THE STATE OF RESEARCH IN ROCK ART

THE ROCK ART OF TANZANIA AND THE EAST AFRICAN SEQUENCE

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The Setting

The physical features of eastern Africa are characterized by a varied topography. The narrow coastal plain may be delineated roughly by the 200m. contour line. In parts of Somalia and Mozambique the plain is more than 200km. wide. Along most of Kenya and Tanzania its average width varies from between 30 and 60km. The present vegetation of the coastal plain is of the dry desert type in the north, becoming increasingly rich and varied as one goes south.

In some parts of Ogaden and Tanzania the sloping steppe varies between 200m. and 1,500m. above sea level and can be over 500km. wide. It is characterized by savanna and bush vegetation.

The highlands and mountain, which average between 1,500 and 3,000m. (with higher points in central Ethiopia and in the volcanos and Rift Valley area of Kenya and Tanzania), rise in peaks reaching over 5,000m. The forests of the highlands can reach altitudes of over 3,000m. and continue today to provide a rich and diversified habitat.

The two main highland regions of Ethiopia and of Kenya-Tanzania are separated in northern Kenya by the Turkana-Marsalit plateau, a dry steppe flanking both sides of Lake Turkana (Lake Rudolf).

One of the major topographical features of the region is the Rift Valley, which divides into two main branches south of Ethiopia, with several smaller sub-branches. The western Rift Valley today defines the borders of eight nations and may be considered the western limit of eastern Africa; it includes a sequence of major lakes: Lake Albert from which the White Nile flows, Lake Edward, Lake Kyaga, and Lake Tanganyika. The eastern Rift Valley crosses the Kenya highlands, from Lake Rudolf to Lake Natron.

The overwhelming majority of rock art sites in this region is concentrated in the highlands, primarily throughout the area from Eritrea to Mozambique. In Tanzania the Rift Valley splits into two further sub-branches. The western branch includes Lake Eyasi and Lake Kitangiri, reaching the numerous smaller lakes of the Singida area. The eastern sub-branch includes Lake Manyara and the Bubu River Valley. The major concentration of rock art known in East Africa is located around these two sub-branches of the Eastern Rift Valley.

The Cultural Sequence

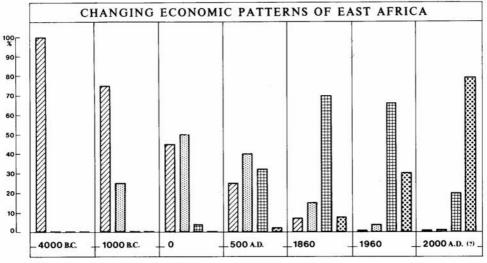
Eastern Africa, from Eritrea to Mozambique, is divided today into 10 na-

tions (Ethiopia, Djibouti, Somalia, Uganda, Kenya, Tanzania, Rwanda, Burundi, Malawi and Mozambique). Some 120 million people live in this area, speaking roughly 200 different languages belonging to five major linguistic groups (Bantu, Cushitic, Nilotic, South Semitic and Khoisan). Most groups rely on a mixed rural economy, but urban industrial clusters are growing fast. Groups based on a hunting and gathering economy are a minority, made up of only a few hundred which are rapidly disappearing. Pastoral nomads in 1960 were ca. three and a half percent of the total population and for several of these pastoral tribes hunting is still a rather important aspect of their economy. (W.T.W. Morgan, 1972).

One century ago the inhabitants of this area were divided into several thousand tribes; they spoke nearly one thousand languages, and may have numbered about one fifth of the present population. Pastoral nomads are likely to have made up over fifteen percent of the total, and groups relying primarily on hunting and gathering were far more numerous than today.

Two thousand years ago, while large zones of the region were inhabited exclusively by pastoral nomads and others primarily by hunter-gatherers, limited parts of this large territory were being colonized for the first time by agriculturists.

Four thousand years ago, hunting, gathering and shore fishing constituted the basic economy for the overwhelming part of a population which may have numbered less than one percent of the present one. Sporadic groups of pastoralists were then reaching the area from the north for the first time. Still earlier, for over two million years, human beings had lived here subsisting solely on the abundant natural resources provided by the bush and forests and the rivers and lakes.



HUNTER-GATHERERS & SHORE FISHERMEN

Changing economic patterns of East Africa. This chart illustrates the economic background in various period of its history. Hunting, pastoralism and agriculture have been the dominant activities at different moments.

[■] PASTORALISTS
■ MIXED FARMING VILLAGERS
■ URBAN-INDUSTRIAL POPULATION

Some of the world's earliest known human relics have been found in the heart of this region, primarily in the Rift Valley crossing Kenya and Tanzania, a zone of major archaeological interest because of the abundance and variety of human remains from all ages. Throughout hundreds of millennia nature has been most generous to man in this area of mountains, highlands, valleys and plains. (L.S.B. Leakey, 1936).

