kudu (B. E. B. Fagg 1956d and e, 1957a and b). Their use is known in modern times as a children's amusement and in connection with initiation ceremonies and puberty rites; in some cases, it is said, they were formerly used as an alarm system to give warning of attack against a village. Where rock gongs occur and there are suitable rock slopes, the latter are sometimes used by children for sliding down on 'sledges' made of flat pieces of rock or bunches of leaves, thereby producing a 'rock slide'. Such rock slides are known from Europe in proximity to rock gongs and are said to be associated with practices derived from long-forgotten pagan fertility rites (Fagg 1956 b). It has been suggested that because of their physical proximity to rock paintings at Birnin Kudu, the rock gongs were in some way functionally related to them; and since there was reason to believe the latter had some antiquity, the rock gongs must be ancient also. There may be no association, and there may be no connection between the rock gongs and rock slides of Europe and those of Nigeria (Conant 1960) but there is a connection between rock gongs and rock paintings in contemporary initiation ceremonies among the Marghi (Vaughan 1962). More recently the excavations at Dutsen Kongba provided evidence which suggests that rock gongs do have some antiquity. In a corridor leading off the main shelter there is a flat slab of granite wedged upright in a cleft between two massive boulders; it bears the marks of use as a gong, and gives out two notes. A pressure-flaked hollow-based arrowhead of Sahara type, rare in Nigeria, was picked up in the corridor after it had been eroded by recent rain. Excavations revealed pottery, ground stone axes and hammerstones in a single cultural layer, in which charcoal yielded two radiocarbon dates in the second millennium BC (York 1974). If the hammerstones became incorporated in the cultural layer after use on the rock gong, which is quite likely, this would date the latter to the second millennium BC.

30 The rock paintings of Birnin Kudu are the most interesting of the very small number known in Nigeria. In general, West Africa does not have the great wealth of rock paintings and engravings to be seen in the Sahara (Mauny 1954). As far as paintings are concerned, the greater humidity, being more inimical to preservation, might be thought to have something to do with this scarcity, but the fact that only one set of rock engravings has been

reported in Nigeria may indicate that the scarcity is genuine. On the other hand, there are almost certainly more paintings waiting to be discovered. The one set of engravings is at Igbara Oke, 27 km from Akure on the road towards Ilesha. It was discovered in 1959 when a plot of land was being levelled for a new house. The engravings are made on a granite outcrop with broad, shallow polished grooves, making the shape of what appears to be the outline of a fish, a triangle and other geometric designs. Nothing is known of their age (Murray 1967, 169).

With the exception of an enigmatic design which might be a cattle brand, all the Birnin Kudu paintings are of humpless cattle; some are long-horned, like the 'Hamitic longhorn' cattle no longer extant in Nigeria, others are short-horned, like the West African Dwarf Shorthorn, mostly now confined to the tsetse-infested rain-forest regions of the south; none resemble

30 Paintings, in solid red monochrome, of humpless longhorn cows on the ceiling of the rock shelter at Dutsen Habude, Birnin Kudu, Kano State. Each cow is about 45 cm in length from horn tip to tail. In the foreground is a large exfoliation of rock used extensively at its other end as a rock gong



31 Rock paintings of cattle, executed in red pigment, at Birnin Kudu

the humped Fulani cattle which today predominate. Unfortunately we do not know very precisely at what date humped cattle were introduced into northern Nigeria, but it may not have been much more before AD 1000 since cattle figurines with humps only occur at Daima at the end of the sequence, and none of the actual cattle bones from the site have been identified as deriving from humped cattle (Fagan 1973). Accordingly it is reasonable to suggest that the Birnin Kudu cattle paintings antedate the introduction of humped cattle into this part of Nigeria and may well be at least a thousand years old – perhaps considerably more.

Three main styles of painting have been identified, which at the group of rocks known as Dutsen Mesa are superimposed upon each other so that a red outline (with black for part of a cow's back) underlies solid white, which in turn is overlain by solid red; red outline with white body also occurs.

The village of Geji lies 130 km south of Birnin Kudu, and rock paintings have been reported here also (Sassoon 1960). The paintings are small, hardly any of them being as long as 30 cm, and all are executed with a red pigment. The subjects represented are more varied than at Dutsen Mesa, and fall into

the following categories: i) painted solid, 11 antelopes, 5 cows, 2 monkeys, 2 men and 6 unidentified; ii) in outline, 8 cows, 1 horse, 1 unidentified; iii) in outline and striped, 2 cows, 1 antelope. All the cattle are humpless and have long horns; the West African Dwarf Shorthorn does not seem to be represented. Most of the antelope paintings represent roan antelopes, but in two cases the remarkable length of curving horn makes them look more like the sable antelope of East Africa. The length and set of the horns in a single example suggests a scimitar-horned oryx, at present found only north of Nigeria. The two human figures stand upright with their arms stretched forward, have thin legs and appear to be clothed. The fact that nearly all the paintings face the centre of the rock shelter suggests that their arrangement is not fortuitous. The presence of the horse has been used to suggest that the paintings are not earlier than the fifteenth century BC (Sassoon 1960), and although no bones of horses or camels were identified at Daima (Fagan 1973), it was suggested, even before the finding of the horse's tooth at Rop (see above p. 41), that horses were in fact introduced into northern Nigeria a good deal earlier than the fifteenth century (Fisher 1972).

We cannot tell for certain what the original purpose of the ancient rock paintings was; modern inhabitants are sometimes rather reticent about them and have beliefs about their magical properties; sometimes there are unexplained folk-customs attached to them, e.g. in preparation for marriage. In modern ethnographic practice the complex of rock gongs, slides and paintings are associated with expressions of social rebellion, symbolic death to childhood, birth into adulthood, fertility and certain kinds of publicity (Morton-Williams 1957; Vaughan 1962, 52). The possibility that the association is an ancient one should not be dismissed.

Summary of the Late Stone Age

We have now seen how Late Stone Age peoples were widespread in Nigeria, how they adapted their way of life to the different vegetation zones of the country – in a manner repeated elsewhere in West Africa (Shaw 1975b) – and that by the end of the period they were keepers of livestock, not merely hunters and gatherers and fishers; whether they were also agriculturists in the sense that they grew cereal crops we cannot yet say for certain, but this seems highly probable.

4
Early farmers

In the last chapter we saw that the Late Stone Age people of Daima, in the sahel zone in northeastern Nigeria, were keepers of livestock and thus were producers of food, not mere collectors of it. It is very probable that they also grew grain, but as yet we do not have direct evidence of this. At the end of the Iwo Eleru sequence there were hints of food production, and the diet of the man of Rop also points in this direction. There is the possibility that rock gongs and associated rock paintings of cattle may extend back in time to the end of the Late Stone Age. In Ghana there is evidence of stock-keeping going back to the fourteenth century BC (Carter and Flight 1972). How did this transformation to food-producing take place, from the hunting and gathering of the earlier part of the Late Stone Age? In order to understand this, we have to travel beyond the boundaries of Nigeria.

The food-producing revolution

The change from dependence on hunting, fishing and gathering the fruits of the wild, to crop-raising and stock-keeping, is the most important step which man has taken in the last 10,000 years, since without it none of the subsequent developments could have occurred. The process was spread over a long period of time but it was nevertheless a revolutionary step, inasmuch as it fundamentally changed man's way of life and brought with it momentous consequences. It not only radically advanced man's capacity for controlling his environment, but it set up the conditions necessary for the emergence of what is usually called 'civilization'. It made sedentary life possible as never before, the storage of food, the accumulation of wealth, and an increase in population; it led to increased division of labour, social stratification and new forms of social control. This revolution did not take place in a single location and then spread to the rest

of the world; there were a limited number of 'foci' where such developments evolved. For Europe, western Asia and northeast Africa, the important focal area was the hill country of Anatolia, Iran and northern Iraq. Here were developed the cultivation of wheat and barley and the domestication of sheep, goats, and cattle (Grahame Clark 1969, 7 ff; Ucko and Dimbleby 1969; Oates 1973). By the fifth millennium BC, perhaps earlier, there were domesticated sheep and cattle and cereals were being grown in Egypt (Caton-Thompson and Gardner 1934; Seddon 1968, 490; Wendorf *et al.* 1970, 1168). Although some recent thermoluminescent and radiocarbon datings may be interpreted as supporting the priority of domesticated stock in the Nile valley (Caton-Thompson and Whittle 1975; Posnansky and McIntosh 1976, 194), other evidence has suggested that there may have been domesticated cattle earlier than this in the Aurès mountains of Algeria and the central Saharan highlands (Mori 1965; Roubet 1971); the evidence for cereal growing is slender (Camps 1969).

It will be recalled that at Daima, from the earliest levels dated to about 600 BC, there were large numbers of barbed bone harpoons, and others were found at Shilma a few hundred years earlier. Among the fish bones identified from Daima the greatest proportion belong to catfishes of the family Clariidae, which live in swamps and rivers (Howes 1973). By possessing an accessory breathing organ these fish are able to leave the water and move across land. In this way they can abandon an area of water that is drying up and make their way to a more permanent one. When this happens whole shoals may move overland and can be caught by spearing. Their habit of congregating for spawning, and of lurking in the shallow water of swamps makes them relatively easy prey for the fishermen armed with spear or harpoon. Such harpoons, together with fish-hooks, are part of an older tradition which extends back in time as far as the seventh millennium BC and which stretches right across the sahel and southern Saharan zones from the Atlantic to the Nile and southwards thence into the lacustrine area of East Africa.

Largely paralleling this distribution and going back almost as far in time is the incidence of a particular kind of pottery, known as 'wavy-line' and 'dotted wavy-line'. The pottery and the harpoons are often associated, but not invariably (Arkell 1949, 1962, 1972; de Heinzelin 1957, 1962; Monod and Mauny 1957; Huard and Massip 1964; Courtin 1965, 1967; Camps-Fabrer 1966a; Camps-Fabrer and Camps 1972; Robbins 1972; Clark

1973, 63; Hays 1974). Although one need not go as far as some (Sutton 1974) in seeing the pottery and the harpoons as representing 'the aquatic civilization of Middle Africa', nevertheless their extent both in time and space does emphasize that a very stable adaptation to their particular environment had been worked out by the Late Stone Age peoples of these areas. The accompanying map shows the region of Africa where this way of life had evolved.

Now, it cannot be a coincidence that this is the same broad zone of the continent where the African cereals were domesticated. The important thing to remember about the cereals is that wheat and barley are temperate zone, 'winter rainfall' crops; these were the crops first domesticated in southwest Asia by dry-farming methods, and later their cultivation was adapted to the arid sub-tropics by means of irrigation in the valleys of the Tigris/Euphrates, Nile and Indus. It is virtually impossible to grow wheat and barley by dry-farming methods in the 'summer-rainfall' areas of the tropics; no wild ancestors of wheat and barley grow there nor have they ever done so. The practice of growing wheat and barley by irrigation in northern Nigeria cannot be more than a few centuries old at most, as was suggested by nineteenth-century travellers (Nachtigal 1881, 511; Barth 1857 vol. 2, 314) and by the fact that the Fulani terms for them are of Arabic origin (David 1976a).

African cereals

No less than eight wild African grasses were domesticated in the zone shown on the map, of which the most important are Guinea-corn or sorghum, bulrush millet, African rice, finger millet and *fonio* or 'hungry rice'. We owe our knowledge of the areas of their domestication to the work of the botanists (Portères 1946, 1951, 1962, 1976; Doggett 1965, 1970; Harlan 1971; Harlan and DeWet 1973; Harlan and Stemler 1976).

Archaeological evidence of domesticated crops is hard to come by, depending on the chance carbonization of cereal grains or their leaving impressions in the wet clay of pots before it had hardened. The earliest such evidence we have for finger millet comes from a pre-ninth-century BC context in Ethiopia (Phillipson 1976), and for bulrush millet from the twelfth century BC in southern Mauretania (Munson 1968, 1970, 1971) – apart from two pollen grains dated to the sixth millennium BC from the central Saharan highlands (Camps 1969, 188). The

earliest sorghum yet found comes from the Republic of Sudan in the middle of the third century AD (Clark and Stemler 1975). We have no archaeological finds of African rice or of *fonio*. We know, however, that cultivated bulrush and finger millet had reached India by the middle of the second millennium BC (Vishnu-Mittre 1968) and we can be reasonably confident that domestication of the African millets was taking place not later than the third millennium BC over a wide area of the sahel zone of Africa. Peoples in this zone had become accustomed to a sedentary or semi-sedentary way of life because of their need to stay by the waters where they fished and which provided them with a reliable diet, with abundant stands of wild grass also within easy reach to provide them with grain. They had learnt to manage the ecosystem in which they lived so as to take advantage of the annual cycle of different foods it provided and they had an intimate knowledge of the resources of their environment (Harris 1973). Gatherers of wild food are well aware that seeds placed in the ground will grow into plants – but what is the point of doing this artificially if nature does it for you? Why go to all the hard work and anxiety involved if you do not have to? In our agriculture-dependent economies we take it for granted that food production is 'a better thing' than food collecting because we have never experienced a life in which the wild resources of nature provide us with enough food and give us leisure to spare; we imagine, wrongly, that such an existence would be extremely precarious; but the ethnographic evidence tells us that this is not so at all. However, the onset of arid conditions in the sahel may have caused some of the smaller lakes to dry up and concentrated

32 Grinding grain on an outcrop of rock, about 20 km southwest of Bauchi. The resultant hollows are to be seen on rock outcrops in most parts of Nigeria and while they attest to nearby settlement at some time in the past, no means has yet been found of dating them. Such grinding hollows are not to be confused with narrower ones resulting from the grinding and sharpening of stone axes

fishing on the remainder and on permanent rivers; the resultant overfishing would further reduce the available fish supplies. This might tend to make the collecting of wild grains play a more important part in subsistence activities – but at the same time, desiccation might have made the wild grasses scarcer and farther to seek. Such a combination of circumstances would be a strong stimulus to make these grasses grow artificially near at hand, close to the areas where fish were still available. Thus with continuing desiccation, increasing reliance would be placed on grown sources of food. From the areas of earliest domestication, the cultivation of Guinea-corn and the millets, *fonio* and African rice spread into all those parts of Nigeria where they are grown today. Maize is a New World crop, and was only introduced after the arrival of the European voyagers on the coast at the end of the fifteenth century.

32

Non-cereal crops

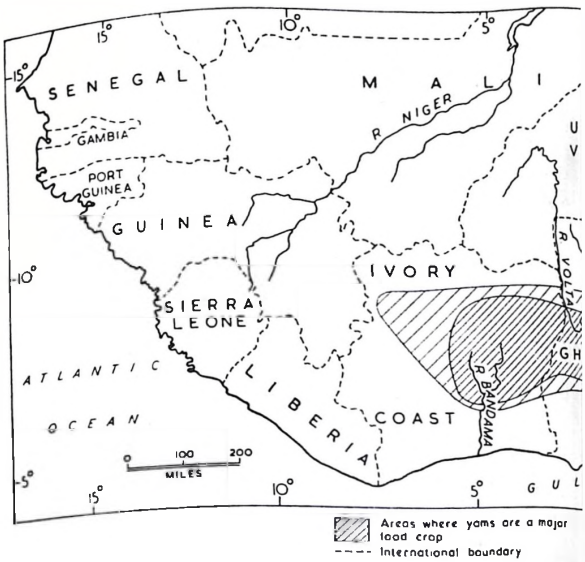
Whereas cereal grains may be preserved by being carbonized, their impressions be retained in pots, and their pollen identified, tubers such as yams do not leave the same clues about themselves; they very often do not even produce pollen. It is therefore going to be very much more difficult to get direct archaeological information about these crops. This is most unfortunate, since yam cultivation was probably extremely important in the development of indigenous African agriculture, and it may have had a very considerable antiquity. What has tended to obscure the history of yam cultivation in Africa is that until recent years it was believed that the domestication of the indigenous yams only resulted from the stimulus of the introduction of the Asian forms (Forde 1963, 211; Gray 1962, 183) although one of these is in fact quite a recent introduction (Miège 1948; Morgan 1962, 236; Coursey 1976). Murdock (1959) speculated that the Asiatic food plants entered Africa via the Ethiopian lowlands and travelled westwards along what he erroneously called 'the yam belt'. Nowadays it is generally believed that the Asian food crops, including plantains, bananas, one type of cocoyam and the citrus fruits, reached Africa from Indonesia via Madagascar or the adjacent parts of the east coast in the first half of the first millennium AD (Gray 1962, 182). There is some linguistic evidence that Asian yams reached India about the first century AD (Allchin 1974). It is believed that yam

cultivation may be very ancient in southern Nigeria, going back as much as four or five thousand years (Coursey 1967, 1976; Posnansky 1969, 106). The prohibition in certain areas on the use of iron tools for the digging of yams in New Yam festivals, and the importance of such festivals, is suggestive that yam cultivation antedates the introduction of an iron technology (Coursey 1971).

No other indigenous tuberous crop has the same importance as the yam, but the 'Hausa potato' is a cultivated crop, although the locale of its domestication is uncertain (Dalziel 1955, 459; Davies, 1968, 481; Purseglove 1976, 303). Just as it is likely that many tropical grasses were at one time grown for their grain, so it is likely that a number of African tubers were formerly much more widely cultivated than now (Busson 1965, 405) and have come to be displaced by more successful ones, such as cassava, sweet potato and the second type of cocoyam, all introduced from America by Europeans.

Tree crops are also important – shea butter, kola and, above all, the oil palm. We have evidence of early use of the oil palm elsewhere in Africa (Arkell 1953; Flight 1970) but we do not know how ancient in Nigeria is the systematic growing of palm trees. The borderlines are very hazy between gathering the nuts of wild oil palms, giving protection to a wild tree, allowing trees to seed themselves in man-made clearings, and actual planting – but at some point along this line we are concerned with intentional food production rather than mere food collecting. The securing of a supply of palm oil as an ingredient in the diet may have had important consequences on population growth (Shaw 1972, 159), and may help to account for the dense population of southern Nigeria. Contrariwise, the fact that the 'Middle Belt' lies north of the best areas for yam-and-oil-palm agriculture and south of that for bulrush millet, may help to account for the sparsity of population there.

What was the origin of the yam-and-oil-palm agriculture of southern Nigeria, since the process postulated for the domestication of the African cereals obviously does not apply? It has been suggested that it resulted from the stimulus of cereal cultivators to the north and only came about when 'the idea of agriculture' reached these southern areas (Morgan 1962, 238; Alexander and Coursey 1969, 421). However, it could have been an entirely independent development, perhaps even resulting in the domestication of some cereals as a result of their growing as weeds in yam patches. Fixed-plot agriculture may be older than



33 The yam zone of West Africa

systems of bush-clearing and fallowing (Sauer 1952; Harris 1973, 401). The natural habitat of both oil palms and yams is not in the rain forest but along forest margins, in forest/savanna mosaic, in gallery forests, beside streams and in forest clearings. The yam is a vine, adapted by its evolution to a severe dry season, but needing something to climb up; therefore it is suited neither to grassland savanna nor to high forest. Similarly the oil palm needs plenty of moisture at its roots but cannot propagate itself unless it receives adequate sunshine, which it would not do underneath a high rain-forest canopy. One can, then, imagine that these foods were an important source of nourishment for our Late Stone Age hunters in the southern savannas, taking advantage of living in an ecotone where they could obtain food resources from both savanna and forest. Perhaps the pressure of population or competition for the available game resources of the savanna became such that some groups, accustomed to foraging into the forest anyway, were forced to penetrate it farther and farther south. We are probably wrong in thinking of the forest as completely unbroken, as elephants may have been responsible for causing clearings (Buechner and Dawkins 1961; Kortlandt 1972, 18, 19). A process could have begun in which yams were

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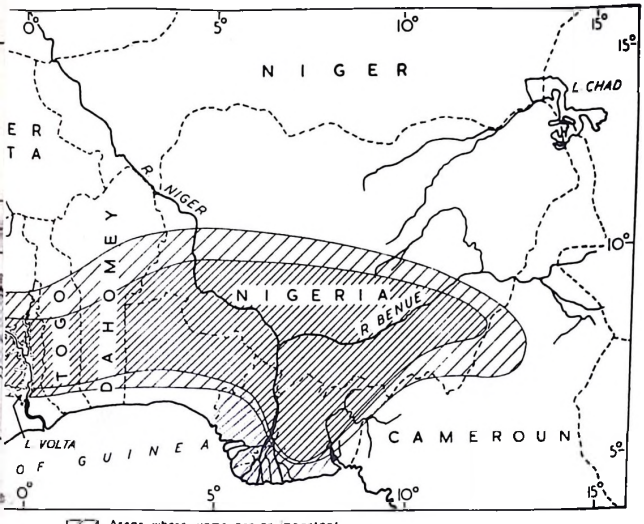

Areas where yams are an important but secondary food crop

Regional boundary

not merely grubbed up on sight but marked down for future use, and it is a characteristic of the yam that it can regenerate after the removal of the tuber if too much damage is not done to the vine and roots; the propagation of discarded yam-heads at recurrently used camp sites could lead to intentional planting (Davies 1968, 479). Similarly the nuts of the oil palm would first have been collected when they fell to the foot of the tree, but they would be those left by wild animals; therefore perhaps trees were felled to obtain complete clusters of nuts, but a better solution was certainly found in the invention of the climbing rope. From such care and protection of trees it may be a short step to intentional planting, or the protection of young seedlings growing at the foot of mature trees.

The groups who were first forced to penetrate deeply and permanently into the forest, leaving the environment which was best suited to their previous way of life, subsequently found that yams and oil palms actually grew better in forest clearings in the wetter areas farther south, once man had interfered with the natural vegetation to ensure their supply of sunlight. Perhaps it was the complementary diet thus provided, with protein from fish and bush-meat, especially the giant African snail so prolific

in the forest, that helped to produce the high population densities in southern Nigeria. Surprisingly enough also, the labour input in the forest zone in order to obtain a livelihood is not only much less than might be expected but commonly less than in the savanna (Boserup 1965); possibly this circumstance ultimately facilitated the emergence of centralized social and political systems and a high level of artistic production in this part of Nigeria.

Domesticated animals

It will be recalled that at Daima there were bones of cattle, sheep and goats, as well as little clay models of them, from 600 BC onwards (Connah 1967a; Fagan 1973). All domesticated animals are introductions to Nigeria except the Guinea-fowl. It looks as if goats were the earliest arrivals, some four thousand years or more ago (Arkell 1953, 15–18; Carter and Flight 1972). Not long after, cattle reached northern Nigeria, brought perhaps by pastoralists who found that the drying-up of the Sahara no longer allowed them to pasture their cattle there. These cattle were the ancestors of the West African Dwarf Shorthorn, which developed some immunity to trypanosomiasis after being forced to live in tsetse-ridden areas. The humped Fulani cattle so familiar today were a later introduction. These 'zebu' type cattle were originally domesticated somewhere north of India and introduced into Egypt in the middle of the second millennium BC, but they may not have reached Nigeria until very much later; at Daima all the cattle figurines throughout the occupation are humpless until the end of the sequence, around AD 1000, and it will be recalled that all the rock paintings of cattle at Birnin Kudu are humpless. We have no archaeological evidence about pigs nor about chickens; the latter were domesticated in India from the wild jungle fowl and may have reached East Africa at the same time as the Asian crops and spread with them across the continent.

From the evidence at present available, it thus seems likely that by about 1000 BC people in many parts of Nigeria had adopted systems of producing food in place of complete dependence upon hunting, fishing and gathering. These activities continued as supplementary means of obtaining food, but the agricultural base made a more receptive milieu for the next big development – that of metallurgy – which in turn itself made for more effective agriculture.

5
The first metallurgists

Archaeologists in Europe have long been accustomed to speak of the 'Stone Age', 'Bronze Age' and 'Iron Age', and, in spite of the methodological shortcomings of such a system (Daniel 1943), continue to do so because of its very convenience. Similarly in sub-Saharan Africa archaeologists divide the Stone Age from the Iron Age because the appearance of iron in their assemblages of artifacts, indicating a striking change in the technology, makes a convenient basis for a division of their material. Yet it is likely that the coming of iron at first made little difference to the inhabitants of Nigeria, since we at present have no evidence that it involved a large-scale movement of people; the way of life, combining hunting and fishing with agriculture and the keeping of livestock, was little affected at first by the possession of a few iron tools and weapons. Very soon, however, as a knowledge of iron-smelting became more widespread and iron cheaper and commoner, it had an appreciable effect, most importantly in a greater capacity for bush and forest clearing for agriculture; this benefit may well have been greatest in southern Nigeria, whereas in those parts of Nigeria with a severe and prolonged dry season, the use of iron for the digging of wells and cisterns may have facilitated all-the-year-round settlement in areas otherwise difficult for this. The increased capacity to manipulate the environment bestowed by iron tools led to changes in settlement patterns and increases in population density. Doubtless there were accompanying social changes and increased division of labour.

Although the latest excavations at Rop, in which a number of stratified pieces of iron were found (David 1976b), may show that there was continuity of occupation from the Late Stone Age to the Early Iron Age, Daima appears to be the only site where this is clearly established (see pp. 52–5). It will be recalled that Daima is a large mound in Bornu on the *firki* lands south of Lake Chad, in which the lower levels represented the accumulated occupation

debris of the Late Stone Age people of the area, beginning around 600 BC. Iron occurred for the first time some $2\frac{1}{2}$ m above the bottom of the mound, but the radiocarbon analyses are difficult to interpret in terms of assigning a date to this first appearance of iron: this event is now put in the fifth or sixth century AD (Connah 1968, 317) although earlier it had been thought to date to the last century BC (Connah 1967a, 24). It is also still difficult to assess how much, if any, cultural continuity attended the coming of iron at Daima, and more certain knowledge of this will have to await a detailed study of the pottery and the full publication of the results. Although cattle were important for them, we do not know for certain that the Late Stone Age people also grew grain, as is definitely the case with their iron-using successors, since actual remains of carbonized sorghum were found only in the upper layers. The making of clay figurines of animals persisted for a while after the first appearance of iron, and the burial traditions remained unaltered. On the other hand the types of clay figurines are different: in the earlier period they are of cows with flat or concave bases, or with legs of medium length, and these do not occur in the later period; while figurines of humans and of long-legged and spiky animals are confined to the later occupation. The excavator has suggested that there was a period of two or three centuries when the original inhabitants of Daima took to using iron and began building huts of mud in place of the earlier ones in wood and grass (Connah 1968, 317) but that they were then replaced by people with wide contacts, as evidenced in the burials of this time by the presence of bronze ornaments, white stone lip-plugs, and beads of carnelian, rock crystal, ostrich egg-shell and glass; pottery beads and lip-plugs were common, and there was a marked change in pottery styles (Connah 1967a, 25).