The rock art of central Tanzania, which includes by far the earliest evidence of artistic creativity in eastern Africa, is found within this geographical -historical context and provides, as we shall see, new insight into the history of man over thousands of years.

The data acquired through rock art must be integrated into a general cultural frame and compared with other information provided by the material culture, i.e. linguistics, ethnology and other disciplines. Before going into the details of rock art analysis, we shall consider the cultural sequence of the region.

It seem possible to follow, in eastern Africa a general development of linguistic, cultural and social patterns. For several thousand years the trend developed into cultural and linguistic fragmentation. Each tribe tended to assume its own characteristics and to acquire marked cultural and social connotations of its own.

When the Bantu speaking people entered this area some two thousand years ago, they were likely to have spoken two main and very similar dialects of one language. One hundred years ago their offspring spoke over 900 languages deriving from the same basic stock. The Khoisan speaking people of this area probably spoke one language consistently until three or four thousand years ago, but by one hundred years ago, each small group had developed its own language and one tribe could hardly understand the other. ed the specific characteristics of restricted human groups. In addition, beliefs and religious practices had become extremely circumscribed. Such elements are further evidenced by rock art patterns which became differenciated and geographically circumscribed in the latest phases.

In contrast to those relatively late developments, it is noteworthy that several thousand years ago the very earliest phases of rock art reflect rather homogeneous patterns over a very large area, which may have included the entire southern part of Africa, from Tanzania to Namibia.

Until two generations, ago it was quite easy to associate the basketry, pottery and other crafts, with specific cultures, since each tribe had its own peculiarities. Numerous aspects of cultural identifications, from body decorations to the design and structural components of huts and villages, reflect. The process of cultural fragmentation appears to have followed a sort of geometric progression ultimately reaching extremely localized patterns. But despite whatever may appear at first glance, the rapid process of cultural fragmentation seems to be a rather recent phenomenon, having started as a persistent and progressive pattern, no more than four or five thousand years ago. One of its primary causes is likely to have been the arrival of foreign peoples, probably the first bands of pastoral nomads, which created serious cultural differentiations in the area, and stimulated the search for ethnic identity and local changes in the autochthonous groups.

The process has reversed its trends in the last two hundred years or so. Trade the colonial adventures and the intense proselytism of the alien religions such as Islam and Christianity, are probably among the main reasons for the geographic expansion of habits and the unification of cultural patterns. The birth of national governments has contributed to an even faster unification of linguistic, cultural and social patterns, producing sociopolitical areas defined by geographic boundaries rather than by ethnic identities.

Such dynamic patterns are well illustrated by rock art. We shall see, for example, that at first the rock art of the Bantu-speaking people was rather uniform and homogeneous some two thousand years ago, while in later phases it became more and more diversified by geographical provinces. These may well represent tribal areas, each with its own cultural habits, beliefs and practices.

At the beginning of our era we can detect three main stylistic groups of rock art being produced at the same time in adjacent areas. We shall see how we can demonstrate that at this time three kinds of human groups lived in this territory, each maintaining its own social, economic and conceptual autonomy. One of these groups produced rock art typical of hunting societies, the second, of pastoral societies and the third one of incipient agriculturalists. Going further back in time, we find records of the occasional arrival and temporary coexistence of different people. But the stylistic succession is more and more homogeneous throughout the entire area, showing that the further we go back in time, the more widespread are cultural patterns. In the early phases of the sequence, we shall detect surprinsingly large geographical areas with an homogeneity of style, subject matter and conceptual motivations. At the very beginning, the whole of southern and eastern Africa, from Namibia to Tanzania, produced rock art just in a few, sporadic spots that we know of, but all show the presence of the same elementary style and conceptions.

Review of Rock Art in Eastern Africa

Rock art is widespread both in northern and southern Africa. The mountain ranges of the Atlas, Hoggar, Tassili, the Tibesti, and the Ennedi in the Sahara, and those of the Drakensberg, the Cape, and the Brandberg in the south, are among the richest regions of the world in such early expressions of human creativity and imagination. The tropical forest regions of central west Africa are, on the other hand, not renowned for this aspect, (R. Bayle des Hermens, 1984). They are instead the focus of an exhuberant creativity of plastic art: masks, figurines, carved and painted decorations on wood and clay, bone and metal artifacts. But there is no reason to believe that the present knowledge of rock art in this region reflects the paucity of this means of expression, rather it most probably is indicative of the current state of exploration.

The eastern part of Africa, from Eritrea to Mozambique, has so far revealed a scattered distribution of rock art zones with a major concentration in central Tanzania.