The Nok Culture

In previous chapters (pp. 29, 35) the Stone Age material from the Nok valley was described as coming from the two earliest alluvial infills of the valley and the terracotta figurines of the Nok Culture from the third and most recent infill. The valley lies to the west of the Jos Plateau and, like the Plateau itself, is surrounded by rocks out of which tin has been eroded and concentrated by water action into alluvial deposits. Open-cast mining methods are used to extract the tin from the gravels; during the course of these operations in the Nok valley before

34 Two terracotta heads of the Nok Culture recovered in tin-mining operations. (*left*) From Jemaa. Ht 23 cm. (*right*) From Nok. Ht 35 cm. Both are broken off at the neck; since parts of arms, torsos and legs have been found in the deposits, they probably come from complete figures

and during World War II, a number of recognizably archaeological objects had been turned out, and saved from oblivion by a partner in the mining firm of Nigeria Alluvials Ltd, Lt Col. Dent Young. They included ground stone axes and a number of terracottas which portrayed a monkey's head, a human foot, a monkey's body, and a human head in a very distinctive style. These objects were among the first placed in the new Antiquities Department museum in Jos. Shortly after Mr Bernard Fagg had begun cataloguing and studying them he received information from a mining engineer, Mr F. H. Townend, about a terracotta human head which he had bought from a labourer who had been using it as a scarecrow; he had found it when digging for tin beneath 8 m of alluvial deposits. This head has remarkably fine modelling; the hair is elaborately dressed, there is a raised disc on the forehead, the eyes are triangular in shape with the pupils portrayed by holes into the hollow interior. Bernard Fagg recognized this Jemaa head for the superb work of art it is, and noted that it was made in the same style as the terracottas earlier discovered at Nok. Accordingly he designated it as belonging to the 'Nok Culture', the name which has been used ever since (B.E.B. Fagg 1945, 1946, 1956a and c), although subsequent

34 (left)

progress towards defining the culture more comprehensively has proceeded slowly (Angela Fagg 1971).

After the setting-up of the archaeological headquarters of the Antiquities Department in Jos, a close look-out was kept for the discovery in tin-mining paddocks of further remains of the Nok Culture. In 1954 a magnificent lifesize head was found at Nok overlain by some 4 m of gravels, clays and sands. The modelling of the eyes and lips is comparable to that of the Jemaa head, but there is a quite different hair style, consisting of five 'buns', four

34 (right)

35 Terracotta head found in tin-mining operations at Nok, Kaduna State. The subtriangular eye, with circular hole to indicate the pupil, is characteristic of Nok Culture figurines. Ht 19 cm

36 Two Nok Culture terracotta heads. (*left*) From Nok. Ht 21 cm. (*right*) From Jemaa. Ht 19 cm

of which have holes in them (possibly for the insertion of feathers); three strings of beads or plaited fibre cross the forehead and end at the temples (Fagg 1956b). In subsequent years hundreds of figurines or fragments of them have been recovered from tin-mining and are stored in the Jos Museum. Figurines in the Nok style have also been found outside tin-mining contexts at Katsina Ala, Ankiring and Kagara. The publication of this large corpus of material is at present being undertaken and is eagerly awaited. The known area for Nok-style figurines is oval in shape some 300 miles long and 100 miles across, to the west and south of the Jos Plateau, mostly north of the Niger and Benue but crossing south of the latter. The terracotta heads of human beings are usually broken off at the neck, their compactness and roundness giving them a better chance of survival in alluvial conditions than the body parts, which when found are for the most part fragmentary. A number of human representations show the results of disease or deformity, some have plaited or coiled beards, others portray 'mythical' types of figure, e.g. with greatly enlarged ears or canine teeth. The figurines provide many details of dress,

35–9

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37 Nok Culture terra-cotta head from Jemaa. Ht 10.5 cm

43–5

headgear and personal adornment, e.g. with beads and pendants, and there is one of a man carrying a hafted axe over his left shoulder; whether the blade represented is of stone or of iron it is impossible to say. Systematic study of all the Nok terracottas should tell us a great deal about the people who portrayed themselves and objects in the world about them by means of these figurines.

In addition to human beings and monkeys, a wide range of other living things is represented in the terracottas, such as elephants, snakes, a bloated tick, and fluted pumpkins; the identification of domestic cattle is doubtful.

Besides the terracottas, the alluvial deposits containing Nok Culture material have produced ground stone axes and iron axe

38. Two Nok Culture terracotta heads. (*left*) From Jemaa. Ht 10 cm. (*centre*) From Wamba. Ht 14 cm

39 (*left*) Nok Culture terracotta head from Shere. Ht 19 cm

a

b

40 Two Nok Culture terracotta heads. They come from the present known limits of the distribution of such figurines in the northwest and southeast of the Nok Culture area. (See Ill. 1.) a) From Katsina Ala. Ht 20 cm. b) From Kagara. Ht 17 cm

41 Weathered head from Nok, showing cataract and facial paralysis; a number of the Nok Culture figurines show disease or deformity. This specimen also illustrates the eroded surface many examples have as a result of inclusion in alluvial deposits. Ht 15 cm

42 Nok Culture terracotta head from Jemaa. Ht 20 cm

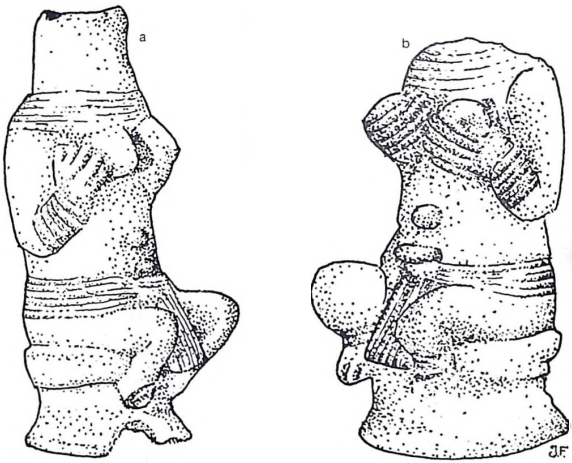
43 (*below*) Nok Culture terracotta figurine of a kneeling man, from Bwari. Ht 11 cm. The head is large in proportion to the trunk, and the trunk in proportion to the legs – characteristics typical of much African sculpture

44 Nok Culture figurine. Female figure on a globular pot, from Jemaa. Ht 31.5 cm. (Cf. Ill. 45)

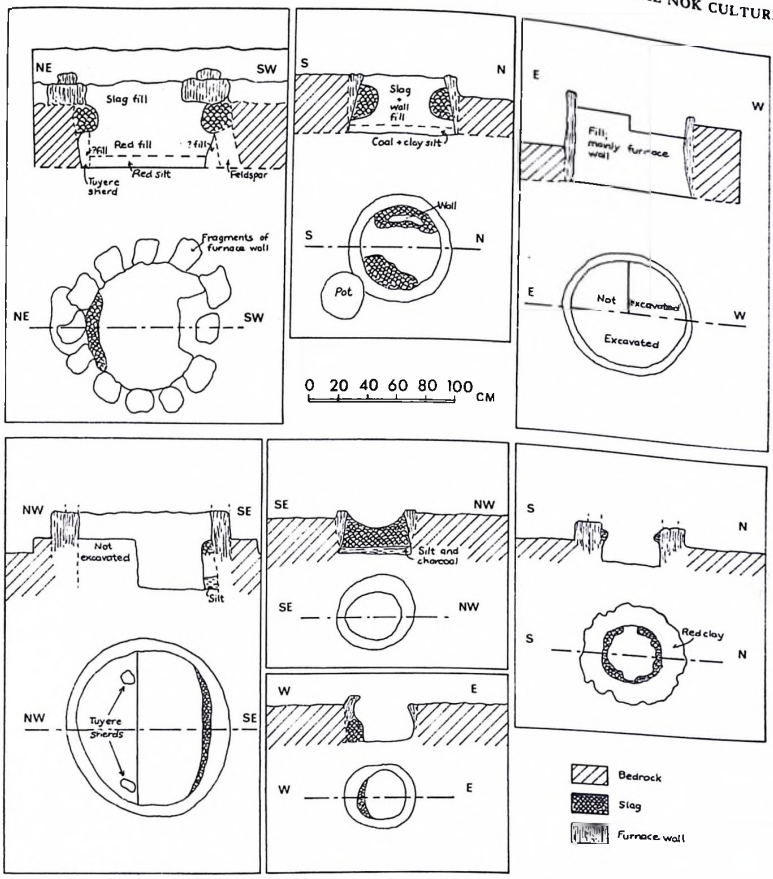
blades, small stone arrow points and barbs, perforated quartz beads, solid quartz lip-plugs, tin beads, pieces of iron-smelting furnaces, iron slag, the clay draught pipes of the furnaces, known as *tuyères*, and quantities of pottery (Fagg 1956c, 1959).

Because of the mixture of stone and iron artifacts in the layers producing the Nok Culture terracottas it was at first tentatively suggested that it belonged to a period of transition from the use of the one to the use of the other, but more recent evidence from non-alluvial sites shows that it represents the earliest iron-using culture in Nigeria. Carbonized wood from the mixed alluvial deposits at Nok gave dates in the third, second and first millennia BC, but the only really meaningful date was that of AD 200 ± 50 from a clay layer overlying the figurines, showing that they could not be younger than that but that they might be considerably older (Barendsen *et al.* 1957; B.E.B. Fagg 1959). What was needed was to find Nok Culture material in a non-alluvial site.

In 1960 such a site was discovered, and with it something of great additional importance. Two headless terracotta figurines were found by miners in the course of prospecting for tin and tantalite in the Taruga valley near the village of Takushara about 55 km southeast of Abuja; both figurines portrayed a woman wearing a loin-cloth and strings of beads around her neck and wrists, seated on a stool and holding her breasts. Trial
45 excavations on a terrace formed between two rainy-season



45 Two headless terracotta figurines in the Nok Culture style found in 1960 at the Taruga site by miners prospecting for tin. Ht a) 26 cm, b) 23.5 cm



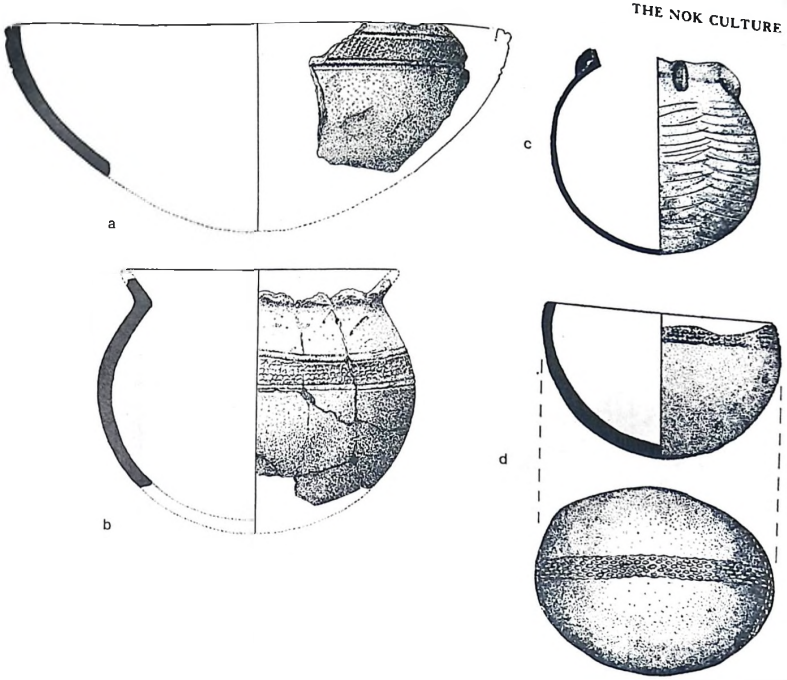
46 Plans and sections of iron-smelting furnaces excavated at Taruga

streams showed that it was an occupation site. Finds included objects of wrought iron, a quantity of iron slag, fragments of *tuyères*, large quantities of domestic pottery, a number of figurine fragments, red ochre, quartz hammerstones, worn-out querns and small concentrations of charcoal. A sample collected from a depth of 40 cm in the densest occupation layer, yielded a radiocarbon date early in the third century BC (Fagg 1969).

Excavations were resumed in 1965–6, and a radiocarbon determination in the mid-fifth century BC was obtained on a

sample 24 cm below the first one. A proton magnetometer survey was conducted because there was a prospect of discovering evidence of iron-smelting. In spite of doubts whether the method would work near the magnetic equator (Tite 1966) the survey revealed twenty concentrations of iron slag many of which contained the structure of furnaces in their original positions. The thirteen furnaces excavated were all low shaft furnaces consisting of pits dug into the ground to a depth of 30 cm. The walls stood up to a height of as much as 20 cm but would originally have attained a metre or so. They varied in diameter at the top of the pit from 36 to 105 cm, but the diameter decreased with height from the bottom. Tuyères were found but none in position, presumably because they were situated in the
46 part of the wall which had collapsed (Tylecote 1975a, 1975b). A radiocarbon date of 300 BC ± 100 was obtained from charcoal below the continuous slag layer situated in the bottom of one of the furnaces. No stone artifacts were found in the excavations at Taruga, showing that here at any rate, where there was no alluvial admixture, the Nok Culture people employed a fully evolved iron technology.

The only occupation site of the Nok Culture so far discovered in the Nok valley, at Samun Dukiya, yielded a radiocarbon date at the end of the third century BC from the lower part of the occupation horizon (Angela Fagg 1972b). No structures were recovered, as the huts were probably built on the large granite boulders at the edge of the valley; the domestic rubbish which fell down the slope contained quantities of fragmented domestic pottery, pounding- and grinding-stones, and iron fragments, including knife blades, pieces of arrow and spear-heads, hooks and bracelets; stone beads were all of disc shape; clear quartz imported onto the site and ground smooth was probably used for ear- or lip-plugs; fragments of figurines completed the assemblage. There was a single ground stone axe, which the excavator believed was functional (Angela Fagg 1972b, 77) but which could have had a secondary or ritual purpose (Shaw 1961, 69). The pottery from Taruga shows three main vessel forms: open bowls or shallow basins, globular pots with everted rims, and grating dishes. The latter are shallow, flat-bottomed dishes deeply scored inside with a diced pattern to produce a sharply abrasive surface, in all probability used in food preparation; some are decorated with rim-tip grooves and almost all have an elaborately decorated undersurface, both inside and outside the foot-ring, which itself is often decorated. Decoration on the



47 Nok Culture pottery. a) Bowl with rim-top groove from Taruga. Diam. 28 cm. b) Globular pot from Taruga. Max. diam. 18 cm. c, d) From Samun Dukiya. Max. diam. c) 17.5 cm, d) 20 cm

Taruga pots includes comb-drawing, channelling, rouletting, curvilinear incision, cross-hatching and impressed circles (Fagg 1967, 1969). The only nearly complete vessels recovered from Samun Dukiya were a bowl and a globular pot. The bowl is of an unusual elliptical shape, and bears a zone of raised dot decoration below the rim and in a band along the long axis, passing from one end to the other across the bottom of the bowl; the decoration was made by means of a carved roulette of a type not so prominent either at Taruga or the Nok-style site of Katsina Ala, where at no very great depth in a non-alluvial context both pottery and figurine material were found (Angela Fagg 1972b). This is the earliest known use of the carved wooden roulette for decorating pottery, and it may prove to be an important diagnostic feature in tracing cultural connections. 47

While the Nok Culture appears to have some sort of common element in the production of figurine material in which human heads are usually (but not invariably) portrayed with triangular

eyes with perforations for pupils, nostrils and mouth, there are many stylistic differences within the corpus of material; and there are observable differences in the associated pottery from the various non-alluvial sites. Perhaps the unifying factor was the practice of agriculture and devotion to a religious cult associated with it. The terracottas are probably best interpreted as altar figures belonging to a cult concerned with the fertility of the land. Shrines may have been placed at the edge of cultivation plots, and in a system of shifting cultivation, each time a new area was cleared for farming a new shrine with newly-commissioned figures had to be set up. Old shrines would be left to decay and when seasonal floods inundated the valley their contents would get swept away and become incorporated into alluvial deposits down-stream. The very practice of agriculture, and the cutting down of trees to provide fuel for iron-smelting, by removing vegetation cover from the slopes of the valley sides, is likely to have increased surface run-off and the resultant sheet erosion. These man-made conditions, rather than any climatic change, may have been what caused the Nok Culture material to become so deeply buried in alluvial deposits. Apparently the process of aggradation did not begin before 1500 BC (Angela Fagg 1972b, 77) but was more or less complete by AD 200, when the valley had been sufficiently filled up to result in swampy conditions which laid down peaty clay.

The iron-smelting process

The iron-smelting furnaces of Taruga, dated to around the fourth century BC, are the oldest so far discovered in West Africa.

How did the Nok Culture people learn how to smelt iron by so early a date? Unlike gold and copper, iron does not occur in nature in a pure state (except in Greenland); the nearest thing to it is meteoric iron, which also contains nickel, but we have no evidence for the use of meteoric iron in Nigeria. Iron ores, then, take the form of stones which contain iron and something else; smelting consists of the process of separating the iron from the something else. Most iron ores are oxides and therefore have chemically combined oxygen to be got rid of, and in addition have non-iron solids; these are mostly silicates, and form the 'gangue'. Smelting is carried out by heating the ore, but not to the point where the iron becomes liquid and flows (except in making cast iron, which was anciently practised only in China; a

temperature of 1530°C is required for this). The oxygen can be driven out of the ore at a temperature of 800°C under the right conditions, but 1150°C is required to melt the gangue and make it flow off as slag.

The most primitive type of iron-smelting furnace consists of a simple clay-lined hollow in the ground, perhaps not more than 50 cm in diameter, into the bottom of which charcoal is laid; this is ignited and then covered with alternate layers of ore and charcoal. This is known as a bowl furnace. However, to make it achieve the necessary temperature, some kind of forced draught by means of bellows is necessary. Here arises one of the problems of smelting: a naturally burning fire will not achieve the temperature necessary for smelting, therefore additional oxygen has to be supplied by means of additional draught; this tends to produce oxidizing conditions, the opposite of what is needed to drive off the oxygen chemically combined in the iron of the ore, which requires reducing conditions. For this reason the bowl furnace is not very efficient, and does not extract from the ore as much iron as might otherwise be the case; efficiency is improved if some sort of cover is put over the furnace or damp charcoal dust scattered on top of it. However, no simple bowl furnaces are known in Nigeria, either in archaeological or ethnographical contexts.

Much greater efficiency of iron extraction is obtained if combustion takes place in a reducing atmosphere, as a result of the furnace being completely enclosed by a clay wall, leaving only a vent at the top for the escape of exhaust gases. This results in what is known as a shaft furnace, consisting of a vertical cylinder of clay, usually with an internal diameter at the base of 30 cm to 60 cm and with a height varying from 1 m to 3 m.

The dome furnace can be regarded as a specialized type of shaft furnace in which the combustion chamber is domed over at the top, leaving a vent in the middle, instead of being cylindrical all the way. Such dome furnaces may be over 1 m in internal diameter at the bottom but because of the doming they tend not to be as high as shaft furnaces. The advantage of the dome furnace is that the internal form, tapering from the base to the vent, increases the draw of air through the fire.

This draught may be either 'induced' in this way, entering the fire through clay pipes or *tuyères* inserted through the base of the furnace wall, or 'forced' through them by means of bellows. Furnaces may or may not be supplied with special arrangements for tapping off the molten slag as it occurs during the smelt.

Yet one more type of furnace is called the 'Catalan', since it is believed to derive from that area of Spain and to have been introduced into North Africa by the Arabs in the eighth century AD (Williams 1969). This is an elaboration of a bowl furnace, in which a draught is forced into the base of the bowl through a long *tuyère*; this *tuyère* passes from the bellows to the furnace through or below a wall which serves to protect the operator of the bellows from the heat of the furnace.

Iron ore which can be used in such pre-industrial furnaces is common in Nigeria and takes the form of limonite and haematite pebbles, magnetic sand, ferruginous sandstone and ferricrete (lateritic 'hard pan'). What is obtained as a result of a smelt is not workable iron, but a 'bloom', which is a mass of iron crystals mixed up with small fragments of charcoal and other impurities not removed in the slag. To make usable iron from this, it has to be broken up and pounded thoroughly to reduce the charcoal and slag to a fine dust, which can then be winnowed away leaving the granules of iron; there is record on the Jos Plateau of this being done by means of a stone pounder on rock outcrops, resulting in deep circular depressions (Sassoon 1962). Alternatively the bloom is reheated with charcoal in a smith's forge and repeatedly hammered, to remove the impurities and weld the iron crystals together. If the right proportion of carbon becomes combined with the iron in this process, steel is produced. Wrought iron has no carbon in it and is comparatively soft and malleable; cast iron has 1.5%–5% of carbon; it has a lower melting point but when cold is hard and brittle; steel, with an intermediate amount of carbon, 0.15%–1.5%, is both hard and tough.

The discovery of iron

The discovery of iron and steel took place among the Chalybes of Armenia, subjects of the Hittite empire, towards the end of the first half of the second millennium BC, and the knowledge of iron-working in the whole of Europe and western Asia is ultimately traced to this source. How the discovery came to be made in a world where there had been some two thousand years of experience of copper and bronze metallurgy, we do not know. Haematite can look a bit like copper sulphide ore after roasting, and if a coppersmith had put some in his furnace he would have got slag at the bottom instead of copper, but if he had been interested in the bloom above and had heated and hammered it,

he would have got iron (Coghlan 1956, Forbes 1965, 592–9; Hodges 1964, 80–4; Tylecote 1962, 175–299).

Could iron have been independently discovered in West Africa? Such an independent invention of iron-smelting was at one time tentatively put forward (Davies 1966, 471) but the early dating of iron on which this was based has not been confirmed (Davies 1973); another claim is based on the earliest radiocarbon dates in the figurine-producing deposits at Nok (Diop 1968). Without any intermediate copper and bronze metallurgy, it is difficult to see how Late Stone Age people could have discovered the use of iron for themselves. It has nevertheless been maintained that this might have happened as a result of the temperatures obtained in firing pottery and the accidental inclusion of iron ore in the fire; but such an eventuality would certainly not have produced iron and it is doubtful if it would even have produced a bloom, since pottery firings are usually of the bonfire type, do not use charcoal, and do not employ a kiln (Coghlan 1941).

If, then, the technique of iron-smelting was introduced to Nigeria from outside, where did it come from? And who brought it? An independent discovery of iron is claimed by some to have arisen out of the Mauretanian copper industry, which was centred upon the exploitation of the copper deposits of Akjoujt from the ninth to the fifth century BC (Lambert 1971, 1973). This is certainly a possibility to bear in mind, but in the absence of any positive evidence pointing in this direction, the idea remains speculation.

It has frequently been suggested that a knowledge of iron metallurgy reached Nigeria from Meroe in the Republic of Sudan. Meroe was the later capital of the ancient negro kingdom of Kush, and it came to an end in the middle of the fourth century AD, reputedly destroyed by the rising power of Axum. Meroe was clearly an important industrial centre for the manufacture of iron, as great piles of slag are still visible there today. It had been supposed that at the destruction of Meroe, refugees from there had drifted westwards along the sahel strip south of the desert, bringing with them a knowledge of metallurgy. In view of the dates since obtained for the Taruga iron-smelting furnaces, this obviously no longer fits, and if Meroe was the point of origin for a knowledge of iron-working in West Africa, the connection must have been much nearer the beginning of Meroe's own iron-smelting activities, which seem to have been under way by 500 BC (Green 1975, 20).

If a knowledge of iron-working had reached Nigeria from Meroe, one would have expected it to have reached Daima, situated in the natural east/west corridor between Lake Chad and the Mandara Mountains, as early as or earlier than it reached Taruga, not some eight hundred years later (Shaw 1969b). Unfortunately this argument hangs on a single set of rather difficult radiocarbon dates at Daima, the implications of which might be modified by further work in the area; and some 500 km to the north-northwest of Daima, in the Termit massif, an iron-smelting furnace at Do Dimmi is said to have yielded a radiocarbon date in the seventh century BC, although the associated settlement gave a date of AD 200 ± 110 (Quéchon and Roset 1974). If a knowledge of iron-working did not reach Nigeria from Meroe, there is another route by which iron technology could have done so, consistent with the Taruga dates, and which now seems more likely.

Carthage was founded towards the end of the ninth century BC by Phoenicians who had come by sea from an area where iron was widely used earlier than it was in Egypt or at Meroe. Egypt had an efficient copper and bronze technology and iron did not become common for tools and weapons before 600 BC. Carthaginian influence became strong on the North African coast, especially along the Gulf of Gabes; inland from here was the powerful tribe of the Garamantes. The Carthaginians also explored along the coast of Africa west of the Straits of Gibraltar, but did not go much beyond Mogador. Many efforts have been made to identify the places described in Hanno's supposed voyage, but the account is probably a forgery (Mauny 1970; 1971, 73–7; Picard 1971). Herodotus's account (IV (19b), 336) of the 'silent trade' for West African gold may be wrong about its silence (Sundström 1974, 22–31) but right about the gold, although we do not know whether this came from Morocco or farther south. He also describes the Garamantes as drivers of horse-drawn chariots. There is a series of rock-engravings and paintings of such chariots which stretches in a southwesterly direction from the Garamantian homeland in the Fezzan across the Sahara desert to a point within 200 km of the River Niger at Gao (Mauny 1947, Lhote 1966); from Gao the river forms a natural corridor southwards into Nigeria. Perhaps this was the route from the area of Carthaginian influence, with the chariot-using Garamantes as intermediaries, by which a knowledge of iron reached Nigeria. Linguistic evidence has been adduced in support of this (Mauny 1952). Even after the final desiccation of

the Sahara and before the introduction of the camel, it was never completely uninhabited. Libyco-Berber people are portrayed on rock-engravings of this period, equipped with iron-tipped spears; At Tichitt in southern Mauretania the last of the Stone Age people came under severe pressure from the better-equipped raiding Berbers from the north between 700 BC and 400 BC (Munson 1971). When the Romans took over North Africa from the Carthaginians, they had to organize a military frontier force to protect it from the incursions of the desert nomads.

Thus it seems most likely that these Berber-speaking peoples of the desert, having acquired a knowledge of metal from the Carthaginians, were themselves responsible for passing it on to the negroid peoples to the south. An unanswered question is how they obtained their iron, since it is very doubtful whether there was sufficient wood obtainable in the desert to provide the considerable quantities of charcoal necessary for an iron-smelting industry. The northern Berbers would have had access to the wood supplies of the Maghreb; was it the need for charcoal which brought the southern Berbers further south than they would otherwise have gone – perhaps impressing local people into their service for wood-collecting and charcoal-burning? Or for the complete iron-smelting process? Or did they barter the products of their metal technology and of their way of life in the desert for charcoal, and perhaps other products of a tropical environment as well? Apparently sufficient supplies of timber were available in the wadis (dry valleys) of highland areas as far north as 17°N (Quéchon and Roset 1974, 97; Arkell 1964, 14–15), but these supplies would have been limited and may have induced iron-smelters to look farther south. At the moment this is no more than speculation.

A greater knowledge of the distribution of different types of furnace in Nigeria and in ancient iron-smelting centres may one day help to solve this problem. Dome furnaces have been said to predominate between the Niger and the Gulf of Guinea and to be a Celtic type introduced into North Africa by the Romans after the conquest of Carthage in 146 BC (Williams 1969). Yoruba dome furnaces used an underground chamber for tapping the slag (Bellamy 1904). This does not help us with the Taruga furnaces; we do not know what type of furnace was anciently used at Carthage. A first/second century AD furnace excavated at Meroe was of the shaft type with a tapering top, believed to have been worked with a forced draught. There is

some resemblance between the Catalan type of furnace and those until recently used in the Mandara hills, on the Jos Plateau (Sassoon 1964) and among the Nupe and Igbirra, but there are also certain differences.

The deep circular depressions on rock outcrops used for pounding up iron ore and bloom (p. 84 above) should not be confused with other types of artificial hollows and grooves, of which there are thousands in Nigeria, of several different types: long narrow grooves for sharpening ground stone axes (p. 45 above), deep oval ones for grinding grain, and hollows used in preparing clay for pottery-making (Sassoon 1962), for grinding ochre (Vaughan 1962) and in making cam-wood dye (author's observation). It has been suggested that a rather enigmatical set of circular grooves at Apoje, near Ijebu-Igbo, was used in bead-making (W. Fagg 1959). A more systematic knowledge of all these different kinds of rock hollows and their distribution might provide valuable archaeological data.

6
People and languages

Who were the various people we have been speaking of so far? Who were the people who produced the figurines of Nok and smelted the iron of Taruga? Who herded their livestock and speared their fish around Daima? Who made microliths at Rop, Dutsen Kongba and Iwo Eleru? And what was the relationship of all these various groups, who have been archaeologically recognized, to the present-day inhabitants of Nigeria?

The identity of 'a people' comprises four different elements: biological composition, language, culture and political organization. The biological composition of a people consists of their gene pool, and this differs from the gene pools of other biological units; genes consist of the irreducible elements of heredity, passed on in the process of human reproduction from one generation to another, and mixed together within the breeding group by human mating. They determine body build, shape of head, colour of eyes and skin, type of hair and other physical characteristics; the total gene pool determines the range of variability of these characteristics within the breeding group. The effects of genetic inheritance can be modified by nutrition and environment, but they are uninfluenced by language, culture or politics; they obey the laws of biology alone. The particular characteristics of certain 'racial' groups have been evolved in the past when their ancestor populations were more or less isolated; but all human groups can breed successfully with each other and there is no such thing as a 'pure' race. The identity of biological units therefore has to be expressed statistically in terms of the mean and range of measurable characteristics and the incidence of identifiable attributes such as blood composition. There are about a thousand such biological units in sub-Saharan Africa (Hiernaux 1974, 52).

Similarly, when a population is isolated, its language does not evolve in the same manner as that of any group it may have formerly been associated with. A living language is always changing, it is never static. Under these circumstances there has

often tended to be a large measure of congruence between language group and physical group, but this must never be taken for granted. An originally separate biological unit may for some reason adopt the language of a larger or more important group to which it attaches itself; a conquering people may impose their language on a subject people, or, on the contrary, have to adopt the language of the subject majority. The history of a language is the history of a set of ideas, not the history of a people, which follows quite different principles (Armstrong 1964, 31).

Likewise there tends to be a relationship between language and culture, since language is the principal vehicle of culture. The archaeologist is only able to recover part of the culture of a prehistoric preliterate people, namely their material culture, and in classifying and dividing his material he has to make his categories on the basis of the data available to him. He is therefore able to identify material culture groups (sometimes referred to simply as 'cultures' or 'industrial complexes'), but he cannot assume that a particular material culture group is also a particular language group; unfortunately potsherds do not tell him what language was spoken by their makers. Nor do they tell him what was the biological unit of the potters; this he can only learn if he is lucky enough to find preserved a fair quantity of human remains. Historical examples of political groupings overriding biological, linguistic and cultural groupings are sufficiently familiar for this to need no elaboration.

Physical characteristics

The population of Africa belongs overwhelmingly to two of the great divisions of mankind recognized by physical anthropologists, the negroid and the caucasoid, with the former predominating. The negroid group, which includes the majority of Nigerians, is characterized by dark skin and tightly-curled black hair; the caucasoid group, including Arabs and Berbers, typically have a light skin and wavy hair anything in colour from blond to black. The distinguishing negroid/caucasoid characters undoubtedly evolved in response to differences in climate: whereas a light skin was suitable for a temperate climate, the melanin pigment of the negroid gives better protection against ultra-violet rays to people more frequently exposed to the direct rays of the sun. Natural selection favoured the same features among the Dravidian peoples of India and it is not necessary to invoke them as the ancestors of the African negroids and posit a

large migration from Asia into Africa. The general area in which this negroid evolution took place was probably the sahel and savanna zones of sub-Saharan Africa, from the Atlantic to the Red Sea and perhaps into the Great Lakes area of East Africa. The general characteristics are shared by the whole negroid group, but within it there is a cline or gradient from the tallest and slimmest body build in the north and east of the area to shorter and stockier types further south and west. (Such differences between south and north can be observed within Nigeria today.) The tall slim bodies and narrow noses of the 'elongated Africans' were evolved where these characteristics gave survival advantage in conditions of dry heat: the high ratio of body surface to body mass facilitated heat-loss and the narrow nose helped to minimize moisture loss (Hiernaux 1974, 82). It was these locally evolved characteristics that helped to give rise to the 'Hamitic myth' which wrongly accounted for them as the result of caucasoid admixture (Seligman 1930, 1934) – a myth now discredited on other grounds also (Drake 1959; Sanders 1969; Smith 1971, 170).

Among the Middle Stone Age populations of Africa *Homo sapiens* replaced the earlier *Homo erectus* but skulls from southern Ethiopia indicate that racial differentiation had not taken place before 40,000 BC (Leakey *et al.* 1969). Nigeria provides the next piece of fossil evidence. At the back of the Iwo Eleru rock shelter (see pp. 45–9) at the bottom of the deposit between two rocks were the remains of a human skeleton dated to around 9000 BC. It is the earliest skeleton so far discovered showing negroid characteristics, although on account of certain differences from modern negroid populations, it is regarded as proto-negroid (Brothwell and Shaw 1971). Other fossil evidence 48, 49
of proto-negroid populations comes from the lacustrine area of East Africa (Gramly and Rightmire 1973) where skeletons formerly called 'East African caucasoid' should probably be more correctly assigned to the 'elongated African' type (Leakey 1935; Gabel 1966; Hiernaux 1974, 62).

By the fifth millennium BC we have a negroid skeleton from Asselar in Mali (Chamla 1968, 85), while a study was carried out of nine skeletons from the Saharan 'Neolithic' (as the Late Stone Age food-producing complex is called in North Africa). This study showed that six of them were negroid, two indeterminate and one non-negroid. This is consistent with the rock art of the period in the Sahara, which shows both dark-skinned negroids and light-skinned caucasoids. It is significant that examination of

48 The badly preserved remains of the skeleton of a Late Stone Age man exposed near the base of the deposits excavated in the Iwo Eleru rock shelter. The better preserved skull can be seen emerging at bottom left. Scale in centimetres

49 The skull and jaw of Iwo Eleru man. The biological characteristics of the skull place it in the negroid group. Most of the teeth were present, the degree of wear suggesting an individual over thirty years old

sixty-one skeletons from the subsequent post-Neolithic pre-Islamic period in the present Saharan area showed the proportion of negroids to have fallen to 25% and caucasoids to have risen to 41%, with a distribution of the negroids predominantly in the south of the area and the caucasoids in the north (Chamla 1968). The people moving out of the Sahara following its desiccation during the last two millennia BC were predominantly negroid, moving into areas already occupied by other negroids. The Nok Culture agriculturists portrayed themselves in their terracottas as the negroids that they were, even if they had learnt their metallurgy ultimately from caucasoid Berbers. Thus practically all the people of Nigeria today are negroid, mostly at the 'western' and 'southern' end of the negroid spectrum, but with some examples in northern Nigeria of the 'elongated African' type. The only exception is the small group of Shuwa Arabs in northeastern Bornu, who came as caucasoid immigrants during the last five hundred years but who have since absorbed a lot of negroid blood; in a complementary

way, there are probably more caucasoid genes among the Kanuri than among any other Nigerian group.

Blood genetics and anthropometry have demonstrated the biological similarity of the Fulani to the negroid populations of West Africa (Hiernaux 1974, 134–40) and that there is no need to invoke the 'Hamitic hypothesis' to account for their physical characteristics. They have been seen as descendants of the Late Stone Age pastoralists who came south from the Sahara (Hampate Ba and Dieterlein 1961), and linguistics has confirmed and added details to their journeyings (see below p. 94). The maintenance of their pastoral way of life, with a strong consciousness of its superiority over that of the earth-bound farmers among whom they graze their herds (Horton 1971, 106) has led to breeding isolation; reinforced by sexual selection for admired characteristics, such as a narrow nose, this has helped to maintain the physical features of the Fulani (Stenning 1965). Where they have become sedentary and mingled with the sedentary population they have become physically indistinguishable from Hausa (Hiernaux 1974, 139).

Languages

What of the languages spoken by the people whose various artifacts constitute the archaeological record we have been describing? Practically all the languages of the West African forests and savannas, except in northern Nigeria, belong to what Greenberg (1963) has called the Niger-Congo group, and it seems a reasonable assumption that some sort of 'proto-Niger-Congo' was spoken by the evolving negroid populations of the earliest part of the Late Stone Age in West Africa. In the course of time 'proto-Niger-Congo' evolved into a number of separate regional families, which Greenberg has called West Atlantic, Mande, Gur (Voltaic), Kwa, Benue-Congo and Adamawa Eastern. The first three of these families lie mostly to the west of Nigeria, but in Borgu, the Bussa language belongs to the Mande group and Bariba to the Gur. The Kwa family includes Yoruba, Edo, Igala, Nupe, Igbirra, Idoma, Ibo and Ijo; linguists believe that most of these major language groups have developed, in approximately their present area of distribution, over a very long period of time (Armstrong 1962; 1974, 12, 23). Greenberg's Benue-Congo family includes Kambari, Dakakari, Jaba, Birom, Jukun, Ibibio, Efik, Andoni and Bantoid – which itself includes Tiv, Mambila and all the Bantu languages of Africa; the

Adamawa-Eastern family includes Chamba, Vere, Mumuye and languages stretching eastwards through Cameroun and the Central African Republic. There is one representative of the West Atlantic family in Nigeria, which is Fulani, and this ascription helps to throw light on early Fulani history. Agricultural negroids speaking a West Atlantic language, situated in the valley of the middle Senegal and calling themselves Halpularen ('those who speak "Fula" '), were infiltrated by pastoralists who moved on to occupy the Ferlo plateau. They established an exchange relationship with the surrounding agriculturists who had more elaborate institutions than the former, intermarried with them and adopted their language. The resulting 'cattle Fulani' spread eastwards along the savanna lands of West Africa, filling up an ecological niche not previously occupied; the 'town Fulani' retained more of the culture and way of life of the sedentary element in their ancestry (Armstrong 1964, 6–8, 25–8).

The more easterly part of the area of negroid evolution is on the whole the area of Greenberg's 'Nilo-Saharan' group of languages, represented in Nigeria principally by Kanuri but also by Songhai, which extends up the Niger from the point where it enters Nigeria right round the great bend of the river in Mali. It has been suggested that Nilo-Saharan languages were spoken by the Late Stone Age peoples of the area between 10,000 and 5000 years ago who gained their livelihood largely from fishing (see above pp. 63–4; Sutton 1974, 537). As small groups of these people were eventually compelled by the climate to move southwards, considerable fragmentation would have taken place; some of the smaller groups may even have become absorbed linguistically by speakers of Niger-Congo languages; only large groups like the Songhai, retaining their cohesion and their riverine way of life, were able to keep their Nilo-Saharan language.

The last major language group in Nigeria is Afro-Asiatic, the group in which Greenberg places Ancient Egyptian, Berber and the Semitic, Cushitic and Chadic families of languages. In Nigeria, Chadic includes Hausa and a number of more restricted languages, such as Angas, Kotoko, Margi, Tera, Mandaran, Mubi, etc. The date at which Hausa-speaking peoples first established themselves in northern Nigeria is not known, but there is a tradition that pagan iron-workers were living on the Dala Hill in Kano when the city was founded by its first king (Palmer 1928 (3), 97–9; Hogben and Kirk-Greene 1966, 184). However, this is probably too late to account for the

establishment of the Chadic languages in Nigeria and possibly the best explanation is that the ancestral language originated in the southern Sahara, perhaps through contact between the Late Stone Age pastoralists and peoples further south (Smith 1971; David 1972, 27). Other Chadic-speaking groups seem to have pushed their way into the 'Middle Belt' of Nigeria, displacing and separating older-established communities speaking the 'Plateau' sub-family of Niger-Congo languages (Ballard 1971).

There is no doubt that more of Nigeria's history lies secretly embedded in her languages, awaiting discovery by expert linguistic study. This applies both to the history of whole language groups, and to the history of various cultural practices such as hunting and fishing, stock-breeding and cultivation, weaving and metallurgy, religion and ritual. The study of the unwritten past is an interdisciplinary one which calls for the special skills not only of the historian and the archaeologist but of the anthropologist and linguist as well.

7
Elephant hunters and bronze-smiths

We saw in Chapter 5 that by the later part of the first millennium BC we have archaeological evidence in Central Nigeria for settled agricultural communities smelting their own iron and producing works of art of a high order in terracotta. Because of the large areas of Nigeria which have not received attention from tin-miners or archaeologists, we do not yet know how widespread these communities were. Outside the Nok Culture province, we have some evidence from the rescue archaeology that was carried out in the area now flooded as a result of the building of the Kainji Dam.

Kainji Dam rescue archaeology

There is a sad story of less being done in this operation than should have been. Nevertheless, a preliminary survey was carried out in 1962 and 1963 by Mr Robert Soper on behalf of the Federal Antiquities Department which was a valuable and time-saving basis for later work. In 1966–8 Mr Priddy excavated sites on the west bank on behalf of the Department of Antiquities, Professor Donald Hartle from the University of Ibadan on the east bank, and an expedition from the University of Colorado in the Bussa area (Breternitz 1975). These excavations showed that in this area also there were iron-using agricultural communities before the end of the first millennium BC.

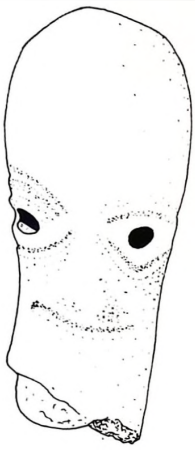
The site of RS 63/32 on the west bank below Yelwa was a mound 10 m high occupied by an undefended settlement of an estimated eighty people; the majority of animal bones recovered are believed to be of cattle and sheep or goat. Analysis of the pottery divides the occupation into two phases: in the first, decoration is by painting, applied cordon and comb-rocking, in the second by cord roulette. The only stone tools encountered were two ground stone axes, while there were nearly two hundred objects of iron, consisting of rings, bracelets, barbed

arrowheads, spearheads, axes, knives or daggers and unbarbed fish-hooks. There were stone beads and lip-plugs, and two bracelet fragments, one of stone, the other of ivory. The many terracotta figurines are in a style on the whole unlike that of the Nok Culture, although perforations are sometimes used for mouth and eyes (Priddy 1970a).

On the same side of the river farther south, the village of Kagoge stood on another occupation mound, about 4 m high; excavations revealed two periods of occupation, the earlier prehistoric, the later that beginning about AD 1800 according to oral tradition. The earlier period is not radiocarbon dated, but much of the material culture of the earlier period is comparable to that from RS 63/32 except that terracotta figurines only derived from an uncontrolled provenance (Breternitz 1975, 115); pottery is decorated by applied cordon and comb-rocking,

50 (*left*) Terracotta figurine excavated from an occupation mound (RS 63/32) on the west bank of the Niger below Yelwa in the course of the Kainji Dam rescue operations. Radiocarbon dates indicate the period of occupation as from AD 100 to AD 700. Ht 20.5 cm

51 Head of terracotta figurine excavated from an occupation mound at Baha, near Yelwa, in the course of the Kainji Dam rescue operations. Ht approximately 8 cm



52 Small terracotta head excavated from the Baha mound south of Yelwa. Ht 6.4 cm

whereas cord roulette occurs only in the later phase (Priddy 1970b). Across the river from RS 63/32 lies the Baha mound, 6 m high (Hartle 1970; Flight 1973, 548). Four radiocarbon dates at depths between 1 m and $3\frac{1}{2}$ m lay in the tenth to the eighth century AD and one from below $4\frac{1}{2}$ m gave a reading in the second century BC; iron objects occurred throughout.

With such agricultural communities established in Nigeria at the end of the first millennium BC we might expect that in the course of the next thousand years or so, larger aggregates of population with more centralized political control might emerge. This is exactly what seems to have happened in some areas but we are tantalizingly ignorant about the process, and apart from the sites of the Baha Mound, RS 63/32, Daima and Orun Oba Ado at Ife (see below pp. 157, 170), this crucial 'formative' first millennium AD remains archaeologically blank. It is the 'silent millennium', particularly in the important areas of the forest states and Hausaland; we have an isolated date in the seventh century AD for an iron-smelting furnace in Kano (Willett 1971a, 368).

State formation

To trace the course of urbanization and state formation is difficult enough at the best of times and remains a matter of controversy even where there are written records (Hopkins 1973, 5; Horton 1971, 109). For it to be possible to derive interpretations of social and political developments from archaeological evidence requires a comprehensive corpus of data, accurate in its chronology, extensive in the area covered and intensive and exhaustive in settlement excavation. We do not yet begin to approach this situation in Nigeria. Even in countries where there is a great accumulation of archaeological data, they tend to be supplementary to the documentary or ethnographical information on this kind of development. For example, concerning the process which led to the formation of the oldest state in the world in Mesopotamia, we should be hard put to it to produce a coherent account if there were no written documents and we had to rely on archaeological evidence alone (Adams 1966, 32). For the pre-Hispanic Mesoamerican states we have the help of fifteenth/sixteenth-century Spanish ethnographical records. In Nigeria, for Ife and Igbo-Ukwu we have neither contemporary written documents nor ethnographical observation; in the case of Benin, only sporadic ethnographic

observation prior to the destruction of the city in 1897; and for Borno and the Hausa States, no documents that are contemporary or near-contemporary with the foundation period, nor ethnographic observation before the nineteenth century.

Accordingly, archaeology has to be a little speculative concerning the circumstances that gave rise to the societies which produced the works of art of Igbo-Ukwu, Ife and Benin. It can nevertheless add quite a lot of circumstantial evidence concerning the conditions in which those works of art were produced, whose discovery was mostly fortuitous in the first place. Those from Benin were a by-product of the British Expedition of 1897; all the thousands of pieces were 'collected' not excavated, no associations were established nor any chronology secured. The bronzes of Ife were accidentally discovered and are without direct dating of any kind; the original finds at Igbo-Ukwu were similarly accidental and were undated until archaeological excavation was lucky enough to find more and to uncover the context in which they lay.

Igbo-Ukwu

As in other parts of Nigeria, we can take it that in the area south of the Benue and east of the Niger, settled agricultural communities had been long established by the last millennium BC, although the evidence from the Afikpo rock shelter (p. 50 above) suggests that a knowledge of iron-working did not reach the area until the first centuries AD. Field work is only just beginning in the Niger Delta and so far we do not have any archaeological evidence for the occupation of the area before the ninth century AD (Anozie 1973, 1974), but it was probably settled long before this. Linguists tell us that the Igbo- and Ijo- 53
speaking peoples are likely to have occupied approximately their present areas for a lot longer than the last thousand years. Biological evidence indicates that the Niger has been a barrier and that the Ibo have been genetically isolated from their neighbours for a long time (Hiernaux 1974, 170).

By the end of the first millennium or the beginning of the second, we have remarkable archaeological evidence for a social institution which indicates a considerable measure of centralization of social authority and an attendant concentration of wealth; it seems likely that this authority was more religious and moral than political and administrative.

a

b

In the course of digging a cistern in his new compound in 1938 on the outskirts of Igbo-Ukwu about 40 km southeast of Onitsha, a man called Isaiah Anozie unearthed a number of bronzes. The administrative officer in the area heard of the finds, bought them and published an account of them; after the creation of the Federal Department of Antiquities he presented them to the Nigerian Museum (Field 1940; Jones 1939).

Regalia

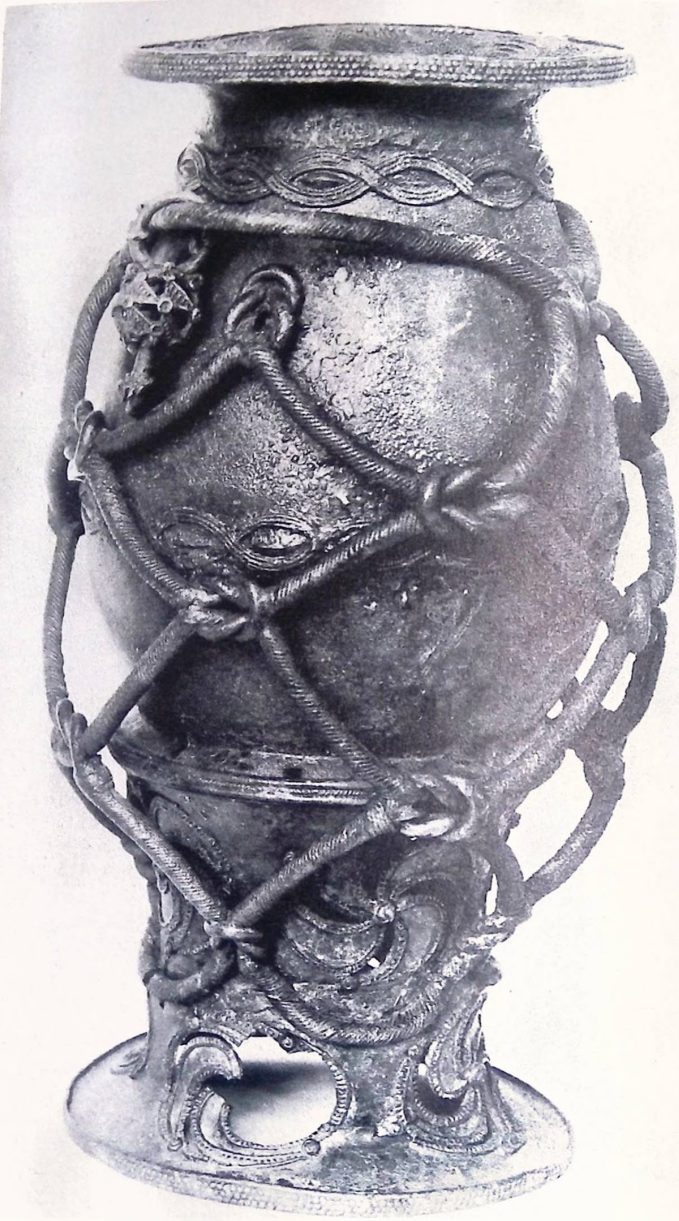
An interesting thing about these bronzes was that their style and their decoration were quite unlike the already known bronzes of Benin and Ife. The Department of Antiquities made a note of the site as one requiring future investigation, and arranged for it to be excavated in 1959/60. Negotiations to excavate in the compound of the owner, Isaiah Anozie, were protracted and by

c

53 Two terracotta masks (a and b) recovered from the Alapolo mound excavated at Ke in the Niger delta, Rivers State, and one (c) from the Ekpepoku mound at Ke. The Alapolo mound yielded radiocarbon dates in the tenth and seventeenth centuries AD, while two samples from a depth of over 3 m in the Ekpepoku mound gave approximately AD 1200. Ht (a and b) 11 cm, (c) 13 cm

the time this was arranged, agreement had also been reached to excavate in the neighbouring compound of Richard Anozie, where finds had likewise been made. Accordingly, for reference purposes the original find area was designated 'Igbo Isaiah' and the second site 'Igbo Richard' (Shaw 1970a).

In order to clear an area around the original find-spot in Isaiah Anozie's compound, it was necessary to demolish a goat-house and a compound wall. Underneath, at a depth of only about 50 cm, was found an undisturbed deposit containing more bronzes. The very first uncovered was perhaps the most remarkable of all, a highly decorated vessel of leaded tin bronze, 32 cm high, representing a pear-shaped water-pot set upon its own stand; it was enclosed in a free-standing pattern of rope-work only attached to the vessel on the shoulder and above the foot of the stand. This casting is a masterpiece of technical 54



achievement; it was done by the 'lost wax' process, as in the case of most West African bronzes. The principle of this method is simple – to substitute molten bronze in the place of a clay-covered wax or latex model – but the execution can call for great skill and experience.

In addition to the vessel already described, the bronzes from Igbo Isaiah, including those dug up at the original finding, comprised six large bowls, eleven small crescentic bowls, one pear-shaped bowl or ladle, three large bronze shells, a bowl on an openwork pedestal, an openwork altar stand, an annular potstand and a large number of handles and ornamental bosses which had originally been attached to calabashes; twelve large

55 Igbo-Ukwu: bronze bowl from the repository. It has been cast by the lost wax method in imitation of a calabash to which a twisted copper wire handle and ornamental copper wire bosses had been fixed; such copper wire handles and bosses were found in the excavation with the calabash in most cases decayed away, but in one case some of the actual calabash was preserved. Diam. of rim 26.4 cm

56 Igbo-Ukwu: bronze bowl from the repository, imitating the form of a calabash to which a handle has been attached. The small loops stand clear from the side of the vessel (a match-stick can be pushed through them) and may also reproduce in bronze a form of ornamentation applied to a real calabash. Diam. 25.7 cm

54 (*opposite*) Igbo-Ukwu, Anambra State: bronze vessel in the form of a waterpot set on its own pedestal and enclosed in rope-work, to an outward loop of which a travelling handle is attached (top left). Ht 32.3 cm

pendant ornaments and thirteen small ones, three bells, one large chain, one small decorated chain, plaques for a composite belt, twenty-eight anklets, ten wristlets and a large quantity of small jingle ornaments ('crotals') and pieces of small chain; three staff heads, four large cylindrical staff ornaments, six spiral snake ornaments, two ornate scabbards, three scabbard supports, four hilts and a number of other small miscellaneous objects. An iron blade lay alongside one of the scabbard supports. Some of the vessels had been wrapped in cloth.

In addition to the bronzes, there were several complete pots, decorated in a highly ornamental style characterized by deep channelling and the use of projecting bosses. There were large numbers of beads, mostly of coloured glass but some of carnelian, often lying in strings, although the thread on which they had been hung had decayed away.

57 (*opposite*) Igbo-Ukwu: crescentic bronze bowls from the repository. These also imitate the form of calabashes, but cut in a different direction from those shown in Ills 55 and 56. The fine surface decoration achieved by the use of the lost wax process (or perhaps 'lost latex') is characteristic of Igbo-Ukwu work. L 12.9 cm

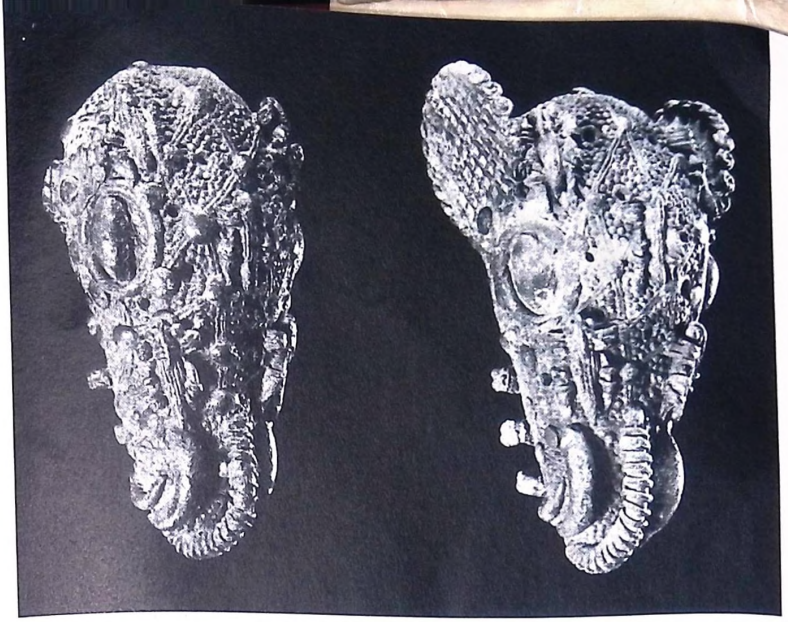
58 Igbo-Ukwu: bronze shell surmounted by the figure of a leopard. It is supposed that this was some kind of ritual vessel and that the leopard had symbolic significance. L 20.1 cm

59 Igbo-Ukwu: bronze shell from the repository. It illustrates another characteristic of Igbo-Ukwu work, the use of insects as motifs in the surface decoration, in this case flies. L 30.5 cm

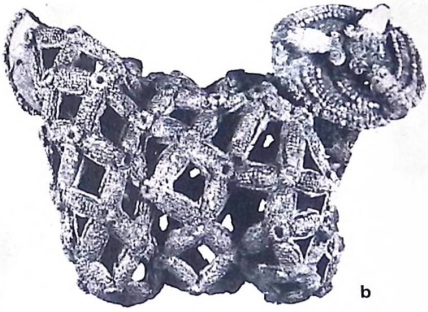
60 Igbo-Ukwu: bronze 'altar stand'. On one side of the hollow openwork cylinder is a male figure wearing a loin-cloth, necklaces and a disc on the forehead; on the other side a female figure wearing only a necklace and waistband, and having facial scarifications radiating from the bridge of the nose. Each of the figures is flanked by an intricate pattern of snakes with frogs in their mouths. Ht 27.4 cm

61 (*opposite, above*) Igbo-Ukwu: bronze pendant ornaments. Each elephant's head has a thong loop at the back. Among the dozen ornaments of this type found in the repository were human heads with the same pattern of facial scarifications as can be seen in Ills 60 and 74. Hts 7.9 cm and 8.1 cm

62 (*opposite, below*) Igbo-Ukwu: bronze staff ornaments from the repository. a) Staff head; on the underside was an iron spike, probably inserted in a wooden shaft. Ht 14.5 cm.
b) Cylindrical ornament with a hole running through the middle by which it could have been mounted on the shaft of a staff; three birds decorate the finials. Ht 17.5 cm



a

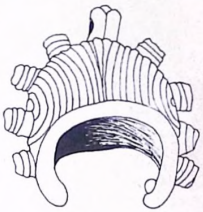


b

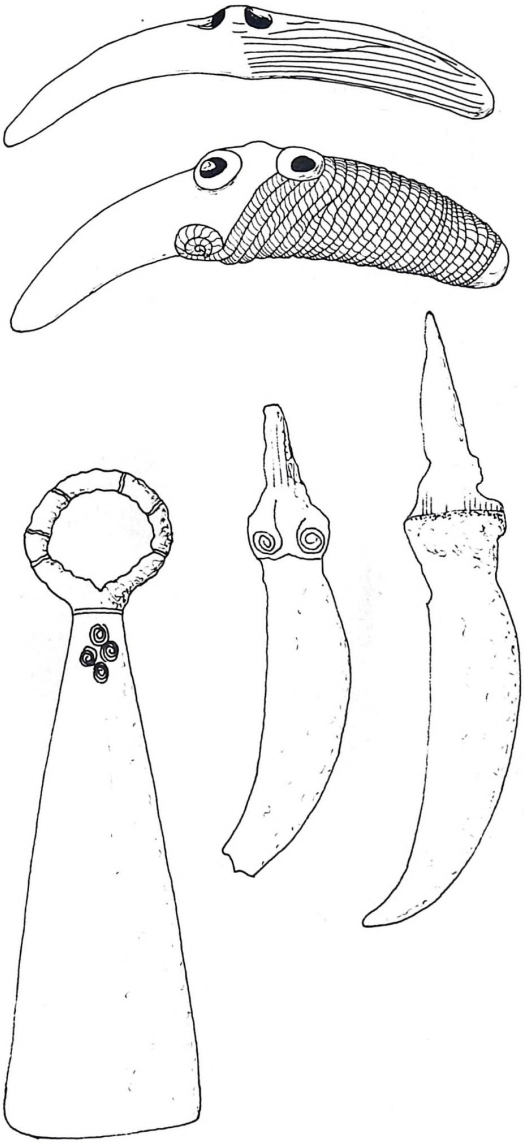
63 Igbo-Ukwu: a good example of the love of fine surface ornament and the technical virtuosity of the Igbo-Ukwu craftsmen; a bronze staff ornament from the repository, showing (*below*) the hole running through the middle by which it was mounted; it is in the form of intercoiled double-headed snakes and uses birds, insects and human heads as decorative motifs. Ht 16.3 cm

64 (*opposite*) Igbo-Ukwu: reconstruction drawing of the repository. The objects at the back and on the right are in the exact position as found in the excavation; the remainder were found in the original accidental discovery. There was some evidence that there was a roof over the repository and that this had collapsed. Many of the bronzes may not have been as visible as shown in the artist's reconstruction but have been wrapped in cloth

How did this rich deposit of bronzes and other objects come to be here, and how is it to be interpreted? The nature of the bronzes is strongly suggestive of sacred vessels used for a ceremonial or ritual purpose and of ornaments and regalia for some important person or persons connected with this. But why were they left in the ground? Had they been hurriedly buried in a pit for safekeeping in time of war or some threatened or realized emergency, and not later recovered? The way these objects were disposed in the ground did not in fact suggest a hurried burying in a pit, for they were spread out over a level rectangular area; moreoever they were at a remarkably shallow depth below the surface of the ground. It seems more likely that they were housed in a small building devoted to the purpose, and that this subsequently decayed without trace. The abandonment may have been due to some raid or disaster in warfare, when the



65 Igbo-Ukwu: bronze crotal or jingle ornament; there were a number of these on the end of the copper wire chains hanging from the bronze pendant ornaments. Ht 1.9 cm



66 Igbo-Ukwu: two bronze canine teeth, with holes for suspension. The lower one reproduces in bronze a tooth partly bound round with string. L 4.8 cm

67 Igbo-Ukwu: three small iron knives or razors. The larger of the curved knives is 12.5 cm, the square-ended one, whose handle is bound with copper wire, 13.5 cm long

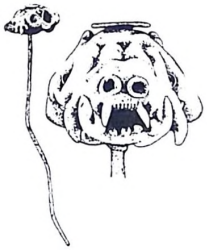
victors either overlooked the little building or feared to interfere with 'foreign gods'; or perhaps the abandonment was voluntary when the people had become so out of tune with their gods that the latter decided to 'expel' them (Afigbo 1971, 212).

A burial chamber

In the neighbouring site of 'Igbo Richard', excavation was also undertaken, because a man putting in a cistern there had stopped digging when he became frightened on encountering 'iron, black boards and like cement'. What had happened was that the shaft of this cistern had just impinged onto a burial chamber whose floor lay $3\frac{1}{2}$ m below the surface. The decay of organic materials in the tomb had changed the colour of the surrounding soil from red to yellow, and this is what had been described as 'like cement'.

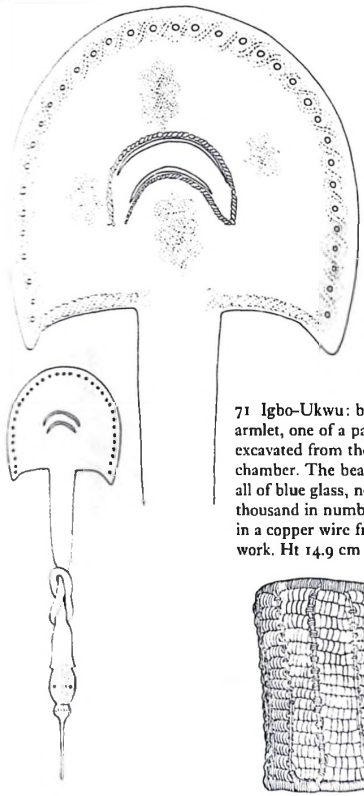
Between depths of 1 m and $2\frac{1}{2}$ m, a number of beads were encountered, two copper wristlets, one of them associated with some very decayed bone, and the enamel from the teeth of not less than five individuals. The next 50 cm yielded nothing, but then a stylized bronze leopard's skull emerged, with a supporting rod going deeper into the ground. As this was followed down, other objects appeared, of copper and bronze, of bone and ivory, together with pieces of iron and an abundance of beads, all tangled up in seemingly hopeless confusion. There were three ivory tusks, but so decayed that it was impossible to tell whether they had been carved or used as horns. In the centre was a circle, about 35 cm in diameter, of spirally twisted copper bosses, with spikes protruding inwards and set in wood, which was preserved around the copper spikes. There was a similar circle of copper bosses set in wood 20 cm below the first one, and it was concluded that they represented the top and bottom of a stool. Nearby was a skull, although the thin facial part had decayed away, and scattered around were the very decayed remains of the human limb-bones of a single individual. The skull was completely surrounded with beads, and altogether there was an even greater abundance of beads in the burial chamber than at the Igbo Isaiah site, amounting to over a hundred thousand.

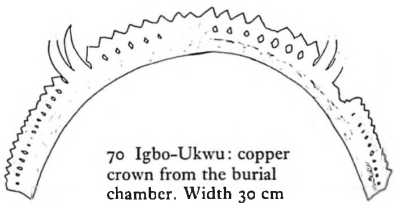
68



68 Igbo-Ukwu: bronze leopard's skull on copper rod from the burial chamber. Width 11.5 cm, ht 90 cm

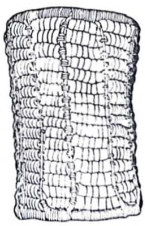
Of objects in copper there was a decorated pectoral plate, a crown and various plaque ornaments, fourteen anklets and four wristlets, a large decorated handle for a big calabash, a decorated fan-holder, and two brackets on pointed rods; a beautifully modelled bronze hilt, probably for a fly-switch, consisted of a horse and rider surmounting a decorated pommel.





70 Igbo-Ukwu: copper crown from the burial chamber. Width 30 cm

71 Igbo-Ukwu: beaded armlet, one of a pair, excavated from the burial chamber. The beads are all of blue glass, nearly a thousand in number, set in a copper wire framework. Ht 14.9 cm



72 Igbo-Ukwu: thin copper plate, decorated with punched designs, and with holes for attachment to fabric; associated with the crown excavated from the burial chamber. Ht 11.4 cm

69 Igbo-Ukwu: copper fan-holder with decorated head, excavated from the burial chamber. Ht 56.5 cm

Here was clearly the burial chamber of someone of great social importance. The tomb appeared to have been lined with wooden planks joined together by iron clamps and nails and to have had matting on the floor. The conclusion arrived at was that the corpse had been buried sitting upon the stool and propped up in a corner of the chamber, the arms supported by the two copper brackets and with the fan-holder and fly-switch set in its hands; it had been dressed in a rich array of beads and with a beaded headdress surmounted by a crown, and with the pectoral plate suspended on its chest; on each wrist there was a beautiful wristlet 15 cm long made up of panels of blue beads set in a

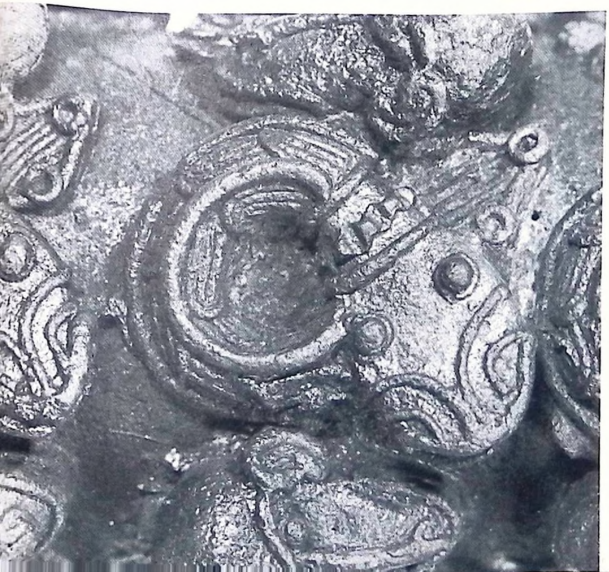
73 Igbo-Ukwu: reconstruction drawing of the burial chamber, based on the excavation findings and suggestions from ethnographical data. The dead man, clearly someone of great social importance, is dressed in the regalia of his title, and the bronze leopard's skull on its copper rod is stuck in the ground beside him. Attendants begin roofing-in the chamber, on the top of which will be buried the slaves sent to serve their lord in the next world

74 Igbo-Ukwu: bronze hilt excavated from the burial chamber, more likely for a fly-whisk than for a dagger. The pommel is surmounted by the figure of a horseman having facial scarifications radiating from the bridge of the nose. Ht. 15.7 cm

copper-wire framework. After the corpse had been placed in position, the wooden roof was put on and above it were deposited the remains of at least five individuals – perhaps slaves to accompany their master to the next world; earth was shovelled into the hole and the ground levelled off.

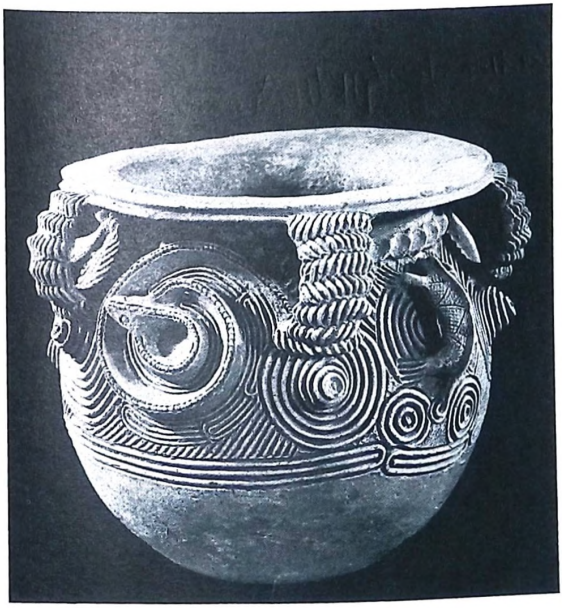
A disposal pit

Four years later, a further site at Igbo-Ukwu was excavated in the compound of Jonah Anozie, hence given the reference name of 'Igbo Jonah'. Here it was found that a modern clay pit – the digging of which had led to the discovery of the site – had sliced off the top of an older pit. The latter had a diameter of 2 m and extended for $1\frac{1}{2}$ m below the floor of the clay pit, itself $1\frac{1}{2}$ m below the present ground surface. The first find in the undisturbed contents of the ancient pit was a delicate double chain of two hundred finely-wound copper-wire links. Other



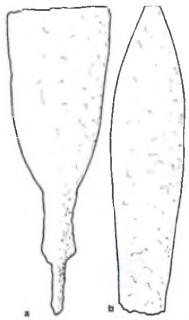
75 Igbo-Ukwu: bronze staff ornament excavated from the disposal pit. It is the same type of object as that shown in Ill. 63, but smaller. (*above left*) General view, showing coiled fish and monkeys' heads used as decorative motifs. Ht 10.9 cm. (*above*) View from on top, showing lyre-tailed birds. (*left*) Enlargement showing detail of casting

objects of copper and bronze found in the pit included thirty-five wristlets of several different patterns, two small bells, six small staff ornaments, a long pointed rod, a large jingle ornament (crotal) and various other miscellaneous pieces. There were two wide blades of iron resembling those of ceremonial swords, and other objects of iron. A great quantity of broken pottery had been thrown into the pit as well as a number of complete vessels, the largest and finest of which was a remarkable example of ceramic art. In form it is a big open-mouthed water-pot 40 cm high and 45 cm in diameter, decorated with the characteristic ancient Igbo-Ukwu style of deep channelling and projecting bosses; in addition it has five large strap-like handles, decorated in imitation of basketry, and between each of these the shoulder is adorned with models in relief of a snake, a ram's head, another snake, a chameleon and a mysterious rectangular hatched object, humped up in the middle, which might be meant to represent a tortoise. There were traces of burnt and decayed bone in the pit, none of which turned out on examination to be human but mostly of duiker or antelope.



76 (*opposite*) A selection of Igbo-Ukwu pottery; complete or nearly complete vessels from the excavations. (See also Ill. 78)

76



77 Igbo-Ukwu: two iron blades excavated from the disposal pit. Hts (a) 29.7 cm, (b) 31.8 cm

78 Igbo-Ukwu: large pot excavated from the disposal pit. Five handles imitate basket-work and between them are placed figures of two snakes, a ram's head, a chameleon and something as yet unidentified. The ground pattern of parallel grooves and conical bosses is typical of ancient Igbo-Ukwu pottery. Ht 40.6 cm

What do the contents of this pit signify? The pit itself was not an abandoned cistern, filled up with rubbish in ancient times, such as was found on the Igbo Richard site, but appeared to have been dug for the specific purpose of receiving the objects which were deposited in it on a single occasion. The contents are unlike those of an ordinary domestic or industrial rubbish dump. Is the pit connected with the same circumstance which caused the abandonment of the regalia repository in Igbo Isaiah a few metres away, representing the work of cleaning-up a destroyed building when life got going again in the area? A more likely explanation is the intentional disposal of a collection of ritual and ceremonial objects, possibly following the burning-down of a shrine house.

Dating

One of the main objects of the excavations was to ascertain how old the finds were. No certainly identifiable imports were found; some of the rusted pieces of iron might have been imported, but since iron slag was found on the burial chamber site, it is simpler to regard the iron objects as locally made. It was hoped to derive some dating evidence from the glass beads, all or most of which are imports, but while there is an interesting suggestion from one authority that many of them came ultimately from India, we do not know enough about them to say for certain what was their provenance. The argument for a recent date based on the preservation of the textiles does not hold good, since it was the proximity of copper which inhibited the termite and bacterial action which would otherwise have destroyed them.

Five radiocarbon dates were obtained, none unfortunately from the repository. Wood from the stool in the burial chamber gave a ninth century AD date, as did three out of four from the disposal pit site, the fourth one being in the fifteenth century. There has been a certain amount of controversy over these radiocarbon dates. The bronzes imply trading connections reaching ultimately into the Islamic world to supply the necessary copper, but as we have no other evidence for such links deep into West Africa as early as the ninth century, it has been maintained that Igbo-Ukwu cannot be as old as that (Lawal 1972a, 1972b, 1973; Northrop 1972; Posnansky 1973a, 1973b; Shaw 1975a). There are Arabic records testifying to the export of copper to the land of the Negroes from the eleventh century AD onwards, and the wreck of a southbound caravan in the Mauritanian desert dated to about AD 1100 was carrying two

thousand brass rods (Monod 1969; Lewicki 1969, 34; Shaw 1970a, 278–9).

The bronzes

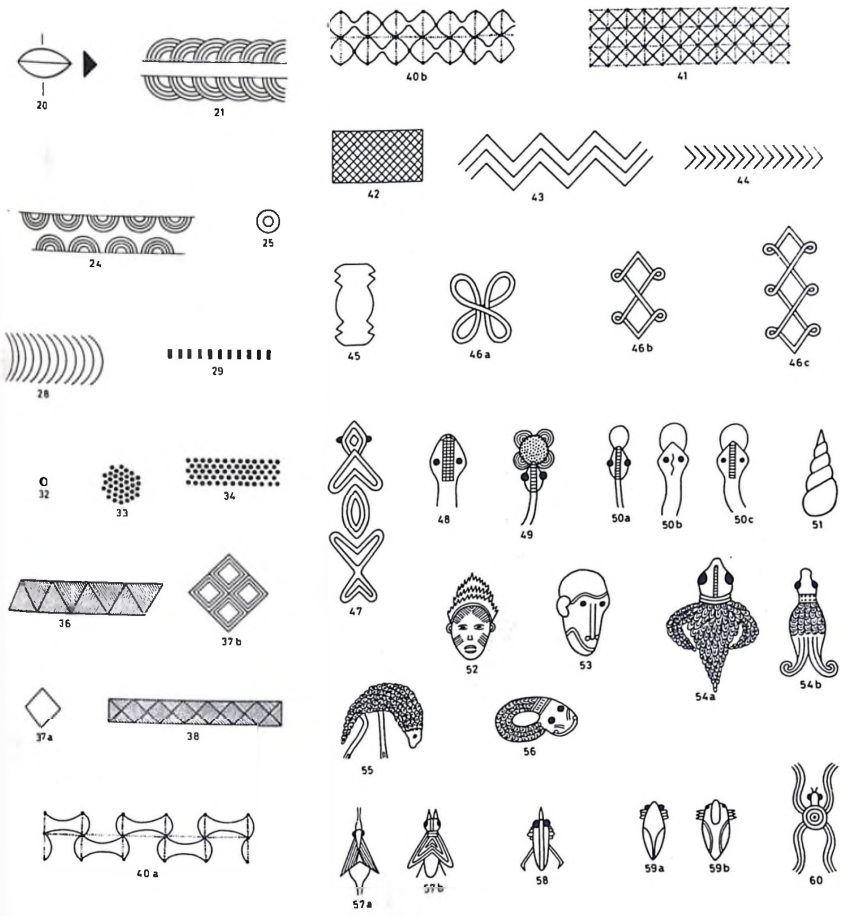
Stylistically the 'strange rococo, almost Fabergé-like virtuosity' (W. Fagg 1963, 40) of the Igbo-Ukwu bronzes is unique, and they have been described as 'justly famous for a fragile, jewel-like aesthetic of a delicacy to be compared in Africa only with Roman pieces imported at the Nabataean capital at Faras; nowhere again shall we encounter the diaphanous lightness of these calabash shapes, crescentic drinking bowls, mammoth shells, reptiles and animals . . .' (Williams 1974, 118). 79

Bronze is an alloy of copper and a much smaller quantity of tin; brass is an alloy of copper and zinc. The castings from Igbo-Ukwu are of bronze, with an admixture of lead, while the objects not cast by the lost wax method but made by smithing and chasing are of almost pure copper. This shows that the ancient craftsmen had sufficient knowledge of metallurgy to know that leaded bronze is more ductile than copper and is better for casting, while copper can be more easily hammered and twisted and engraved than bronze. With tin and lead sources in Nigeria, it is possible that the alloying was done within its borders, but it is more probable that copper and 'casting metal' were imported as separate items.

Although it is theoretically possible for there to have been an independent invention of the lost wax method of casting in West Africa, since the raw material for it has to be imported it seems most likely that the technique derived from the north as well. This is perhaps also suggested by the use of Euphorbia latex rather than wax, and the technique of positioning clay cores on a clay base joined to the 'investment' (the clay covering over the latex mould) instead of using transfixing pins (Williams 1974, 179–203). After the expansion of Arab trading activities from North Africa by means of the camel caravan, copper- and bronze-smiths may well have been among the craftsmen established at the entrepôt centres at the southern end of the routes, to repair camel harness and other metal objects. After copper and bronze objects were traded into the savannas and forests of West Africa, the rich and prominent there desired to have their own smiths make things for them in the new luxury metal. But what paid for the imported raw material and beads of which we have witness at Igbo-Ukwu? Unlike lands to the west of her (Levtzion 1973, 3), Nigeria has no gold to export, so the

-o Igbo-Ukwu: decorative designs used on the bronzes. *1–10* are skeuomorphic, imitating objects made in other materials; *11–46* appear to be geometric; *47–60* of living creatures

principal source of wealth was probably ivory; there were three tusks in the burial chamber at Igbo Richard and the commonest animal portrayed in the bronze pendant ornaments was the elephant. There was a continual demand for African ivory from the Arab/Indian world, which had a large and long-established ivory-carving industry. Doubtless other things were exported



northwards from Igbo-Ukwu as well, such as slaves and kola-nuts. In return were received the copper and copper alloys for bronze-casting, beads, and quite likely salt and cloth. The copper, bronze and beads are merely that part of a volume of trade goods which have survived the passage of time, while the perishable goods have not survived.

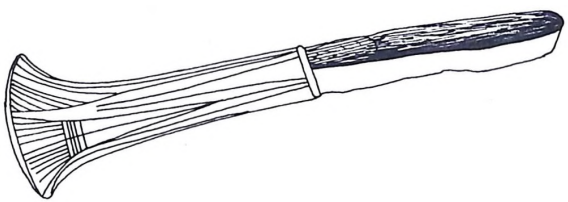
The Eze Nri

What can be said about the social and political circumstances which produced such a concentration of wealth at Igbo-Ukwu? What were the insitutions and the social structure which resulted in a shrine full of ritual bronze vessels and regalia, in the burial of an important personage surrounded by bronze objects and a wealth of beads, and in the placing in a pit of objects similar in character?

Up until the advent of the colonial power, the Igbo-speaking peoples of the area in which Igbo-Ukwu is situated constituted a 'stateless' society, organized in what anthropologists called a segmentary lineage system which has no place for chiefs or kings. According to Horton (1971) such societies emerged in an agricultural subsistence economy, without a monetary system, where walking was the only way to get about; the land was the source of a man's livelihood, and land was obtained through inheritance. The system was encouraged where there was a steadily expanding population, where there was a readily accessible supply of land within the area, and where there was a dispersed settlement pattern; such a pattern can only prevail where the organizational demands of small-scale agriculture do not have to be weighed against those of defence against aggression. These are the conditions which seem to have obtained in southern Nigeria east of the Niger in the first millennium AD. The result is that the lineage is the all-important unit of obligation and organization, not a territorial unit or a village as such; internal differentiation and the growth of authority is discouraged. The emphasis instead is upon equality and leadership, not of a permanent kind but such as to meet the needs of different occasions as they arise. In such societies one does not expect to meet 'kings' or royal courts of the kind that are superficially suggested by the archaeological findings at Igbo-Ukwu. Nevertheless such societies still have to make provision, as every society does, for the settlement of disputes, whether between individuals or between lineages, without recourse to violence. In addition, an agricultural community has to ensure the fertility of its land; in a pre-scientific state of knowledge this is achieved through religion, which attempts to predict and control wordly events through a system of beliefs about how the world is constituted and operates. Stateless societies therefore, even if they have no kings or judges, can tolerate authority figures thought to be backed by the spiritual forces of their groups. Until the office was quashed by the colonial government in

1911 (Onwuejeogwu 1972, 7) central Igboland recognized the authority of such a figure in the person of the *Eze Nri* for certain specific purposes, namely ensuring the fertility of the land, especially the yam crop; removing 'abominations' after taboos had been broken; settling disputes; and in connection with the title-taking system, of which he was the head. The *Eze Nri* came from the Umueri clan, which by tradition originated on the River Anambra on the northern boundary of Igboland; he may thus have been accepted on the principle that an 'outsider' is more likely to command respect for his impartiality in settling disputes (Horton 1971, 108–9). Complementary to the lineage principle of equivalence and lack of differentiation, all Igbo communities have various graded titles which are not hereditary but are worked for and earned; the highest of these titles is *Nze, Ozo* or *Eze*, but in Oreri and Aguku the *Eze* takes the title of *Nri* and thus becomes the *Eze Nri*. Oreri lies immediately to the north of the sites excavated in Igbo-Ukwu and traditions collected both in Oreri and Igbo-Ukwu have stated that the sites used to lie in the former; Aguku lies 18 km farther north. The villages are rivals in the possession of an *Eze Nri*, each claiming seniority.

The most reasonable interpretation of the Igbo-Ukwu finds, therefore, would seem to connect them with the institution of the *Eze Nri* and the title-taking system. It is possible that the dignitary in the burial chamber was not actually an *Eze Nri*, but an *Ozo* titled man. The burial of an *Eze Nri* was a less elaborate process than for other titled men, but very secretive and symbolic. The burial of *Ozo* men on the contrary involved pompous public burial, in which the grave goods were the paraphernalia associated with the person's status in life (Onwuejeogwu 1973). The repository of bronze vessels and regalia can be compared to the compound shrine or *obu* in which a titled man keeps the ritual and ceremonial materials used in connection with the title system and in conducting relationships with the spirits of the former members of the lineage in order to secure their favour. It thus appears that this system of social



80 Bronze object resembling an elongated bell, from the Ifeka Garden site, Ezira. L approx. 35 cm

regulation had a long and stable continuity of existence. There is evidence for the same kind of system at the end of the fifteenth century in Professor Hartle's excavations in the Ifeka Garden site at Ezira. Here also a prominent person had been interred, with eleven bronze bells, seven ceremonial objects at his feet, an iron blade at his side and a number of iron gongs. The decorative patterns on the bronzes are made up of the same exquisitely fine lines as on those from Igbo-Ukwu (Hartle 1967, 1968).

8 The holy city of the Yorubas

Apart from the presence of the University, Ile Ife is superficially little different from a fair number of other towns in this part of Nigeria. However, it occupies a special place in the regard of Yorubas as the seat of the *oni* ('King') and the centre of a large number of religious cults, of which there are said to be over four hundred (Willett 1960a, 232).

Mention has already been made (p. 9) of the position of Ife in Yoruba traditions of origin, traditions which are confused and have been manipulated for political purposes (Crowder 1962, 51; Aderibigbe 1965, 186; Smith 1969, 97; Willett 1970, 303–6; Law 1973; Biobaku 1973; Eyo 1974b, 51–5). The 'creation' and 'migration' versions may have reference to distinct indigenous and immigrant populations. The biological differences between northern and southern Yorubas may be due to evolution in different environments rather than to different genetic origins (Hiernaux 1974, 168–70).

Early discoveries at Ife

Ife first attracted the attention of modern scholars in 1910–11, when the German ethnographer Leo Frobenius discovered there evidence of an ancient artistic tradition in terracotta and bronze which included near life-size representations of human heads in a remarkably naturalistic style.

In the Olokun Grove outside the town he caused to be dug up for him a bronze head wearing a crown; this head had been found there in the middle of the nineteenth century, was reburied for safety and dug up again each year for the annual festivals. This was a characteristic practice in Ife in the nineteenth century, as it still is today; there was no continuing artistic tradition in bronze-casting and the making of terracottas, but as such objects were accidentally found they were venerated and placed in shrines (Willett 1970, 305–6). It is known that Ife

81 Terracottas found in the Iwinrin Grove at Ife. The modelled torso on the left shows the 'double bow' insignia on the chest known from other figures. The cylindrical piece behind the second head from the left is part of the central column of a stool upon which a complete human figure was sitting

82 (*opposite*) Ife: brass head dug up from the Wunmonije compound. It resembles that dug up for Frobenius from the Olokun Grove in 1910, and therefore usually referred to as the 'Olokun head', and said to represent Olokun, the goddess of the ocean. A little under life-size. (Cf. Ill. 84)

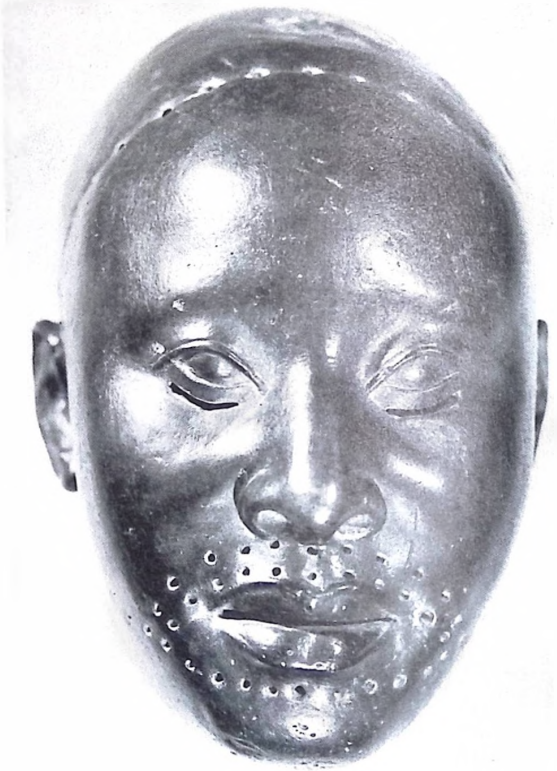
was twice evacuated in the internecine Yoruba wars of the eighteenth and nineteenth centuries (Willett 1967, 102–3), but in addition to these breaks, we now have reason to believe that there was a much earlier break with the preceding artistic tradition.

Frobenius was allowed to take seven terracotta heads with him to Germany, but not the bronze Olokun head. Nearly forty years elapsed before it was discovered that the head remaining in Ife is a modern forgery, made by a sand-mould technique and not by lost wax (Fagg and Underwood 1949; Willett 1976, 8–12); the original has never been found; a genuine head very much like it was among the later discoveries in the Wunmonije compound. The striking thing about the Ife heads is their naturalism, as compared to the highly stylized or conventionalized treatment in most African sculpture. On his return to Germany Frobenius announced that he had discovered the lost civilization of Atlantis, the legend of which is related in Plato. In the terracottas he saw 'a symmetry, a vitality, a delicacy of form directly reminiscent of ancient Greece and proof that once upon a time, a race, far superior in strain to the Negro, had been settled there' (Frobenius 1913, 88–9). He claimed that a Greek colony had been founded on the West African coast in the thirteenth century

BC, but that it had lost contact with its motherland after the advent of the Carthaginians in northwest Africa around 800 BC. He identified Olokun, the sea-goddess of the Yoruba, with Poseidon.

The claims of Frobenius were not widely accepted and tended to be forgotten in spite of the publication in 1937 by the *Oni* of Ife himself (Aderemi 1937) of a copper mask said to have always been kept in the palace. Artistically it is in the same style as the bronze heads and displays the same naturalism, but it consists of the facial part only and is open at the back, thus being the only one that is a true mask. It is reputed to represent an early king called Obalufon.

83



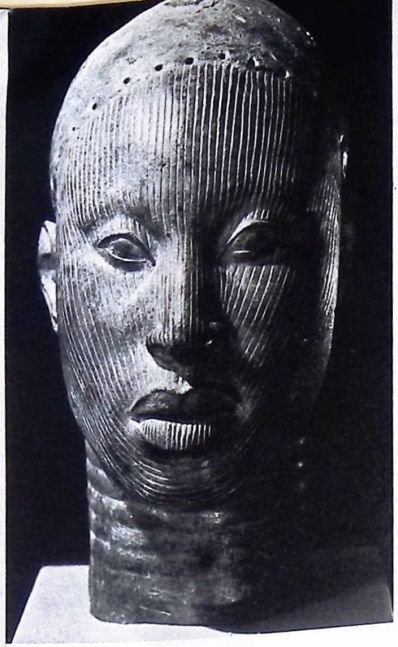
83 Ife: the so-called 'Obalufon' mask; said to have always been kept in the *afin* (palace) at Ife and to be a portrait of Obalufon, the third *oni*, who introduced the art of brasscasting. It is made of copper, and is unlike all the other heads in being a true mask, provided with slits below the eyes to enable the wearer to see out. Ht 33 cm

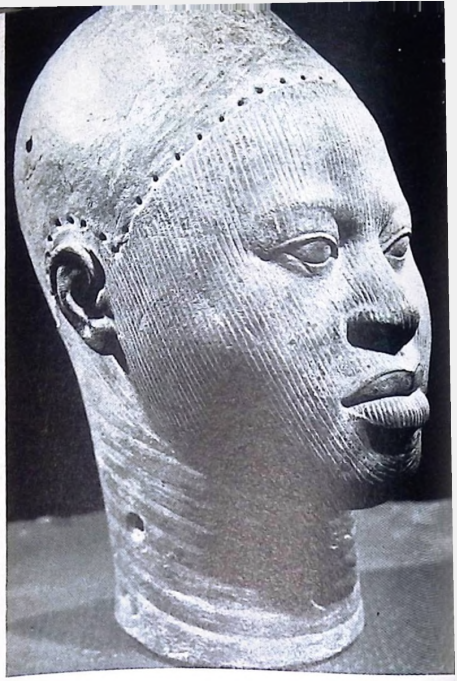
84 Ife: crowned brass head, slightly smaller than life-size, found in the Wunmonije compound in 1938; the top of the crest is broken off. Another crowned head from the same site is in the British Museum. A similar specimen in the Ife Museum, purported to be that dug up for Frobenius from the Olokun Grove in 1910, has been discovered to be a modern replica. Ht 24 cm

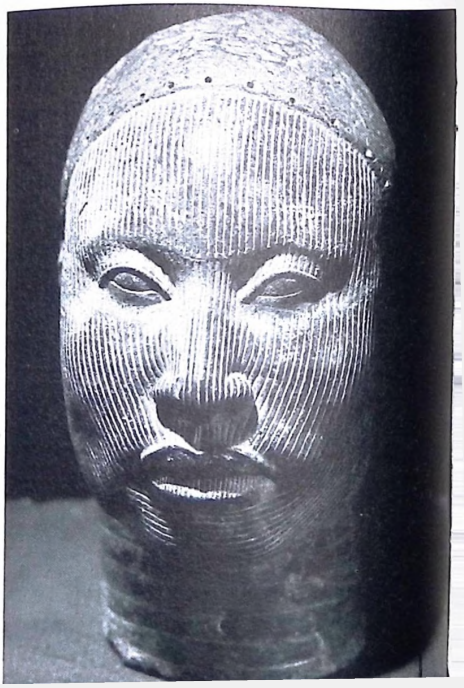
Wunmonije compound and Ita Yemoo

In 1938 some spectacular discoveries were made in digging the foundation trenches for a house in the Wunmonije compound behind the *afin* (palace). Thirteen life-size heads in 'bronze' were unearthed, in the same naturalistic style as the bronze Olokun head and the terraccottas recovered by Frobenius. In the following year four more 'bronze' heads were recovered from this compound and the upper half of a full-length figure 37 cm high, thought to represent an *oni* in his regalia and named Lafogido after its discovery because a former *oni* of that name was buried near the Wunmonije compound. These 'bronzes' are in fact of brass or copper (Barker 1965); they caused a great stir among art critics and art historians, who were not accustomed to associate such naturalism with African work, and they revived speculations of the kind Frobenius had made earlier. Even if his ideas were not accepted, estimates of the age varied widely over the period of the last fifteen hundred years.

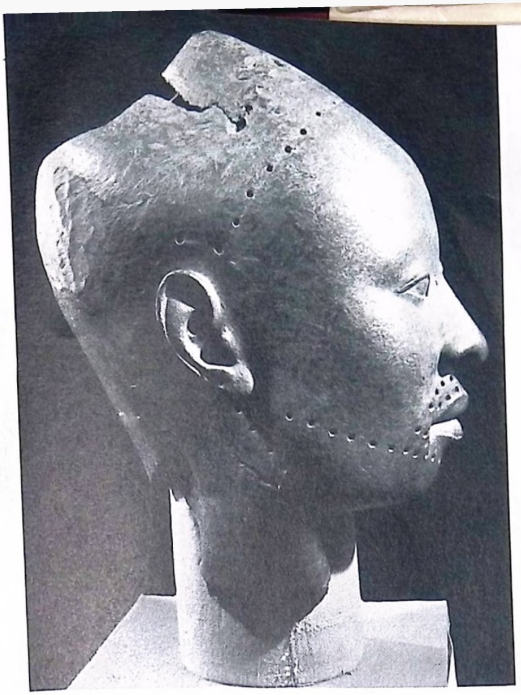
84–9

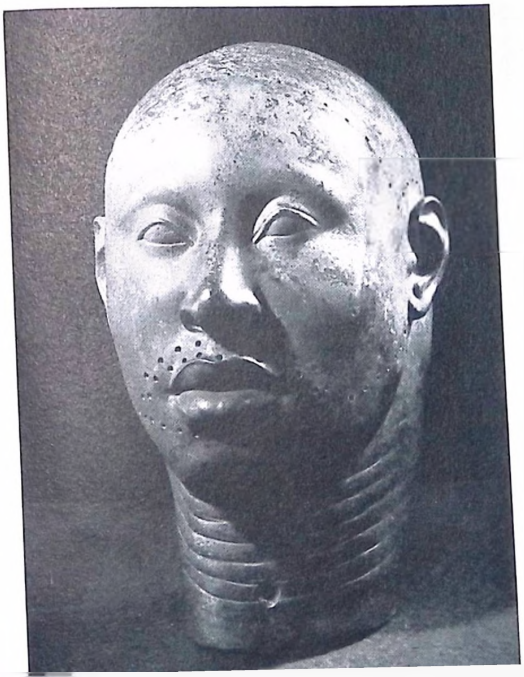






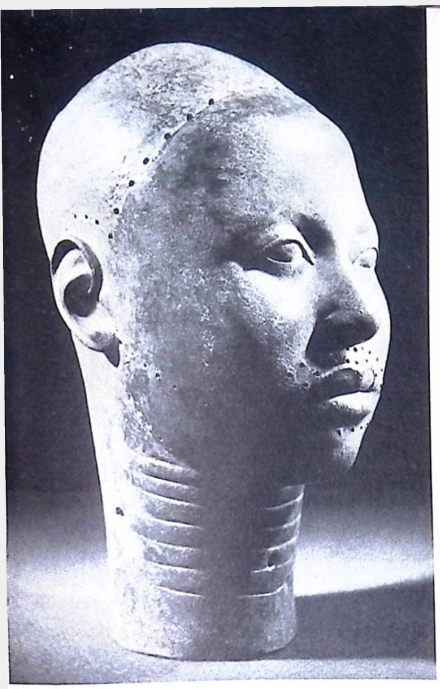
85 Ife: three of the life-size heads showing the characteristic vertical scarifications. The one above is made of brass, the other two of copper. All about 30 cm high

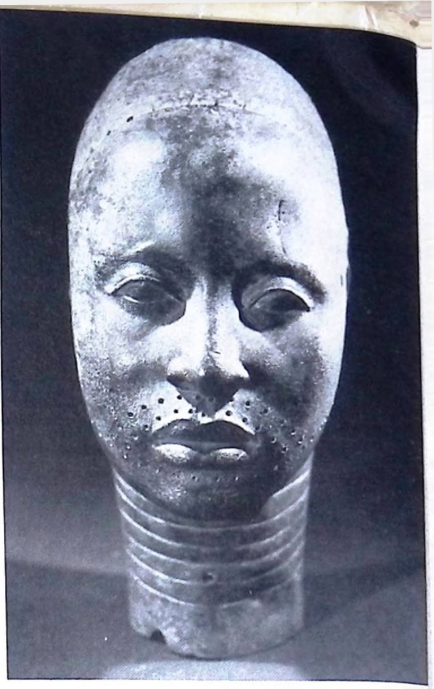


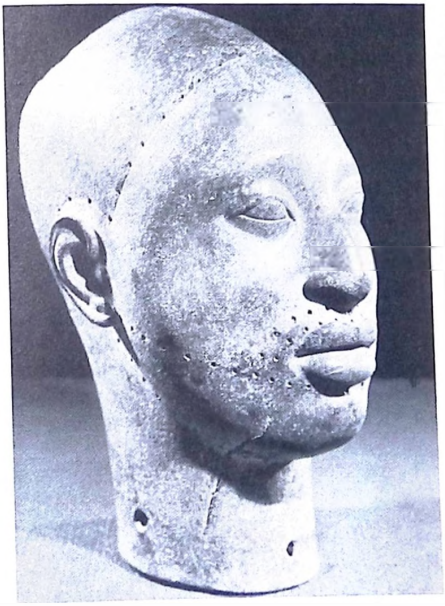


86 Ife: two of the brass heads without facial scarifications, but showing perforations presumably for the attachment of hair, moustache and beard. Life-size

87 Ife: two of the brass heads with vertical scarifications and perforations. Life-size







88 Ife: two views of one of the brass heads. The holes in the neck probably served to fasten the casting to a wooden pole; this may have been part of a framework clothed in robes and regalia to represent a particular *oni* (king) for funeral or memorial ceremonies. Ht 36 cm

89 Ife: one of the brass heads found in the Wunmonije compound. Life-size

In 1957 more brasses were discovered in building work at Ita Yemoo; they included no life-size heads but a complete full-length figure of an *oni* a little under half a metre high, similar to the one of which the upper half was found in 1939 in the Wunmonije compound; a smaller, linked pair of standing figures, interpreted as an *oni* and his wife; a small female human figure coiled round a bowl on top of a stool; and two staffs and two mace-heads portraying human heads. As a result of these finds the Department of Antiquities stepped in and bought the area, arranging for an alternative site for the erection of the building.

However great the undoubted artistic excellence of the Ife brasses, the total number extant is less than thirty. Stylistically they are 'of a piece', and look like the work of one generation, even perhaps of a single great artist.

One other important group of bronze figures must be mentioned; they were kept in villages on the south bank of the River Niger over 200 km north of Ife. One tradition relates that

90 Ife: bronze figure found at Ita Yemoo in 1957, probably representing an *oni* in coronation dress. Ht 48 cm

91 Bronze male figure from Jebba Island in the River Niger, Kwara State, referred to as 'The Bowman' because of the quiver on his back. The so-called 'Tsoede bronzes', of which this is one, have been connected iconographically with Owo, but the significance of their position may lie in northward trading connections out of Yorubaland at a time before Europeans had arrived on the coast. Ht 93 cm

92 Seated figure from the Nupe village of Tada. The style is that of the Ife heads, but this is the only known example of a complete human figure in this style. That it was found 200 km north of Ife may be indicative of Ife's former commercial connections towards the north. Made of copper, it is 53.7 cm high

they were brought there by Tsoede, the Nupe founding hero early in the sixteenth century, but others have denied this (Nadel 1942, 72–6). The most important of these bronzes is a seated figure half a metre high and in exactly the same style – perhaps even from the same hand – as the Ife heads. It is one of a group of seven 'bronzes' from the village of Tada, and is entirely unlike any of the others in style. Of these, three are human standing figures, the largest 115 cm high, the smallest 40 cm. Of the remaining three bronzes two represent ostriches and one an elephant. The two standing figures at Jebba are a female nude 114 cm high (now stolen), and a male bowman 90 cm high. The figure from Giragi, 47 cm high, represents a man with a flat-topped hat, beating a small cylindrical drum hung around his neck (Willett 1967, 168–72; Fraser 1975).

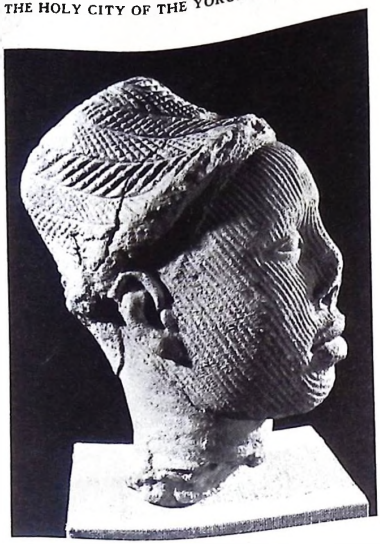
92

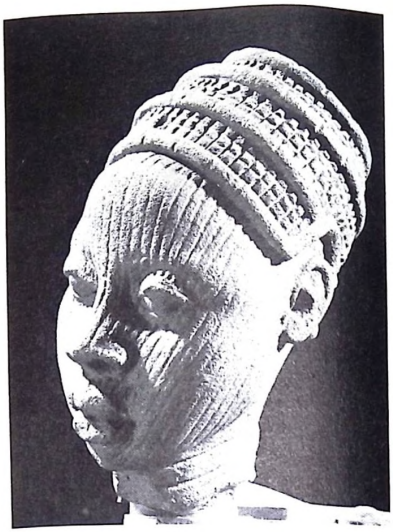
91

Terracotta, stone and other antiquities

The Ife terracottas are much more numerous and varied, and unlike the bronzes, a number have been found in archaeological excavations. Some closely resemble the bronze heads in style, but there are others in quite different – some would say 'more characteristically African' – styles. One beautiful head is said always to have been kept in the palace, like the Obalufon mask, but earth retained inside it suggests it may at one time have been buried in the same way as the Olokun bronze head. It is reputed to represent Lajuwa, a usurping *oni*. This head was never 93 attached to a body, but many of the Ifa terracottas of humans are of full-length figures ranging from almost life-size to figurines only 15 cm high. Some of these may represent sacrificial animals, some may refer to the animal's traditional qualities or to proverbs connected with them. Most of these terracotta heads are in a naturalistic style comparable to that of the bronzes – idealized rather than representational – but various other styles 94–6 and categories can be recognized; for example some of those from the grove of Osangangan Obamakin portray diseased humans. The large numbers of terracottas and the wide range of styles suggest that, unlike the bronzes, this was an art which was practised over many years and by many hands. The period when the naturalistic bronzes and terracottas were produced and in general the *floruit* of art has been called by some the 'classical' period of Ife. Certain styles are considered by their appearance as 'late' and to postdate this classical period, although there is as yet no archaeological confirmation of this. Two ritual vessels recently unearthed are carved with a number of reliefs, one of which shows a shrine or altar. In the centre is a head of 'classical' naturalistic style, flanked on either side by tapering cylindrical heads of a highly conventionalized character, indicating that the two styles were in use contemporaneously (Garlake 1974, 127–9; Willett 1972, 221). It has been suggested that some of these terracotta heads were used on altars as substitutes for the real heads of sacrificial victims. More work needs to be done in studying the whole corpus of Ife terracottas; to define more closely what has been called the 'classical style', both chronologically and in terms of artistic idiom, to isolate the other 'styles' and determine their spatial and temporal connotations (Rubin 1970; Willett 1973a, 132; 1975, 217), and to study their fabric and technique of construction. Some have seen the Nok terracottas as ancestral to those of Ife (Fagg and Willett 1962,

93 Of the first terracotta to be published (in 1937), the so-called 'Lajuwa' head, so named after a usurper who temporarily occupied the throne by force, it was claimed that it had always been kept in the royal palace, but there are traces of earth in the interior which suggests that this is not so and that the association may be recent. Pl. 32 col





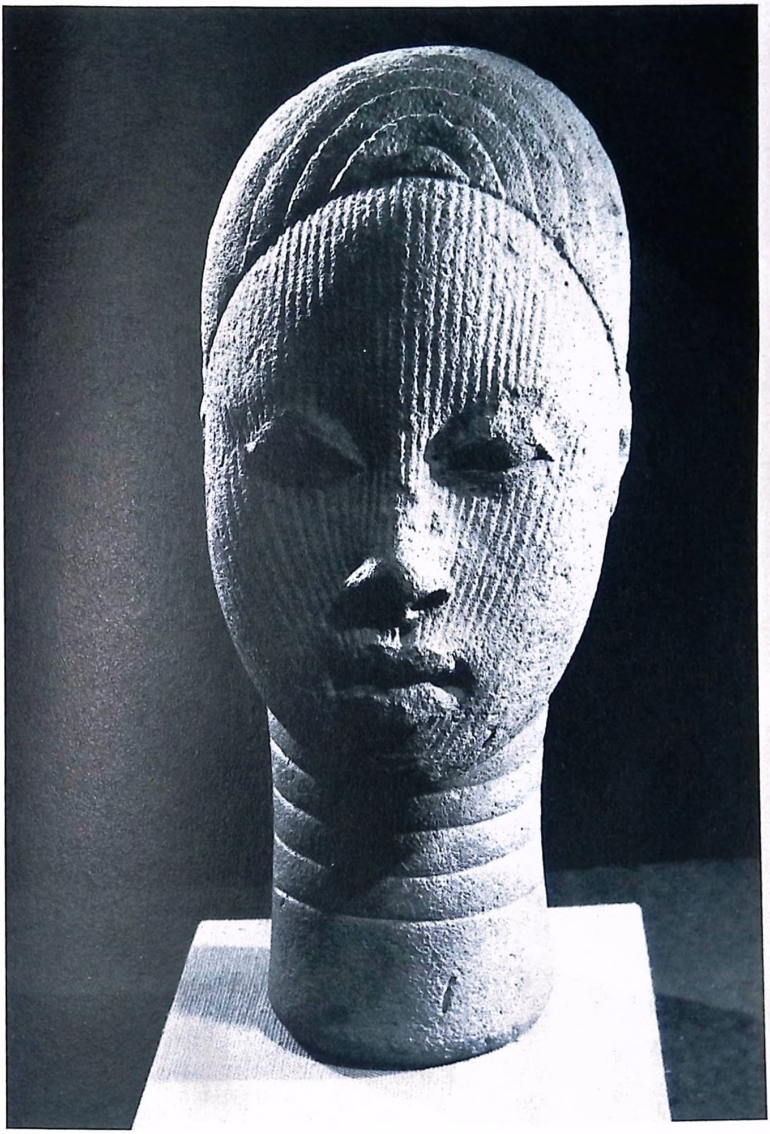
94 Ife: terracotta head broken from a larger sculpture, from the Iwinrin Grove. (It can be seen on the extreme right in Ill. 81.) Ht 21 cm

95 Ife: terracotta head from a larger figure, dug up on a farm and brought into the palace in 1949. It bears the same vertical scarifications on the face as many of the brass heads, but a number of the terracottas, as in this case, show details of head-dress or hairstyle not portrayed in the metal heads. Ht 16 cm

96 (*opposite*) Ife: terracotta head from the Iwinrin Grove, in the style of 'idealized naturalism' in which the metal heads are also cast. Ht 24.5 cm

369; B.E.B. Fagg 1962; Willett 1960a, 245; 1967, 119–20; 1968, 33; Rubin 1970). In a remote and very generalized way they may be, in the sense that some of the Nok terracottas were produced within 400 km of Ife, and points of resemblance can be observed in certain instances between Nok terracottas and the Ife ones (and some Yoruba woodcarvings, such as *gelede* masks). However, there is a time gap of a thousand years between them, and we need to know more about what was happening – and especially what kind of terracottas were being made – in this thousand-year period both at Ife and in the region between it and the Nok culture area.

The stool shown in the bronze piece from Ita Yemoo, with the female figure curled round the bowl on top of it, is of the same very distinctive design as the small number of stone examples which are known. There are two closely associated types of stool; the first takes the form of a central column with a circular disc at top and bottom, for which it has been suggested the prototype was the wooden box still used in Ife to contain ritual objects and to do service as a stool; it has a strip of bark or leather forming a projecting loop joining the two pieces of the box. This form was then translated both into terracotta and into stone; since the stone in question is quartz and the surfaces are polished, they

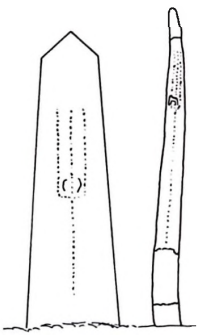


97 Ife: stone stools. In stone carving, in addition to shaped monoliths and a small number of figures, the quartz stools of Ife are unique, one of which is shown here (*above*). Ht 53 cm. From a bronze and a terracotta it is known that the occupant of such a stool placed his feet on one of simpler design, such as the granite-gneiss one shown (*right*). Ht 34 cm

represent very remarkable sculptures indeed. The figure seated on the terracotta stool has his feet on another type of stool, a rectangular four-legged footstool placed underneath the projecting loop of the main stool; the same arrangement is seen in the bronze piece from Ita Yemoo. Stools are known in granite and soapstone as well as in quartz. In 1895 the *Oni* of Ife gave three 97
stone stools to representatives of the British colonial administration, and in the following year Sir Gilbert Carter presented one of these to the British Museum, where it remains. It was the first major Ife work to become known outside Nigeria (Fagg and Fagg 1960; Willett 1961).

Stools are not the only stone sculptures in the Ife area. In a number of the shrines and groves of Ife stand, or stood, stone monoliths of various sizes and of different forms in section; one called *Ada Eledisi* (sword of Eledisi), which is about $1\frac{1}{2}$ m high, is unique in having its upper part curved over at right-angles to the shaft. The most remarkable one of all, however, is the *Opa Oranmiyan* (staff of Oranmiyan), of granitic gneiss; over 5 m high, it is round in section, tapering gently at the top, and studded with 140 spiral-headed nails of iron. Some have seen the trident of Poseidon in the pattern of these nails, but they are 98
probably only decorative. There is a stone carving of a mudfish in the shrine of Ogun Ladin within the precincts of the palace in Ife, which also contains, appropriately enough since Ogun is the god of iron, a large drop-shaped lump of wrought iron weighing more than 50 kg; a similar lump of wrought iron constitutes a shrine in the bush 170 km to the north of Ife between Igbetti and Old Oyo.

The Ore Grove contained two human figures, the larger of which is just over 1 m in height, and is known as *Idena* (the gatekeeper); it has two spiral-headed nails driven into holes drilled in the stone to mark the eyes. A group of similar carvings is situated at Eshure, 150 km to the east of Ife in Ekiti country, and other stone figures are scattered in a number of places around Ife as well as in Ife itself (Allison 1963, 1964). The largest and most distinctive group of stone sculptures occurs at Esie, some 90 km to the north of Ife, where a thousand human figures carved in soft soapstone and with a few terracottas, averaging about 50–60 cm high, stood in a sacred grove; there is a wide range of artistic styles. Although these figures still call for a priestess and an annual ceremony, the present inhabitants say that they know nothing about them and that they were discovered in the bush in the later part of the eighteenth century



98 Imagination and reality. The 'staff of Oranmiyan' at Ife, according to Johnson (1937) (*left*) and according to Fagg (1960) (*right*). It stands 4.3 m high

99 Head of one of the more than one thousand stone figures found at Esie, 100 km north of Ife, and now housed in a special museum. Rather less than half life-size. (Cf. Ill. 100)

100 Seated stone figure from Esie: about 60 cm high

101 (*opposite*) Carved stone figure from Igbajo, some 56 km northeast of Ife, representing *Eshu*, a Yoruba deity personifying the spirit of unpredictability. Ht 61 cm

or mid-nineteenth (Milburn 1936; Clark 1938; Daniel 1937; Meyerowitz 1943; Stevens 1965). In either case this would seem to preclude the suggestion that they originated in Old Oyo and were dumped at Esie by southward-fleeing refugees in the nineteenth century (Bertho and Mauny 1952). Two recently obtained thermoluminescent determinations on terracotta from Esie indicate a date in the twelfth century (Fleming 1975). Obayemi has suggested that the Esie stone carvings emanated from a one-time extensive Oba State and represent kings, chiefs and persons of eminence who died in the area (Obayemi 1976, 232).

A distinguishing feature of Ife is the large number of potsherd pavements. These are areas where a pavement has been made by setting potsherds in the ground on edge; they should not be confused with paving of the kind still made by the Nupe in which

potsherds or specially made pottery discs are laid flat on the ground. Pavements made of potsherds laid edgewise are extremely durable and can stand up to a lot of wear. The paved areas were either the courtyards of houses or the internal verandahs surrounding them. The Ife pavements vary in style: some consist of straight rows of potsherds set side by side, sometimes alternating with rows of white pebbles, others are set in herringbone fashion; others again enclose squares of white pebbles. Sometimes the lines curve around an empty space, perhaps for a shrine, or for a pot set in the pavement. Although particularly numerous in Ife, such edge-set potsherd pavements are known elsewhere, not only in a number of places in the Ife area, but in Dahomey and in the Kabrais district of Togoland (Willett 1967, 104), as far south as Ikeja near Lagos (Hartle 1971) and as far north as Daima in Bornu, as well as at the 'Sao' mounds south of Lake Chad in the Republic of Tchad (Connah 1971a, 19); none have been reported in position in Benin but broken-up pieces were excavated from two rubbish pits there, one of which produced charcoal radiocarbon dated early in the fourteenth century (Connah 1963, 468; 1971a, 15); and they are known in Owo (Eyo 1974b, 278).

103 Ife: potsherd pavements on Obalara's Land, as revealed by excavation. The common herring-bone pattern can be clearly seen. Scales marked in 10 cm lengths

At some time in the past there must have been a glass-bead-making industry in Ife; at various places in the town, but especially in the Olokun Grove, crucibles and bluish waste metal have been dug up; whether the glass itself was made locally or came from some other source is not known.

Ife is surrounded by a defensive system of earthworks of differing dates. Abeweila's wall is nineteenth-century, but it may have been a rebuilding of part of an older system, which is also extant (Willett 1967, 103; Ozanne 1969; Eyo 1974b, 63–5). The nineteenth-century system has a ditch as well as a bank, but the older one has an earth wall only; in at least one place the older system overlies a potsherd pavement (Willett 1970, 320–1).

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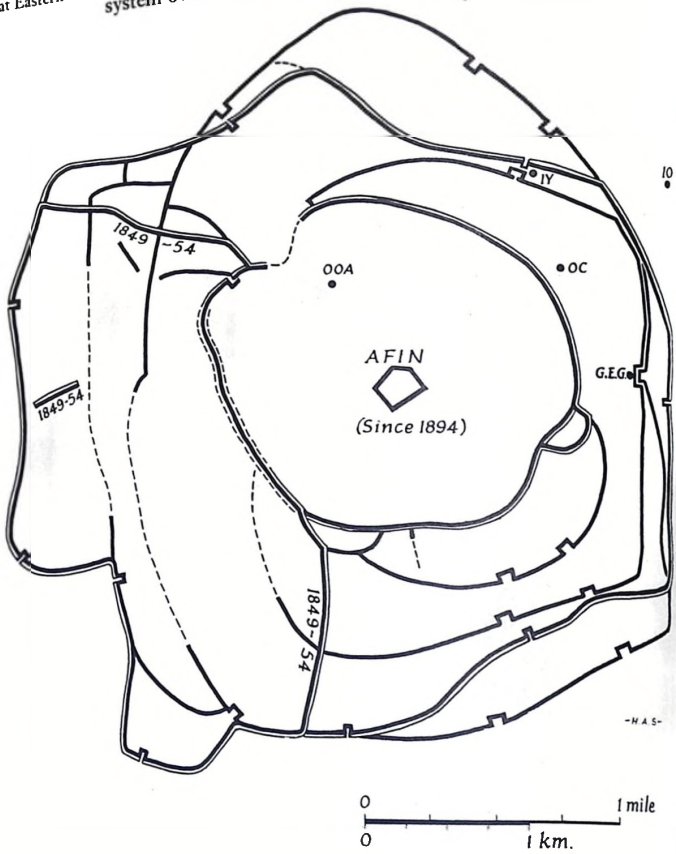


104 Map of the wall system of Ife. IY = Ita Yemoo; OOA = Orun Oba Ado; IO = Igbo Obameri; G.E.G. = Great Eastern Gate

Excavations

With such spectacular but undated accidental discoveries at Ife, it was natural that it should have invited considerable archaeological enterprise. With all this effort, it is only now that the glimmerings of any sort of coherent idea about ancient Ife are beginning to emerge, thanks largely to radiocarbon dating; even so, multitudes of problems remain. The solution of these problems lies not only in more work in Ife itself but in a much more comprehensive coverage by archaeological fieldwork and excavation of the surrounding areas outside Ife.

Following the establishment of the Department of Antiquities, K. C. Murray, Bernard Fagg and William Fagg, with some assistance from Professor John Goodwin, carried out excavations in 1953 in the groves and shrines around Ife. They excavated in the Olokun Grove, the Grove of Osangangan Obamakin, at the Iwinrin Grove, at Olokun Walode and at the shrine of Ogun Ladin. They recovered a fair quantity of terracottas, glass beads and crucibles which are now in the Ife museum, but these excavations have not been published. It was reported that at the Grove of Osangangan Obamakin terracottas had been brought to the shrine at a comparatively recent date and in a fragmentary condition, as if they had been found broken and been placed there for propitiatory purposes (B. E. B. Fagg 1953). In other words they were in a secondary and not a primary context. In the Olokun Grove, where Frobenius had dug, it was reported that the ground was honeycombed with 'burial vaults', consisting of vertical shafts widening out below in bell or bottle shape, and occasionally interconnecting. More than eighty well-shafts were sunk at random at various places in Ife in the hope that a pottery record from these shafts would yield stratigraphical evidence. Unfortunately no description and analysis of the pottery has been published. On the other hand, although these shafts encountered cultural material down to depths of nearly 9 m, area excavation in Ife suggests that such material is only found below a depth of about 1 m when it is in the infilling of pits; since such pits and their infilling can be of almost any age, the absolute depths in the well-shafts may have little stratigraphical significance by themselves (Willett 1970, 312; Eyo 1974b, 76).

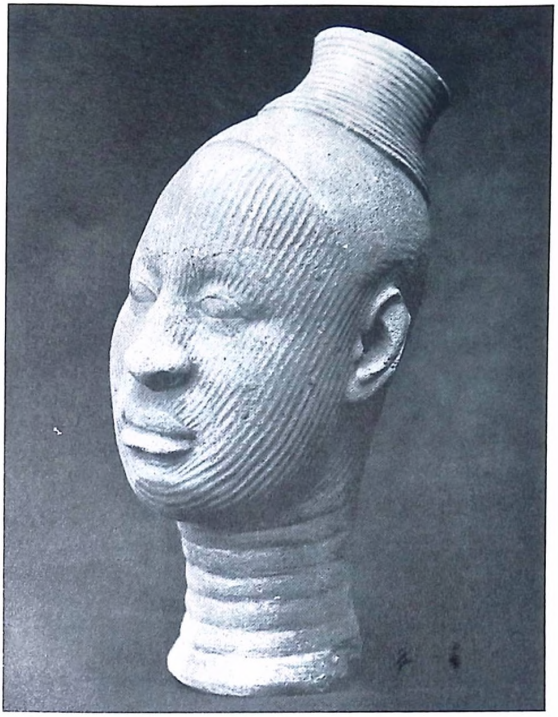
After the accidental discoveries at Ita Yemoo, Frank Willett was invited by the Department of Antiquities to investigate; he found that the bronzes had lain on a potsherd pavement,

most of which had been destroyed in the work which led to the original discovery. A complete potsherd pavement was excavated nearby, the first to be wholly uncovered; it has been roofed over to preserve it. On another potsherd pavement lay at least seven figures in terracotta, about two-thirds life-size; two unbroken heads were recovered, one wearing a crown; it proved possible to reconstruct two more. This find was interpreted as a shrine in which complete figures had been standing, not one made for a few chance fragments; the shrine was believed to have been situated in a mud-walled building with a thatched roof which had been burned off, leaving the terracotta figures open to the weather for a short time; this would account for the slight erosion of their surfaces; the collapse of the walls and roof would have shattered the sculptures. In other words, these terracottas were in a primary, not a secondary context. However, this interpretation has been queried (Eyo 1974b, 77) and further comment must await the detailed excavation report. A second shrine in which the terracottas were believed to be in contemporary use and in a primary context was excavated in the Ita Yemoo area (Willett 1971b, 24); charcoal in the layer in which the terracottas were found, overlying the potsherd pavement, gave two radiocarbon dates in the eleventh and twelfth centuries AD.

In 1963–4 Oliver Myers excavated a number of terracottas from the Grove of Obameri, apparently not in a primary context; an eighteenth-century radiocarbon date may indicate when they were accidentally found and placed in the grove (Myers 1967, 6–7; Willett 1971b, 25). Myers also excavated potsherd pavements, and terracottas in secondary contexts, at Oduduwa College (Myers 1967, 8–11).

Odo Ogbe Street

In 1967 a magnificent terracotta head which had eroded out of the gutter outside No 58 Odo Ogbe Street was bought by the Ife
105 Museum. Two years later the site was excavated by Dr Ekpo Eyo. He revealed two occupation levels, the upper giving a sixteenth-century radiocarbon date, the lower a twelfth-century date. The terracotta head appeared to have been derived from the upper layer, in which some 6 m away from the find spot of the terracotta head were set eighteen fine-textured pottery bowls arranged in a row as if flanking a path. The excavator has suggested, on the basis of the finds and current practice, that the terracotta head had had a secondary use in the worship of Oshun.



105 Ife terracotta head found accidentally, eroding out of the road ditch on Odo Ogbe Street. This led to the excavation of the site. Ht 31 cm

The lower level was separated from the upper by a sterile layer and contained six pits with carefully placed pots and decayed bones. They are considered to represent burials. There were no potsherd pavements at either level (Eyo 1974a and b).

Lafogido

In 1963 Frank Willett rescued a terracotta elephant head which had eroded out of the corner of the area in front of No 23 Lafogido Street. This spot is behind the *afin* and not more than 50 m from the Wunmonije Compound where the eighteen spectacular brass objects were found in 1938 and 1939. The open space in front of the Lafogido Street house was formerly larger, and was used for rituals relating to a former *oni* called Lafogido, who is said to be buried there. When Dr Ekpo Eyo examined this area in 1969, he observed a terracotta bull's head projecting from

106 Ife: terracotta of part of an antelope's head, excavated from the Lafogido site. Situated close to the Wunmonije compound where the brass heads were found, this site is reputed to be the burial place of the former *oni* called Lafogido

107 (*opposite, above*) Ife: terracotta ram's head bearing the royal crest, surmounting one of the disc lids covering the pottery vessels at the Lafogido site. Ht 15.2 cm

108 (*opposite, below*) Ife: terracotta head of mythical animal bearing the royal crest, surmounting one of the disc lids covering the pottery vessels at the Lafogido site. Whereas the majority of the Ife terracottas have not been recovered in a primary context in such a way as to give a clue to their original function, it seems clear that these examples were part of the ritual furnishings of a royal burial site

the ground, and decided to excavate. He found a rectangular potsherd pavement, one end of which ran underneath the adjacent house. Set into the potsherd pavement along the three sides exposed were fourteen pottery vessels, some of them with lids still in position; these lids consisted of a clay disc on top of which was modelled an animal's head, facing the centre of the pavement, where was a fair-sized hole for what was probably the centre-post for a roof. At one end an elongated depression in the pavement looked like the subsidence of a grave. The excavation could not proceed beyond this point because the *oni* ruled that this was where Lafogido was buried and he must not be disturbed. Nevertheless the excavation was of considerable importance, because here were finds of terracotta sculptures in a position where it was possible to gain some idea of their original function. It seems they were used as part of the furnishing of

106–8

what may be a mortuary chapel. A miniature human head in terracotta, only 5 cm high, bearing the characteristic vertical striations, was found, but no full-size heads, although there were fragments with human limbs. The animal heads represented ram, antelope, bull, snake and a mythical animal, while one crude terracotta in a different style cannot be identified. Whether or not the occupant of the grave was the *oni* named Lafogido, variously reported by tradition to belong to the seventeenth or the nineteenth century, charcoal from among the sherds of the pavement yielded a date in the twelfth century (Eyo 1974a and b).

Obalara's Land

Early in 1970, a number of terracotta fragments of 'classical' style came to light in the course of quarrying for gravel some 800 m outside the western rampart of the town. Although some 35–80 cm of material had been removed from the original surface over a considerable extent of ground, excavations were carried out here by Peter Garlake, of the University of Ife, and in the surrounding area available between the already-laid foundations of two houses (Garlake 1974).

Three stone-and-potsherd pavements had been partially destroyed by quarrying, but an undisturbed one had as a central feature an elaborate pot decorated in relief which had been set in position before the pavement was laid; it had stones and

109 Ife: pot from the centre of Pavement B, Obalara's Land; detail showing the representation of a shrine on the right. It is significant that it shows in the centre a head in the 'classical' style of 'idealized naturalism', flanked on either side by anthropomorphic figures of highly conventionalized types, also already known among the terracottas. (See Ill. 116.) Max. diam. of pot 22.5 cm

110 Ife: terracotta head excavated from Obalara's Land. It came from above a concentration of human skulls, and is unusual among Ife terracottas for its realistic expression of malevolence or horror. Ht 15 cm

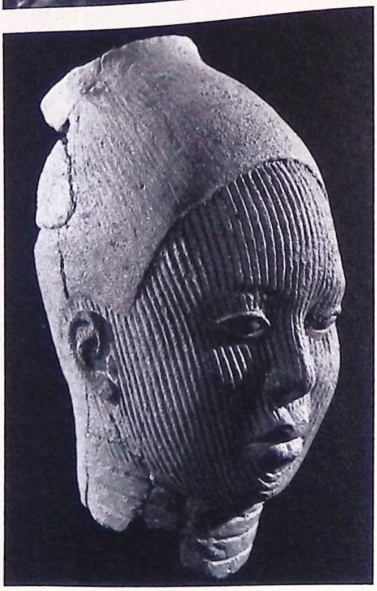
111 Ife: terracotta head excavated from Obalara's Land near that shown in Ill. 112, probably portraying a diseased individual. Ht 12.5 cm

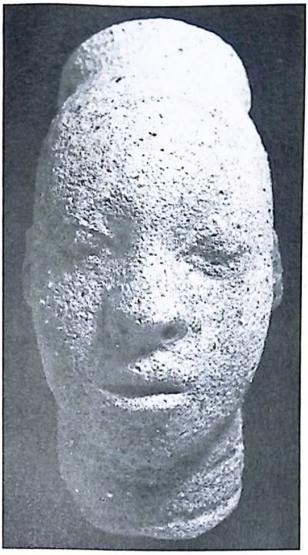
113–15
116

potsherds arranged in circles around it. Another stone-and-potsherd pavement on the site had a more elaborate centrepiece of concentric circles, but only the broken-off neck of a pot, not a complete vessel, set in the middle.

Between two of the pavements lay an area containing a number of discrete but adjacent groups of artifacts: a concentration of iron nails, probably representing some wooden construction; some forty skulls or parts of skulls, together with the heads and shoulders of two terracotta figures, one of a diseased person, the other with an expression of malevolence or horror, and a pottery vessel whose neck and mouth were formed by the upturned head of a leopard; a group of terracottas, damaged but carefully arranged with a north/south orientation and covered with clay and marked by three stones, containing four naturalistic heads and fragments of two more, two conical heads, six human torsos and a number of body fragments; a mass of human long bones; two concentrations of broken pottery vessels, one of them surmounted, like the mass of long bones, by an ornamental iron staff; and a pair of small male human figures in terracotta.

A consistent set of four radiocarbon dates was obtained from charcoal collected from the level in which the main artifact concentrations were set, indicating the first half of the fourteenth century. This suggests that the practice of venerating and re-burying terracotta sculptures, noted above in Ife during the last





112 (*opposite*) Ife: the main concentration of terracottas as found in the excavation of Obalara's Land. The head at top centre measures 13 cm from the top of the crown to the point of the chin. Although carefully arranged, all the terracottas had been damaged before being placed where they were found

113 (*opposite, below left*) Ife: Terracotta head excavated from Obalara's Land. This piece is very close in style to many of the metal heads and to many of the terracottas. Ht 16.5 cm

114 (*opposite, below right*) Ife: terracotta head excavated from Obalara's Land. Ht 17 cm

115 Ife: terracotta head from Obalara's Land; the surface is somewhat eroded. Ht 7.8 cm

116 Ife: conical terracotta of anthropomorphic form, excavated from Obalara's Land, of the kind portrayed on the right of the shrine shown on the pot illustrated in Ill. 109. Ht 26 cm

two centuries, is one that goes back to the fourteenth. The wooden construction marked by the concentration of nails may have been a shrine and the other objects may represent offerings and sacrifices in connection with the cult whose apparatus is suggested by the reliefs on the pottery vessels.

Woye Asiri Land

In the course of a routine inspection of a pipe trench being laid alongside the Ibadan road just outside Ife in 1972, Peter Garlake observed that potsherd pavements had been cut through by the trench. He excavated the area extending back from the road, a site which lies only 100 m southwest of Obalara's Land. He uncovered eleven pavements, arranged in two main groups. Some pavements were made entirely of quartz stones, with a few random ironstone ones. Semicircular 'cut-aways', of the kind already known on other pavements in Ife, were present, in one case flanked by smaller semicircular recesses. It is believed that such 'cut-aways' represent the positions of altars, one of which had disposed in front of it upon the pavement a collection of eight jars, six bowls, a bundle of thirteen iron nails, grindstones, a hammerstone and three ground stone axes such as are

nowadays placed upon the altars of Sango, the god of thunder. There was also a circular centrepiece surrounding the top of a pot, perhaps for the pouring of libations.

A group of six pavements, and two other pairs, were separated by gaps 45–55 cm wide, where mud walls, which have since decayed unrecognizably, once stood. Only in one case was a 22 cm high stub of wall preserved, with buff sand on one face to a depth of 4 cm, probably a plaster facing. The arrangement of the pavement and spaces for walls confirmed the idea that the paved areas were open courtyards surrounded by rooms. This is the traditional type of Yoruba house, with an entirely enclosed interior courtyard, into which the rain falls ('impluvium'); rainwater off the roofs is either collected in pots or carried away through a drain under the walls. In the wall space adjacent to the lowest point of one of the Woye Asiri pavements was the neck of a pottery vessel, lying on its side and apparently serving as a drain. Two pavements 1–1½ m wide appear to have been corridors leading to a courtyard; the two groups of pavements, nearly 30 m apart, had approximately the same orientation. This orientation was also within a few degrees of that of the Obalara's Land pavements 100 m away, giving an impression of a well-ordered urban lay-out.

In an irregularly shaped area, 3 m^2 in extent, was found a concentration of 13,713 pottery discs averaging 2.3 cm in diameter. They resemble one of the three types of potsherds previously recognized (Fagg and Willett 1962, 359) as composing potsherd pavements, but in this case they were not laid as a pavement but were jumbled together without any sign of orientation. They may have been set in the surface of mud walls or columns as a decorative mosaic; they were far too numerous to have served as gaming counters or as weights (Garlake 1977).

Four out of five radiocarbon dates place the buildings of Woye Asiri Land in the thirteenth/fourteenth century, approximately contemporary with those of Obalara's Land. An analysis of the pottery suggests that Woye Asiri may be a little earlier. This analysis also showed that in the course of the time-span covered by the two sites, decoration by carved wooden roulette predominates at the beginning but is progressively replaced by cord impression. The inclusion of a number of pieces of glass-working crucibles in these well-dated pavements of Woye Asiri gives the first concrete evidence, long suspected, that Ife's glass-working industry belongs to the 'classical' period of the thirteenth/fourteenth centuries.

Oke-Eso

From the digging of a modern grave at Oke-Eso, Omotoso Eluyemi, of the University of Ife, saved a number of terracotta pieces, consisting of a bead-garlanded torso nearly half a metre high, a male and female head, a ram's head, an arm, a hand and a fragment depicting gourds and cowries. All except the male head and the ram's head showed traces of red paint. No excavation was possible because of the completed burial (Eluyemi 1975).

Ancient Ife

As a result of all the archaeological work that has been done over the last thirty years, what can we now say about ancient Ife? Such work is cumulative, and although many unsolved problems remain, we are in a better position to speak with some assurance than we were when the Wunmonije Compound discoveries were made just before World War II. Above all, some of the 'mystery' has dissipated, and it is less necessary than ever to resort to speculations of the type in which Frobenius indulged but which have not entirely ceased (Kalous, 1968).

During the first millennium AD the forest lands of Nigeria became increasingly settled by a population making their own iron and practising yam-and-oil-palm agriculture. Although fieldwork and excavation have not been sufficiently widespread to provide archaeological confirmation of this in Yorubaland, six radiocarbon dates from the sixth to the tenth centuries AD from two sites at Ife may be taken as confirmatory (Willett 1971a, 366). An internal system of exchange would have been developed, with regular markets; the importance to an agricultural community of ensuring the benevolence of all the unseen powers of water, earth and sky would have encouraged the emergence of religious specialists whose special duty it was to secure this goodwill for the benefit of the whole community.

Different conditions seem to have prevailed west of the Niger from those in the east, where farmers felt safe enough to live in dispersed homesteads in the middle of their farming land. Whereas defensive earthworks are very rare in Iboland, they are common in Edo and Yoruba country, indicating that, for some reason we can at present only guess at, west of the Niger the needs of defence made the farmers live together in villages within walking distances of their farms. Accordingly the social system which developed among the Yoruba and Edo-speaking peoples was quite different from that of the Ibo. Because people of

different lineages were living close together, the claims of a neighbour began to rival, and then outstrip, those of a kinsman. The demands of kinship tended to threaten the solidarity of the village in its needs of defence, and the disruptive effect of these obligations were siphoned off by giving certain lineages specified functions in the life of the community, such as providing the chief, the war leader, the historian, the spokesman and the priest. In this way leadership tended to develop into permanent authority. Permanent authority in its turn, when developed on any large scale, itself requires assistants and an administrative class to help carry out its functions (Horton 1971).

If it is the case that it was the needs of defence which nucleated a scattered agricultural population into villages, what was the nature of the threat? Had the density of population reached the point where there was real competition for the available agricultural land so that one community threatened another? Or did the threat come from outside, as the result of the commercial and military dominance of the trading states to the north, Mali and Songhai? Perhaps in fact the process did not begin until these pressures were felt – as felt they certainly were after about AD 1100. At its greatest extent the domination of Mali extended down the River Niger to within 100 km of the most northerly Yoruba settlements. We can only guess at how these pressures first exerted themselves, but the most likely demand was for slaves. Slave-raiding southwards from the kingdom of Mali certainly took place, but how early it extended as far east as northern Yorubaland remains uncertain. Slave-raiding was more important in the central than in the western Sudan, because the former produced no gold (Levtzion 1973, 174–8). A system of exchange in which shea butter from the northern savanna was traded into the forest areas in return for kola may be older than any long-distance trade. Once this exchange system had been established, and once the northern areas found themselves, as a result of their own contacts, in a position to offer other goods obtained from farther afield, these would join the shea butter and stimulate the offering in return of additional products from the south.

Ife, situated as it is in the centre of a northward bulge of the forest, was probably the focus of an exchange system and of the organization of the cults needed to protect an agricultural community. Perhaps the *oni* was already a sacred figure, supported by tribute and by tolls on local trade, and in a commanding position by virtue of his pre-eminence in the

religious system. When, therefore, the commercial demands from the north began to make themselves felt, Ife was in a good position to take advantage of them. It is likely that the northern slave-raiders found their task less easy in the forest; they were more easily ambushed, and villages were better able to protect themselves. Therefore those wanting slaves found it more prudent to buy them from locally established authorities of these areas than to capture them. Commercial slavery became added to domestic bondage and the trade enhanced the wealth and power of the *oni* and his entourage, which itself grew and developed with the system. Where external trade impinged upon African societies not endowed with desirable natural exports such as gold, but where a process of political centralization had begun, slaves would be the most obvious exportable commodity (Fage 1974, 13). The most conservative estimate of the number of slaves exported across the Sahara to North Africa in the first half of the nineteenth century is 10,000 a year (Fisher and Fisher 1970, 60), and there is plenty of evidence that this trade had been going on for many centuries; even if the numbers involved were smaller, at the time of Ife's pre-eminence, the trade could well have been the principal source of Ife's wealth. We cannot assume that the many instances in Ife bronzes and terracottas of bound and gagged individuals, of decapitated corpses, and of heads and limbs severed from the body, all represented slaves, but it is likely that many of them were. If slavery was an integral part of the social and commercial system, as well as providing the labour that serviced the court and wealthy traders and officials, it would have furnished the ritual sacrifices required to preserve the health and prosperity of the King and his free-born subjects. The slaves sold to northern traders were probably paid for in salt, but as the trading relationship became established and this in turn helped to develop the wealth and power of the *oni*, so other, luxury, goods would become added to the imports from the north, and other indigenous products be offered in exchange. Copper and brass, textiles, beads, bracelets, swords and horses were added to the expensive imports. In the mid-twelfth century Al-Idrisi also mentions spices, perfumes and manufactured iron tools as exported from southern Morocco to the land of the Negroes (Levtzion 1973, 141). How the crafts of brass-casting and glass bead-making became established we cannot tell; perhaps an *oni* demanded of a resident northern merchant that he should import a teacher to instruct his own household slaves; perhaps the same northern merchant, or another, decided he

could make more profit by establishing a local bead-making industry rather than by importing beads and bangles ready-made. However slavery is defined (Mason 1973, 453), seeing it as the essential basis of the economic and social system that gave rise to the art of Ife in no way detracts from that art; the institution of slavery underlay the artistic productions of classical Greece – and we do not think worse of them for that. The copper and brass had to be paid for in some way, since there is virtually no copper in Nigeria and there are many Arab records of its export to Negro West Africa along the costly caravan routes from the north (Shaw 1970a, 278–9). The other exotic luxuries would also have been expensive, but, being mostly perishable, they less obviously demand an explanation of how they were paid for. Perhaps the kolanut trade has a very ancient history (Levtzion 1973, 181) and kola and ivory helped to pay the bills (Obayemi 1976, 258) but it is difficult to think of anything other than slaves as the major exportable commodity (Mauny 1961, 379; Fisher and Fisher 1970; Lewicki 1971, 657; Hopkins 1973, 78, 83, quoting Lewicki 1967). The suggestion that trade was important in the generation of the Ife state does not imply that the Kingship was dependent on the personnel engaged in this trade (Obayemi 1976, 258–9); nevertheless, once external trade injects surplus wealth into the local exchange system, it adds power to the chiefs who control its distribution, out of all proportion to what it formerly was.

There are a number of hints of the influence from the north – the tradition that Obatala, the creator of mankind, was 'white' (Willett 1970, 304), the technique of brass-casting employed (Williams 1974, 179–203), and the location along the Niger of the 'Tsoede' group of bronzes. A majority of these may have originated in Owo (Fraser 1975) and one in Ife, but their position along the northern frontier of Yorubaland can be interpreted as indicating the importance of this direction of movement (Shaw 1973).

Other hints of a northerly connection have been claimed in some of the art and architecture of ancient Ife, tracing back ultimately to the late Roman/ Byzantine/ Arab world of North Africa. This 'influence' has been seen in the employment of the guilloche and rosette patterns (Eyo 1974b, 379–90); in the impluvium type of house (Willett 1967, 126; Connah 1969b, 51) which follows the same plan as the Roman 'atrium' house; and in the stone and potsherd pavements resembling mosaic and tesselated pavements (Connah 1969b, 50).

117 Table of radiocarbon dates, without standard errors, from Ife. The dendrochronological corrections in the last column have been calibrated from Ralph *et al.* 1973

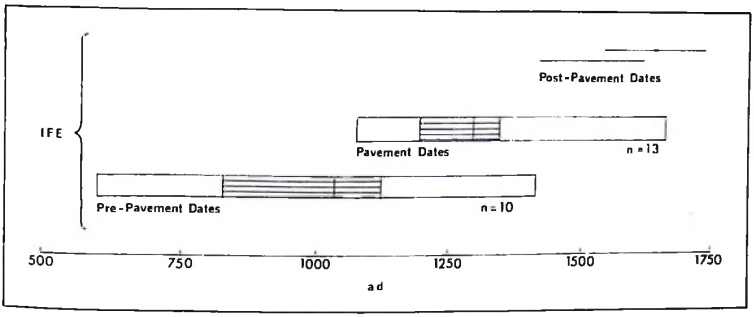
Site	*Lab. No.*	*Date ad* (5730 $\frac{1}{2}$-life)	*Corrected Date* AD
Orun Oba Ado	BM-265	518	600
	M-2114	765	825
	M-2115	765	825
	M-2116	910	970
	BM-264	961	1020
Ita Yemoo, below pavements	M-2121	817	890
	BM-261	930	980 / 1000
	BM-259	1136	1190
	M-2117	1456	1410
Ita Yemoo, associated with pavements	BM-262	1033	1070
	M-2119	1126	1190
	M-2120	1332	1340
Lafogido	I-4911	1074	1090 / 1120
Odo Ogbe	I-4670	1069	1090 / 1120
	I-4669	1620	1520
Woye Asiri	N-1687	1110	1180
	N-1688	1143	1190
	N-1685	1260	1260 / 1290
	N-1689	1309	1310
	N-1686	1770	1660
Obalara's Land	N-1392	1167	1200 / 1220
	N-1393	1306	1310
	N-1391	1353	1350
	N-1390	1456	1410
Igbo Obameri	M-1686	1723	1640

1

These resemblances may be fortuitous, and such things as the guilloche and rosette patterns could easily have arisen independently; similarly the impluvium house and the potsherd pavement could have been locally-devised solutions to the problems of architectural design in a climate of hot sunshine and bright light combined with heavy seasonal rainfall. Taken all together these various hints do suggest the likelihood of cultural influence from the north, but it is not necessary to invoke wave after wave of large-scale invasion (Biobaku 1955, 21–3). It may be correct to see these things, along with the traditions of origin, as demonstrating the political imposition of a foreign ruling dynasty, but even this is not necessary (Willett 1960a, 232, 236; W. Fagg 1963, 25; Fraser 1972a, 290); nor do these hints of connections into a world far away from Yorubaland vindicate the idea that the arts of Ife were not really indigenous. Brass-casting and bead-making are likely to have remained a royal prerogative, the latter perhaps connected with the provision of beaded crowns for the sixteen rulers of Yorubaland entitled to wear them by virtue of authority from Ife (Obayemi 1976, 215).

What was the date at which Ife enjoyed the commercial prosperity which enabled it to support a royal court combining also the focus of a religious centre with many cults and shrines? Until the advent of radiocarbon dating twenty-five years ago and before the excavations in Ife which have utilized it, this was a very intractable problem. As a result of now having twenty-five radiocarbon dates from Ife derived from seven scientifically
117 controlled excavations, the picture is much clearer. The brasses still remain undated of themselves, since none were found in archaeological excavations, but it is reasonable to place them in a
118 350-year time-bracket between AD 1100 and 1450.* As can be seen from the accompanying table, this has emerged clearly as the period of the making of potsherd pavements and is the period to be assigned to terracotta sculptures in a primary context. Potsherd pavements may have continued to be made or repaired after this period, since a few sherds of maize-impressed ware are said to be included in some of them, and maize was not introduced before the early sixteenth century (Willett 1967, 108); however, such sherds in pavements are rare, although nowadays it is one of the commonest decorative motifs on Yoruba pottery. If the brass and copper heads are memorials of past *onis* and were placed upon an ancestor altar, the reigns

* Some thermoluminescent dates now place them in the fourteenth/fifteenth centuries (Willett and Fleming 1976).



118 Dispersion diagrams of radiocarbon dates from Ife, with interquartile ranges shaded. They suggest that a period can be isolated during which the practice of making potsherd pavements obtained and that this period can be distinguished from those before and after

represented may well have extended over three hundred years; yet their homogeneity of style and technique suggests a short period of manufacture; perhaps towards the end of the period a wealthy and pious *oni* had cast in bronze the figures which had previously been made in wood or terracotta.

A beginning for the *floruit* of ancient Ife in the twelfth century would fit in with the likely date of the fingering down into Yorubaland of those commercial demands from the northern world of which Ife was able to take advantage. Perhaps the empire of Mali was too far away to provide the stimulus, and we should look rather to the early Hausa states, in the rise of which economic factors played an important role (Smith 1971, 187–8). We know that at a later date Zazzau (Zaria) specialized in slave-raiding southwards, and perhaps the now abandoned urban site of Turunku fulfilled this role at an earlier period; it lies only 300 km from the Niger at Tada. Unfortunately we still know little archaeologically about the early Hausa states, and the site of Turunku has not yet been excavated.

Old Oyo

Whatever the immediate outlets for Ife's trade, it enjoyed three centuries of prosperity, attested not only by the abundance of antiquities but by the fact that many of the ancient sites lie outside the circuit of the nineteenth-century walls and suggest a large urban unit. What terminated this prosperity and ended the arts of brass-casting, glass bead-making and terracotta sculpture? Some have postulated a catastrophe such as conquest or pestilence, but maybe it is sufficient to suppose that something or someone got between Ife and the northern sources of her wealth. Was it connected with the rise and expansion of Songhai power?

The invasion of Agades and Katsina by Askiya Mohammed in 1513–16 (Levtzion 1973, 87)? The sacking of Bussa in 1554? The Moorish invasion of Songhai in 1591? Or, farther afield, the conquest of Arab Egypt by the Ottoman Turks in 1516/17 and their subsequent control of Tripoli, Tunis and Algiers, with considerable disruption to existing patterns of Arab trading across the Sahara? These events may have had their effect on Ife, but they may only have made worse a situation which was already deteriorating as a result of the rise of Old Oyo. The latter (Oyo Ile, 'Katunga') is situated some 170 km north of Ife in savanna country well north of the forest. Oral traditions for the date of its founding centre on about AD 1400 (Shaw 1973, 236). The site was abandoned after defeat by Fulani from Ilorin in 1837, and has been unoccupied since. Archaeological work was conducted there by Willett (1960b) and at the time of writing is being carried on by the University of Ibadan, but the site is vast and it may be a long time before it yields significant information.

119 The extensive earthworks of the city walls can be traced for many kilometres: the inner wall has a well-marked bank 2 m high with no ditch; the main wall enclosing an area 6 km from north to south, 5 km from east to west, is a bank about 1 m high inside a ditch 2 m deep. There is a complex of earthworks outside the main wall, parts of which have only recently been detected from air-photographs (Soper 1975). Much of the vast area enclosed within the main wall was open land, the buildings being concentrated in certain areas. Nevertheless, it can hardly have been a place whose importance was entirely based on being the exchange centre and the political focus of a purely agricultural countryside. It can only be accounted for by trade on some larger scale, and it has been claimed that it was the terminus of an important trans-Saharan caravan route (Ojo 1966, 121–2).

The tradition which relates that the town was founded by Oranmiyan, son or grandson of Oduduwa, suggests that Oyo Ile was founded by a group from Ife who may have moved there for a variety of reasons; possibly they did so in order to be in a more advantageous position for controlling the northern trade. Alternatively the power of Oyo may have come into being from the development and growth of a number of local 'mini-states' and the Oranmiyan tradition may only represent the validation of this power by means of the 'outsider effect' (Horton 1971, 109) on the part of the ruling dynasty which welded them together (Obayemi 1976, 237). It is also significant that there are hints of Mande connections for Oyo (Obayemi 1976, 260) with

119 Excavations by the University of Ibadan at the site of Oyo Ile (Old Oyo), which are still continuing. The vegetation is typical of the wooded savanna, terrain which renders archaeological work particularly difficult

implications for the long-distance trading which Oyo was now able to monopolize at the expense of Ife. In addition, horses were by now imported from the north, and it was possible for Oyo Ile, being situated in the savanna, to build up its military power on the basis of cavalry, in a way that Ife could not. Ife became cut off from the former source of its wealth and sank into decay, although it remained the supreme centre of religious observances and was venerated as such. Oyo Ile also had its vicissitudes; about the middle of the sixteenth century, when its army was away subduing a rebellious town, it was attacked by the Nupe who caused it to be abandoned for three-quarters of a century (Smith 1965; 1969, 35, 103). The capital was moved to Igboho; even so, it was still in a more advantageous trading position than Ife.

In fact, by now a new source of trade and wealth had appeared, no longer in the north but in the south: the European voyagers had arrived on the coast and had begun to exploit that contact for the development of their own, transatlantic, slave trade, which grew to proportions greater than the earlier northern trade; and with proportionately greater wealth and prosperity available for the African people who engaged in it. In this new situation Ife was again badly placed. Whereas the empire of Old Oyo was able

to make contact with the coast at Badagry through savanna country all the way (when not prevented by the power of the Kingdom of Dahomey), the routes directly southwards from Ife not only ran through the forest but were also blocked by Ijebu (Horton 1976). This newly-arisen state had gained control of trade to the coast to the south of it, and its military power is illustrated by the great earthwork surrounding it, 'Sungbo's *eredo*', apparently already in existence by AD 1500 (Lloyd 1959, 18). Farther east the power of Benin similarly blocked trading access to that stretch of coast. Thus, commercially, Ife was hemmed in.

9
Kings and craftsmen

The Benin 'bronzes' – most of which are brasses – are better known than those of either Ife or Igbo-Ukwu. This is both because they are more numerous and because they have been known to the world outside Nigeria for a longer time and are to be seen in museums in Europe and America, following their systematic collection and removal by the British Expedition of 1897. Thus, as in the case of Ife, the brasses were not recovered in archaeological excavations, and have no stratigraphical or archaeologically-derived dating attached to them. On the other hand, since the *floruit* of Benin was later than that of either Ife or Igbo-Ukwu, and there was a continuing artistic tradition to the end of the nineteenth century, and since Benin is situated near the coast and there was early contact with Europeans, we have much more information about Benin derived from ethnography, oral traditions and historical records (Egharevba 1968; Ryder 1969; Bradbury 1959; 1973; Obayemi 1976).

The rise of Benin

The Edo-speaking area around Benin will have witnessed the same spread of agricultural communities practising an iron technology as we have seen was the case in both Iboland and Yorubaland, steadily developing over more than a thousand years. What gave rise to the process of centralization on Benin, which was already far advanced by the time the first European visited it in 1485, we do not know. Population pressures, the needs of the local exchange system and of a religious centre may all have had something to do with it in the beginning, but subsequently the development of Benin was idiosyncratic. Certainly in its early days it was not so advantageously placed as Ife to derive profit from northern trade, yet it cannot have been entirely isolated from it, since before the Europeans arrived it was using copper (Murray 1941, 71–2) and cowries (Ryder 1959,

120 (*opposite*) Benin: one of the ancestor altars in the palace of the *oba* (king) of Benin. Two 'Late style' brass heads on either side towards the rear support carved elephant tusks. In the centre at the front can be seen four Late Stone Age ground stone axes, believed to be thunderbolts, and therefore possessing, and symbols of, supernatural power. Scale in inches.

121 Benin: close-up of the four ground stone axes seen in Ill. 120.

301; 1969, 60) brought overland, and brasses showing riders with northern head-dresses point to such connections continuing (Fagg 1963, Pl. 30).

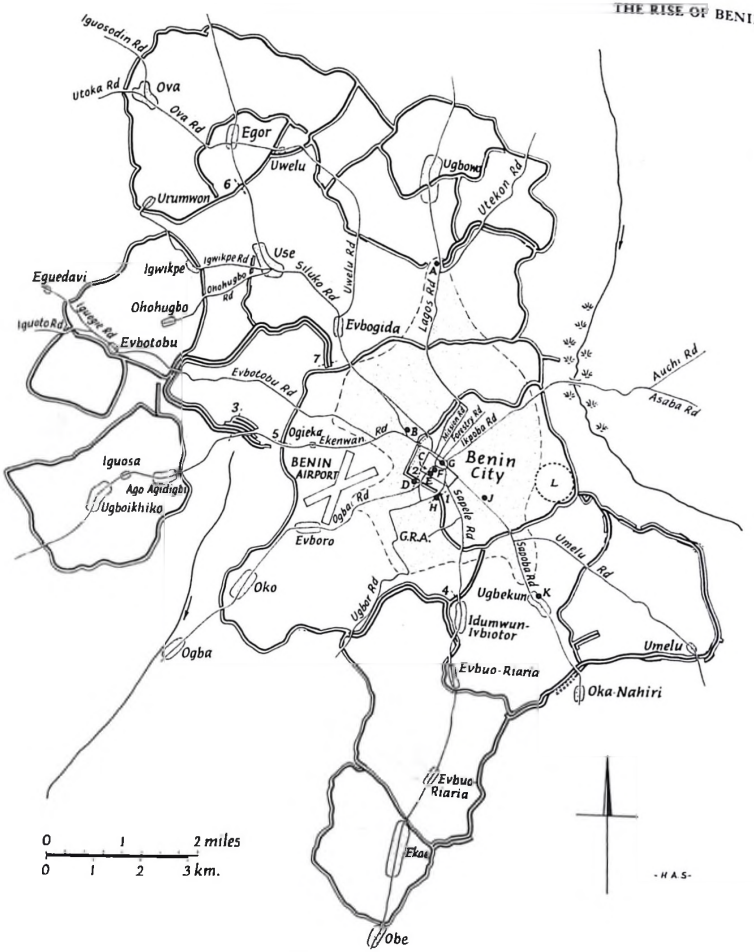
The reports of early European visitors to Benin do not say anything about its origins or its founding, but speak of Benin's allegiance to the 'Ogane', from whom the *oba* (King) obtained his insignia; the Ogane was said to be a powerful ruler whose kingdom lay many days' journey to the eastward (Pereira trans. Kimble 1937; Astley 1745, I, 18; Ryder 1965). At the end of the nineteenth century the court historian and the master craftsmen of Benin placed the beginning of brasswork in the reign of Esigie (early sixteenth century) and attributed it to a craftsman who came with 'the white men' (Read and Dalton 1899, 6). This may also be a hint of northward commercial connections, because it is more likely in this context that 'white men' refers to people of North African or Saharan derivation than to the Portuguese (Murray 1941).

In 1926 Talbot, and in 1934 the Bini historian Jacob Egharevba, published traditions according to which, following misrule by the Ogisos or early kings, the present ruling dynasty at Benin was founded by Oranmiyan, who had been sent for from Ife to save the situation. Egharevba also recorded a tradition that Oba Oguola had sent to Ife for a craftsman who taught the Bini the art of brass-casting. There has been considerable controversy as to what, if any, connection there was between Ife and Benin: Ryder has cast doubt upon any such connection and pointed out that there had been four centuries of European contact before there was any mention of it (and that anyway Ife lies to the west of Benin, not the east) (Ryder 1965). Willett's vindication of the tradition depends

upon identifying the *Oni* of Ife as the Ogane, and upon attaching the seventh-to-tenth century radiocarbon dates from Orun Oba Ado to the recent tradition that this is where the heads of the *obas* of Benin were buried (Willett 1968). On technical grounds, Williams denies that Benin can have learnt brass-casting from Ife (1974, 202). It was formerly supposed that Benin was defended by a triple concentric ring of 'city walls' (Egharevba 1968, 83) consisting of an earth rampart with a deep external ditch. The inner wall is attributed to the Oba Ewuare in the mid-fifteenth century, and seems to represent the climax of a process of centralization of power within the city (Connah 1969b, 55). An excavation through this wall obtained charcoal from an earlier building buried beneath it; this was radiocarbon-dated to AD 1330 ± 105, which accords well enough with the mid-fifteenth-century date for the building of the wall. The bank and ditch together, with a height of 16–17 m from the top of the rampart to the bottom of the ditch, constitute a formidable work of urban defence; its circuit is $11\frac{1}{2}$ km long. It has been calculated that it would have required 5000 men working every day for ten hours a day to complete the construction of such a work in a single dry season (Connah 1975, 105). Whether it was built in such a comparatively short space of time, and whether slave labour was used for the purpose or not, the wall implies a centralized authority which could call upon very considerable resources.

Careful surveying of over 100 km of the much overgrown 'second' and 'third' walls revealed that they did not constitute outer rings of defence but were part of a complex cellular pattern (Connah 1963, 476). Other extensive sets of earthworks exist farther away from Benin and it looks as if the function of these many hundreds of kilometres of earthworks was not defensive, but to make community boundaries. But the question must then be asked: if this was so, why was the marking of boundaries so important that such a large amount of labour was expended upon it? Does it point to a plentiful supply of slave labour (Bradbury 1973, 59), or to high population densities? Further examination of the earthwork system (Darling 1974), especially excavation at junction points to establish the relative dates of different sections, should indicate how the system grew; this in turn should throw light on the economic and political evolution of the state. It is even clearer than in the case of the early states of the western Sudan that the basic business of state formation in southern Nigeria took place by the development of indigenous

122 (*opposite*) The Benin wall system. 1–7. Points at which the profiles of the earthworks were surveyed. A. Site of Edaiken's palace at Uselu. B. Usama palace site excavations. C. Area of the *oba*'s palace before 1897. D. City wall excavations, Ogba Road. E. Ogba Road site excavations. F. Clerks' Quarters site excavations. G. Museum site excavations. H. City Wall excavations, Reservation Road. J. Chief Ogiamien's house (Historical Monument). K. Alleged Ugbekun Ogiso palace site. L. Alleged late Ogiso palace site



principles of social organization (Horton 1971, 119). Benin was originally only one out of some 130 mini-states in the Edo-speaking area (Obayemi 1976, 241–2). With the establishment of the Oranmiyan dynasty and a succession of dynamic and ambitious *obas*, Benin expanded its military power more successfully than any of the other southern Nigerian states. Some of the military activities may have been in the protection of

Benin's commercial interests, such as the conflict with Idah for control of the Niger waterway. Once the Portuguese appeared on the coast, Benin was in a favourable position to take advantage of the greatly enhanced opportunities for trade – even though at times she appeared much more indifferent to those opportunities than Europeans could have wished. Nevertheless, one result of the new contacts can be seen in the enormous increase in works of art in brass, since Benin was now enjoying a plentiful source of supply of the metal by sea instead of by the more costly overland route from the north.

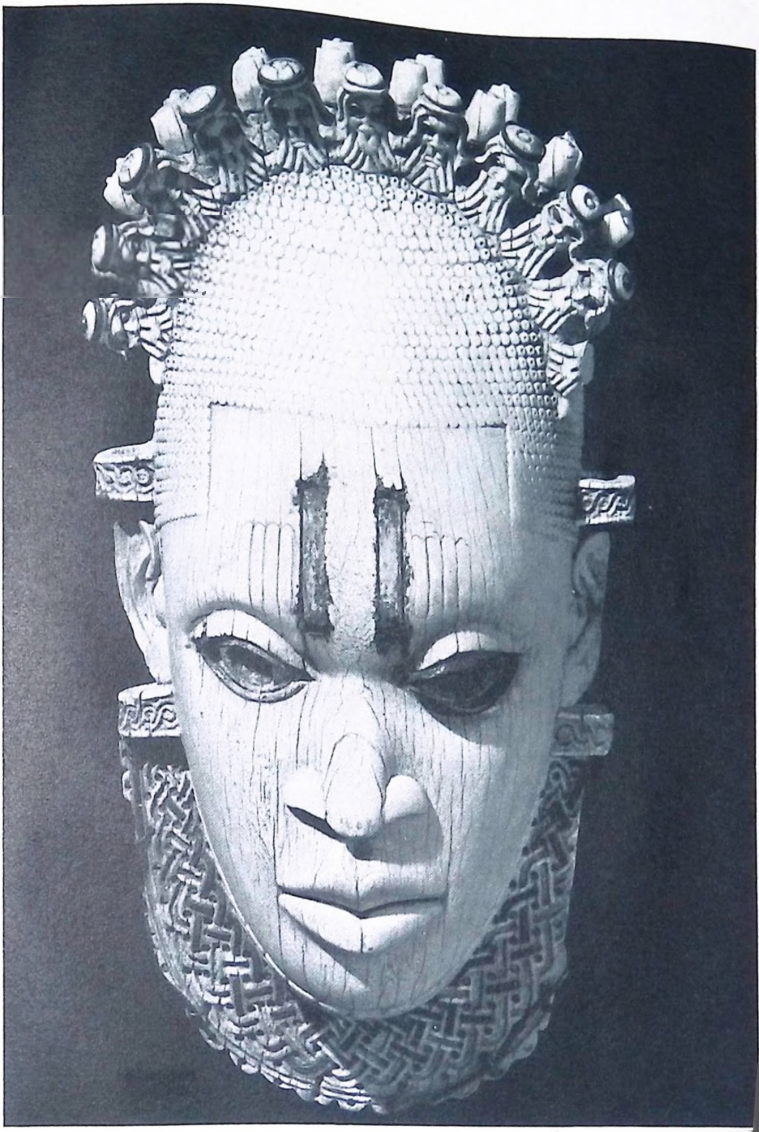
Centralization of power was probably assisted by the adoption, unlike the situation in the Yoruba states, of the law of primogeniture and the suppression of a large royal dynasty (Obayemi 1976, 262), together with the unimportance attaching to secret societies (Horton 1971, 103), and the linking of guild organizations and title associations with loyalty to the *oba* (Bradbury 1973, 138, 188).

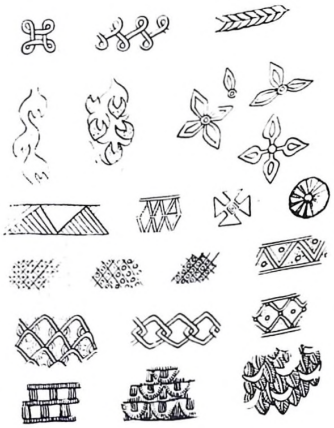
Works of art

The works of art about which so much has been written by Europeans are intimately connected with the history of the Benin state and are one expression of it. Since the extant collection of Benin works spans a period of some five centuries and is variously estimated to number some 4000 to 7000 pieces, it has naturally been a preoccupation of art historians to order them in a temporal sequence. This has been based on the construction of stylistic successions; unfortunately the art historians do not agree on how the sequence should be arranged.

Von Luschan (1919) began the process of recognizing different Benin styles and putting them in a chronological order, and the process was further elaborated by Struck (1923). Following Egharevba's publication of the tradition that brass-casting was introduced from Ife to Benin in the reign of Oguola (whom he places at the end of the thirteenth century but whom Bradbury [1959, 286] puts a hundred years later), the sculptor Leon Underwood suggested (1949) that the earliest Benin heads were those most closely resembling the Ife ones, that is, the most 'naturalistic'. This became the starting point of a chronology worked out by William Fagg (1958) which he later modified in acceptance of Bradbury's chronology. Fagg's 'Early Period' lasted from the beginning of the fifteenth until the mid-sixteenth century, with the ensuing 'Middle Period' terminating with the

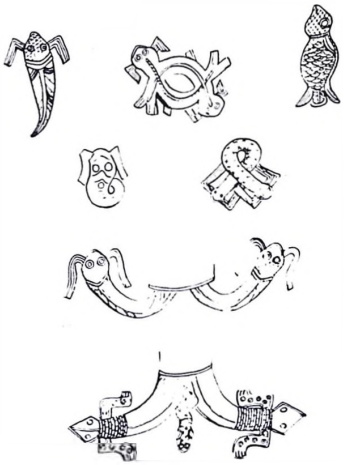
123 (*opposite*) Benin: ivory mask found in Oba Ovonramwen's bedchamber in 1897, but perhaps dating from the sixteenth century. Ivory was regarded as the *oba*'s prerogative and ivory carving was under his control, but carried out by the same craftsmen who carved in wood. The later brass heads were designed to support the weight of carved elephant tusks on the ancestor altars (see Ill. 120). Ht 23 cm



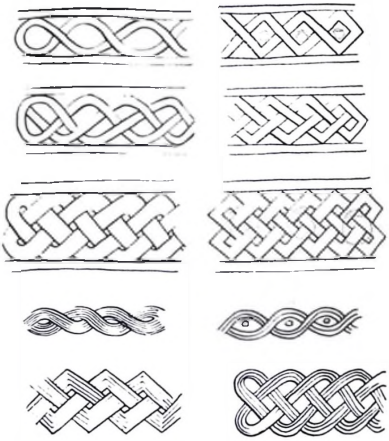


Some common designs

Variations on elephant and leopard heads



Variations on fish



Guilloche designs

124 (*opposite*) Various decorative designs used in Benin art.

125 Benin: brass heads cast by the lost wax process, and regarded as 'Early' in the Fagg/Dark typology. (*left*) Dark's Type I, assigned to the fifteenth century and inspired by Ife models. Ht 21 cm. (*right*) Dark's Type II, assigned to the first half of the sixteenth century. Ht 21.5 cm

end of the seventeenth century. This 'Middle Period' contained heads with high collars or chokers but is above all the period of the plaques, which often show Portuguese soldiers in sixteenth- and seventeenth-century attire; Fagg has concluded that plaques were not made after the end of the seventeenth century on the ground that Dapper (1686) refers to their presence on the pillars of the palace whereas Nyandael a few years later does not (Bosman, 1705). Fagg's 'Late Period', covering the eighteenth and nineteenth centuries, contains the most massive and most conventionalized types of heads, including those with winged head-dresses, introduced, according to oral tradition, by Oba Osemwede, 1818–48. Dark (1970, 1973) follows virtually the same scheme, but he has elaborated it, dividing the heads into a succession of those with:

I High collar under chin (fourteenth-fifteenth century)

II Rolled collar; 'heads of the olden days' (first half of sixteenth century)

III High collar without flanged base (late sixteenth, and seventeenth centuries)

IV High collar with flanged base (eighteenth century)

V Winged cap (nineteenth century)

126 Benin: brass heads of the 'Middle Period' in the Fagg/Dark typology. (*left*) Dark's Type III, assigned to late-sixteenth and seventeenth centuries. Ht 24 cm. (*right*) Dark's Type IV, assigned to the eighteenth century. Ht 25 cm

127 (*opposite*) Benin: 'Late' style brass head, Dark's Type V, introduced early in the nineteenth century. Ht 48 cm

128, 134

There is always the possibility that the characteristics taken by Dark to be of chronological significance merely indicate a difference of meaning or subject. For example, Willett illustrates (1973b, Figs. 12, 13) two Benin heads, of early types according to the Fagg/Dark scheme, said not to be memorial heads but to represent war trophies dated according to oral tradition to the late fifteenth and the mid-eighteenth century respectively. Thus 'the so-called "early" heads may lack elaborate head-dresses because they represent vanquished enemies and *not*, as Dark and Fagg would argue, because they are necessarily earlier in time or close to Ife style' (Ben-Amos, 1974).

Dark also divides the plaques into three stages beginning with those having a background of a circled cross, going on to those of low and medium relief on a foliated background, and ending with those that have medium and full relief on such a background.

The validity of the Fagg/Dark scheme has been queried by Pasztory (1970, 1971) and Rubin (1970). The former observes that Fagg's terminology of Early, Middle and Late Periods 'is still unverified' (1971, 553). Rubin castigates Willett for accepting Fagg's thesis that the 'comparative naturalism' of the heads at Benin assigned to the early period indicates a connection

with Ife and his attributing differences in style to the inexperience of the Benin craftsmen. 'Not only is the stylization of these early period Benin heads supremely confident and unequivocal', says Rubin, 'but their thinness and exquisite surface finish contradict allegations of incompetence in any form.' Thus on the internal evidence of the works of art themselves, Rubin denies the connection with Ife.

Fraser (1972b) has pointed to the difficulty of deriving Benin brass-casting from that of Ife because the earliest Benin heads still differ considerably from those of Ife. 'Fagg is forced to posit a century-long gap or more between the end of the Ife influence and the earliest survivals from Benin', and to postulate the melting down of the earliest pieces. It was the opinion of Professor A. W. Lawrence that if Benin style is derivative of Ife naturalism then the latter must have flourished some three centuries earlier (Crowder 1966, 55). Furthermore, excavations at Owo (Eyo 1972, 1974b) between Ife and Benin, revealed the contemporaneous presence there of an art showing both the Ife and the Benin style, in a time range radiocarbon-dated to the fourteenth/fifteenth centuries. Thus it can be seen that the Ife-

128 (*opposite*) Benin: brass plaque, depicting three courtiers. When the British Expedition reached Benin in 1897, large numbers of such plaques were found stacked away in a store-room of the palace. They provide an invaluable picture of Benin life in the seventeenth century. This plaque measures 48.5 cm × 38 cm

129 Benin: brass casting of a Queen Mother's head, 'Late' type. Ht 55 cm

130 Benin: brass figure of a court attendant. Ht 51 cm

Benin connection, and the supposition that Benin learnt the art of brass-casting from Ife, is one of those 'working hypotheses which has evolved over time and become more or less ossified into "fact" by virtue of constant repetition' (Rubin 1970).

Williams (1974) looks at the Benin canon through the eyes of an artist and equally rejects early indebtedness to Ife, while supporting the notion of interaction between the two centres in the seventeenth century. He denies that Dark's Type I heads represent the beginning of an artistic tradition, and considers Dark's chronology to be based on a combination of unreliable oral tradition and an entirely suppositious sequence of technical and stylistic features; for example he says there is no evidence for making the presence or absence of flanges on the memorial heads carry any chronological significance. While not suggesting that the Bini learnt the art of *cire-perdue* metal-casting from the Portuguese, Williams questions whether they were producing anything more ambitious than bracelets before 1485. Similarly he rejects Dark's developmental series in the plaques, positing early ones which are conceptually two-dimensional whereas late ones have low relief imposed on a flat surface.

Thus Fagg and Dark see Benin art as 'taking off' from Ife, while Rubin and Williams emphatically deny this. Fagg and Dark place the plaques in a 'middle period' of two centuries ending in 1700, while Williams sees the early ones as the

131 Benin: two brass leopards. Hts 49 cm, 50 cm

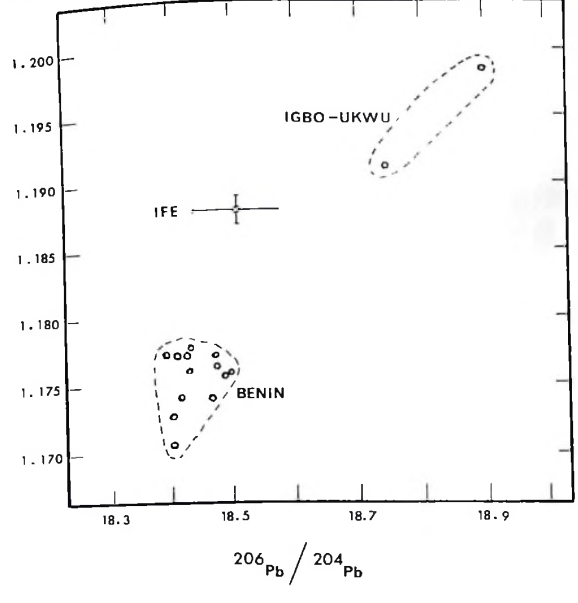
132 Benin: brass figure of a cock. Such cocks were cast for shrines for the maternal ancestors of the *oba* maintained at the Queen Mother's court. Ht 51.5 cm

beginning of Benin art and the whole series persisting for four hundred years. Whereas Dark divides them into three stages on formal morphological grounds, Williams sees in them an early 'Portuguese period' covering the sixteenth century, followed by a mature 'Hieratic' period with no stylistic development in which the formulae worked out in the earlier period are strictly adhered to.

Before the archaeologist can provide a way out of this impasse he needs to find in dated contexts a fair number of works of art comparable to the extant corpus; but the prospects of doing so do not look bright. Contrary to Williams's assertion, excavation at Benin has not been extensive, and it is tragic that in the great surge of development of the state capital in recent years there has not been an adequate programme of rescue archaeology. There was a resident archaeologist from 1961 to 1964 but not since. Goodwin (1957) had two seasons of excavating in the area of the old palace and found part of a brass snake's head, a plaque 135, 134

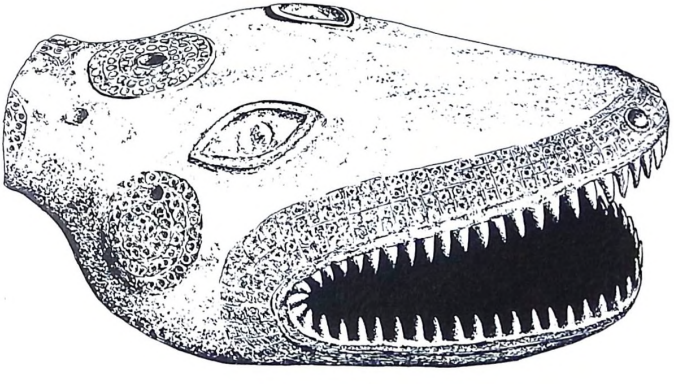
fragment and a bronze-handled iron dagger, but the circumstances of their finding did not permit him to establish their dates of manufacture (Goodwin 1963). In 1961 Willett dug on the site of the new Baptist Church but considered all he found to belong to the nineteenth century. Connah dug two further cuttings in the area of the old palace, nineteen large cuttings on the Museum site, and one at Usama. These excavations have provided a lot of valuable archaeological information (Connah 1963, 1967b, 1975) but have not thrown light upon the relative validity of the different schemes for a temporal ordering of the works of art. Fragmentary remains of potsherd pavements have been found in Benin, but appear to antedate the main development of Benin as a city-state (Connah 1963, 468–9).

There is one line of research which archaeologists are pursuing and which might one day give a sufficiently coherent pattern to throw light on the Benin works of brass and other copper-alloys – and that is an analysis of the composition of the metal. At one time Fagg asserted (1963, 35) that the early Benin castings were of brass (copper and zinc) and the later ones of bronze (copper and tin), and in this was followed by Willett (1964, 81); however, it was shown (Shaw 1970b) that this



133 Lead isotope ratios for two 'bronzes' from Igbo-Ukwu, one from Ife and 14 from 'Benin' (which includes 'Owo', 'Udo' and 'Lower Niger' pieces as well as all Benin 'periods'). Probable errors for all measurements are shown for the Ife specimen

134 Benin: brass plaque showing a gateway into the *oba*'s palace; the tower above it is decorated with a brass snake. Ht 48 cm



135 Benin: head of a brass snake used to decorate one of the palace gateways in the manner shown in Ill. 134. L 42 cm

belief was not justified by the evidence available, and further analyses of Benin objects have given a different picture (Shaw 1965, 1966, 1969c; Werner 1970, 1972; Wolf, 1968). In general, the majority of Benin pieces have proved to be of brass, but the only ones archaeologically dated are forty-nine thirteenth-century manillas and bracelets excavated from the old palace site which are of tin-bronze with little zinc and lead content, while the excavated objects of the Ogba Road hoard, dated to the nineteenth century, are of leaded brass. There have been attempts to make use of the proportions of minor constituents (nickel, arsenic, antimony) in order to trace relationships between Benin and Ife and with reference to sources of ore outside Nigeria (Werner and Willett, 1975). Lead isotype
133 analysis, now being undertaken, may have a better chance of identifying the sources of origin of the metal (Goucher, *et al.* 1976).

Owo

The excavations at Owo referred to above were carried out by Dr Ekpo Eyo in 1971. Owo is the most easterly of the Yoruba kingdoms, 120 km east of Ife, 95 km north of Benin. The site, known as Igbo Laja was discovered accidentally while making preparations for building a house (Eyo 1974b, 206). The excavation revealed one cultural layer 20–30 cm below ground level, indicating that the site had three phases of use. A concentration of terracotta sculptures provided an early-fifteenth-century radiocarbon date. A pit dug through this concentration of terracottas, itself only containing two terracottas, had a radiocarbon date in the middle of the eighteenth century. Radiocarbon dates indicated that a concentration of pottery and other objects was even more recent, although, interestingly, it contained eight ground stone axes and over thirty miniature pots.

Before the excavation took place, Owo had been recognized as a centre of artistic production with a style of its own, but the interesting thing about the terracottas from Owo is that so many of them are in the naturalistic style characteristic of the 'classical' mode of Ife; in fact the heads show the same vertical
136 scarifications and would not seem out of place if found in Ife. Yet in the same concentration of terracottas there are others, fewer in number, which not only bear the characteristic Benin tribal marks of short vertical strokes above the eye-brows, but are
137 treated in a way which would place them stylistically in Benin.

136 Owo: terracotta head excavated from the site of Igbo 'Laja. The resemblance to many Ife terracottas is striking. Ht 17.4 cm

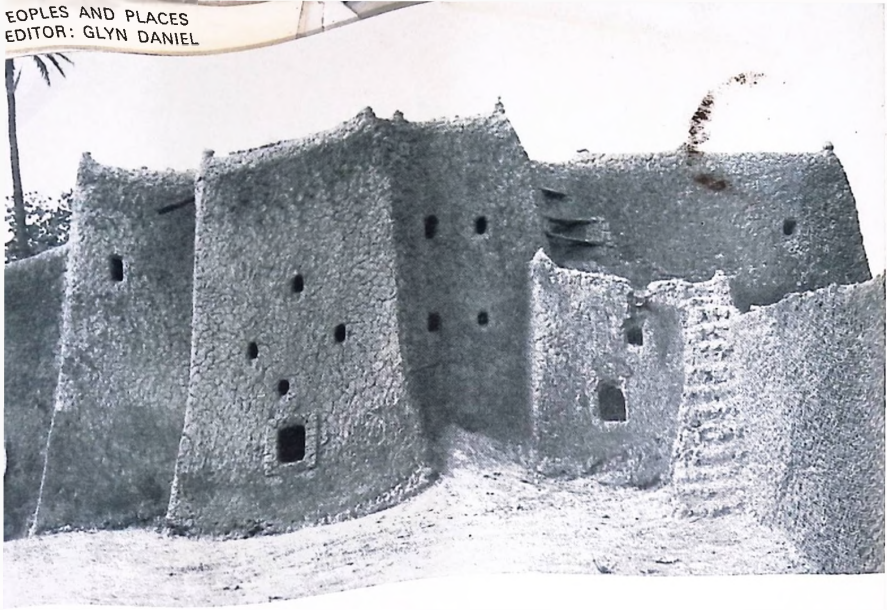
We appear to have the same situation at Owo as at Ife, of 'classical'-type terracottas produced at some comparatively remote period which, following a break in tradition, came to be discontinued; when these were accidentally encountered they were venerated and placed in sacred groves or shrines. The main concentration of terracottas at Igbo Laja is regarded as marking a shrine in such a sacred grove, with other minor foci of ritual objects. Potsherd pavements are known in Owo, and more archaeological work needs to be done there to elucidate its history and its relationships with both Ife and Benin.

137 (*opposite*) Owo: fragment of terracotta head excavated from Igbo 'Laja, showing Benin tribal marks. Ht 6.8 cm

138 (*opposite*) Owo: terracotta of male head and torso excavated from Igbo 'Laja. These terracottas were in a concentration which suggested they were protected inside a small hut; a radiocarbon date of AD 1435 ± 90 was associated. Ht 25 cm

139 Owo: two terracottas excavated from Igbo 'Laja portraying baskets, one containing fruits, the other human heads. The former is 25.3 cm, the latter 21 cm high

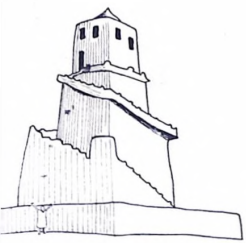
140 Owo: terracotta leopard with human leg in its mouth, excavated from Igbo 'Laja. Ht 35 cm



141 Keffin Madaki, near Bauchi, a fine example of mud architecture. It was built in 1860 by the famous architect Baban Gwani, and the interior contains a beautiful lofty domed hall. Baban Gwani had earlier designed Gidan Makama in Kano, which now houses the Kano Museum

Other early urban centres

At present we know most about the development of the early centres of political power, religious importance and artistic creativity in southern Nigeria, but this does not mean to say that there are not important early centres of urbanization in northern Nigeria. A large and important archaeological research project is waiting to be undertaken to investigate the beginnings of the Hausa states. Tradition has it that the earliest occupants of Kano and Daura were iron-workers (Crowder 1966, 44) and an iron-smelting site has indeed been excavated at the foot of the Dala Hill in Kano which yielded a radiocarbon date in the seventh century AD (Willett 1971a, 368). There are many walled towns in northern Nigeria, and some of these walls are of great size and complexity. Those of Kano, 18.5 km in circumference, are well known (Moody 1969); those of Zaria make a circuit of 18.5 km and with the Kufena link the figure is over 31 km; Katsina has 11.8 km together with the mud-built minaret of the Gobirau mosque (Obayemi 1973a). The whole subject of mud architecture in Nigeria is only just beginning to be tackled in a scientific way and is a whole subject in itself.



142 Gobirau Minaret, Katsina

The Kanuri capital of Birnin Gazargamo is well known (Bivar and Shinnie 1962) and considerable interest attaches to the distribution of similar sites utilizing fired bricks (Lavers 1971).

Limited excavation in the palace midden at Birnin Gazargamu yielded an early-seventeenth-century radiocarbon date (Connah 1971b). Archaeological work at the earlier capital of Kanem-Bornu at Njimi (outside the borders of Nigeria) has yet to be undertaken (Smith 1971, 170), and even assured identification of the site is still awaited (Crowder 1966, 39–40). Only rescue excavation was possible at Leka, probably the site of the capital of Muhammed Kanta, first ruler of the independent kingdom of Kebbi in the sixteenth century (Obayemi 1973b). At Biepi, in Jukun country in Gongola State there is an earth rampart with a circuit of over 6 km which is purported to be the ancient Kwararofa. It was investigated by a Belgian expedition for two seasons, and an early-seventeenth-century radiocarbon dating was obtained, but the once-powerful 'Empire of Kwararofa' remains as shadowy as it has always been (Crowder 1966, 45, 51; Meulemeester 1970; Meulemeester and Nenquin 1972). Archaeology has not yet found any confirmation for the Kisra

143 Birnin Gazargamu, Borno State. According to historical traditions, this was the Kanuri capital from about 1470 to 1811. The photograph shows lines of burnt bricks marking the course of the former walls

144 Gambaru, Borno State; this site lies north of Birnin Gazargamu, close to Nigeria's northern border with the Republic of Niger. It is reputed to be the site of the summer palace of Mai Idris Alooma, the ruler of Borno at the end of the sixteenth century. The photograph illustrates clearly the use of burnt bricks in building construction

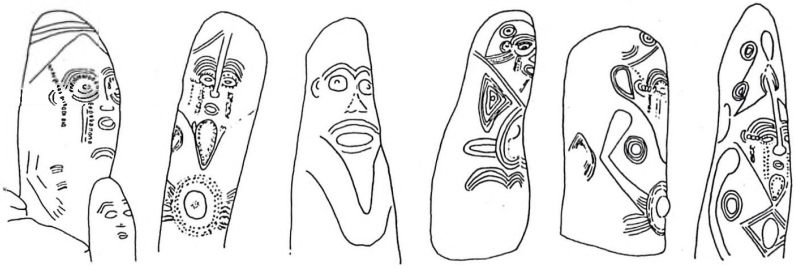
legend indicating 'a great migration from east to west in the seventh century AD' ending in Nigeria (Matthews 1950) although there is always the possibility that this legend records the arrival of a ruling dynasty (Mauny 1968; Breternitz 1975, 92–104).

10
The personality of Nigeria

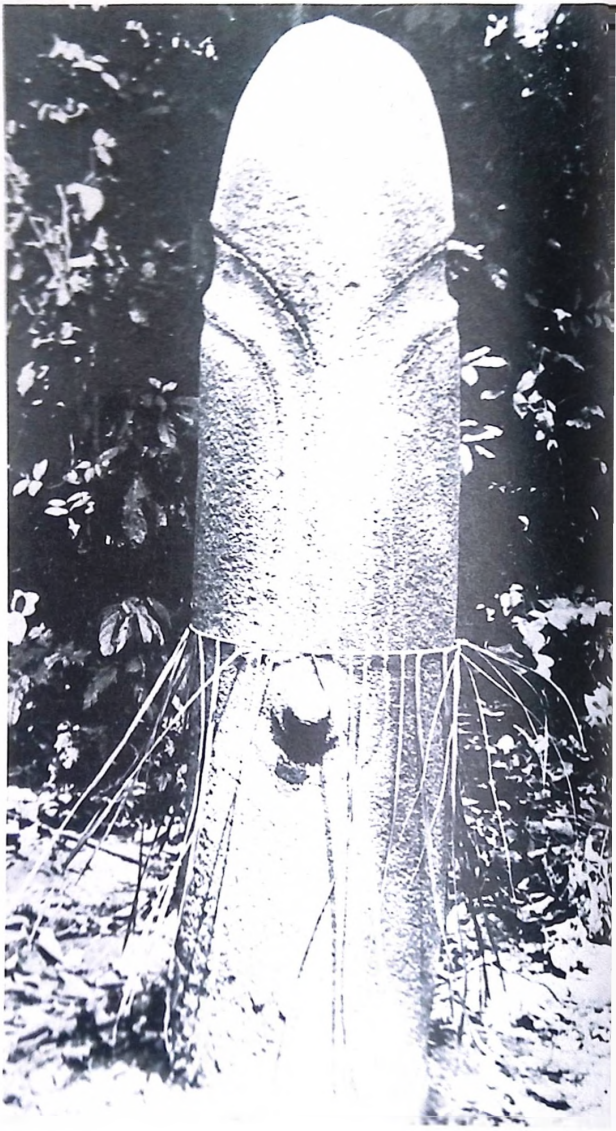
Like an individual, a country has its own 'personality'. Archaeology, by viewing a country over a long period of time, is in a good position to characterize that personality: it can see what are the permanent, what the ephemeral, factors in shaping it. These factors, mostly geographical, reassert themselves time and again, and remain the essential framework within which a people express their own individual genius.

Although there may be purely local manifestations that appear to be independent of these large formative factors, such as the Cross River monoliths (Allison 1968), we can see the great time-depth there is to many of the cultural expressions of regional differences – the North/South contrast, the 'Middle Belt' concept, the relationships with northern Africa, the differences east and west of the lower Niger, the particular situation of the Jos Plateau – all these, we have seen, are visible in the past, and make up the many roots out of which the modern nation of Nigeria has grown.

145, 146

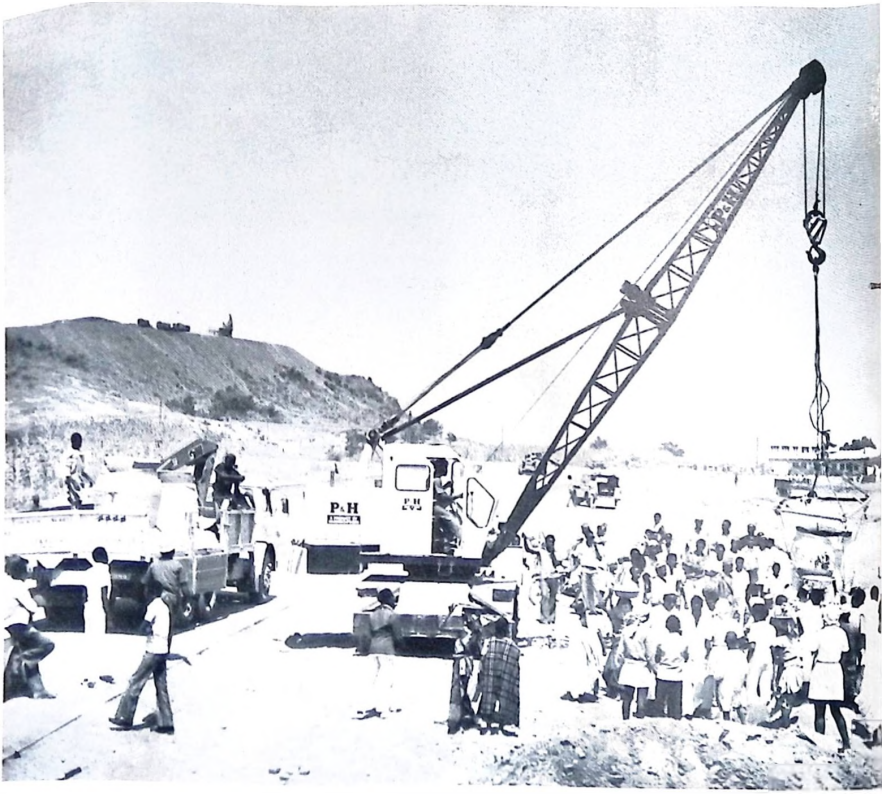


145 Cross River monoliths. These monuments range in height from a little under a metre to a little over a metre-and-a-half. (Cf. Ill. 146)



146 Cross River monoliths. These monoliths, which probably extend back into the sixteenth century, are confined to the area occupied by five sub-groups of the northern Ekoi (see Ill. 1). (*left*) Phalliform pillar near Oyengi, decorated with a palm-leaf girdle for the annual festival. Ht 150 cm. (*centre*) Anthropomorphic pillar near Manden. Ht 127 cm. (*right*) Anthropomorphic pillar, Nkrigor. Ht 130 cm

Enormous gaps in our knowledge remain: there are whole regions of Nigeria which are still virgin to archaeological penetration, there are whole centuries and even millennia which are virtually historical blanks, and many problems are unresolved. But the fact that it has been possible to attempt a diachronic summary of Nigeria's archaeology at all indicates how much has been achieved in the last thirty-five years. With the multiplication of Nigerian institutions of archaeological teaching and research, and the advent of an increasing number of Nigerian archaeologists, it should be much less than another thirty-five years before fresh knowledge makes it necessary to rewrite this account.



147 Rescue archaeology, November 1975. Federal Department of Antiquities operation at Kano-Kabuga where a new road was cutting through an archaeological site; lifting large pots for removal to the Gidan Makama Museum.

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After taking a First Class Honours degree in Archaeology and Anthropology at the University of Cambridge in 1936 Thurstan Shaw was appointed Curator of the Achimota College Anthropology Museum in the Gold Coast (Ghana). He founded the Department of Archaeology at the University of Ibadan in Nigeria, retiring from the Chair in 1974 after nearly twelve years. Professor Shaw was founder editor of the *West African Journal of Archaeology*. He has been visiting lecturer at Harvard and many other American universities. He currently teaches for the Department of Archaeology at Cambridge, and visits Nigeria for three months in the year to do field research as a Visiting Research Professor at Ahmadu Bello University, Zaria.

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