A classification of the material published was carried out, taking into account the following criteria:

- 1) Subject matter
- 2) Patterns of association, compositions and scenes of related figures
- 3) Stylistic characteristics
- 4) Techniques of execution, tools and colouring materials
- 5) Location of sites and position of rock art in each site

Such analysis has stressed the presence of the basic conceptual differences in rock art assemblages, indicated primarily by the first two considerations enabling a subdivision of the rock art into categories according to the mai economic activity of the artist's society.

These categories fall into four major horizons:

- A1) Hunting and Gathering; early (HGE)
- A2) Hunting and Gathering; classical and late (HGL)
- B) Pastoral (PA)
- C) Farming and Mixed Economy (FM)

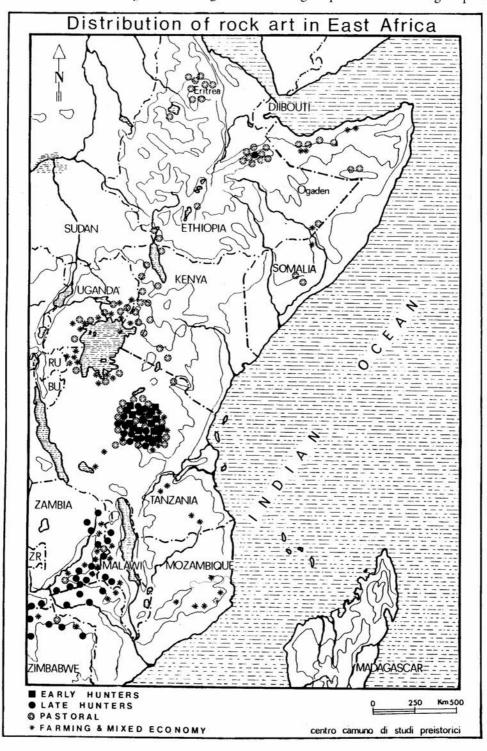
Despite some ambiguous cases and occasional exceptions, the large majority of assemblages presently known in eastern Africa, has shown the following recurrent preferential assemblage characteristics:

Horizons	Main Subject matter	Associations compos. & scenes	Stylistic characteristics	Techniques of execution	Choice of location
A1 (HGE)	Wild animals and ideograms	Associations	Naturalistic generalized	Paintings	Vertical rock surfaces
A2 (HGL)	Humans and wild animals	Scenes	Naturalistic realistic	Paintings	Vertical rock surfaces
B (PA)	Domestic animals and humans	Scenes	Realistic	Paintings and engravings	Vertical and oblique surfaces
C (FM)	Patterns symbols and schemes	Compositions and scenes	Schematic and abstract	Paintings and engravings	Roofs, floors wails: vertical oblique and horizontal

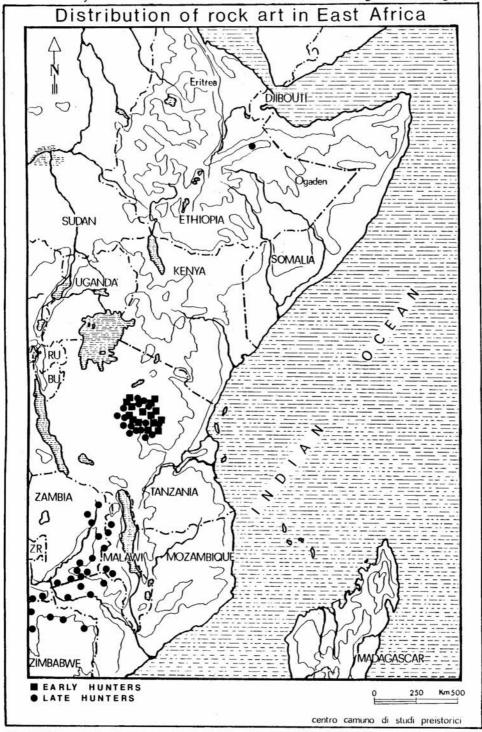
Within each of the major horizons there are variants, and a systematic analysis leads to further differentiations. As we shall see in the following pages, within the range of the Hunting and Gathering series, there are rock art assemblages which indicate a prevailing gathering economy, with very little or no concern for hunting. Other assemblages reveal a prevailing interest for fishing. Undoubtedly, the mosaic of patterns is quite varied. A more detailed subdivision has been established for central Tanzania, which is the specific area of concern of the present study. However, for the purpose of a general survey of the entire eastern Africa sub-continent it was determined that a schematized classification was needed in order to create a basic layout.

In Kenya and Uganda the reported sites so far number less than forty (J. Adamson, 1946; J.R.F. Bower, 1973; J.H. Chaplin, 1974; R.M. Gramly,

1971, 1975; A.T. Matson, 1962; O. Odak, 1977; M. Posnansky & C.M. Nelson, 1968; L. Robbins, 1970; R.C. Soper, 1968). In central Kenya, the western highlands, the area surrounding Mount Elgon and that close to Lake Rudolf, almost every site belongs to the PA group while the FM group is



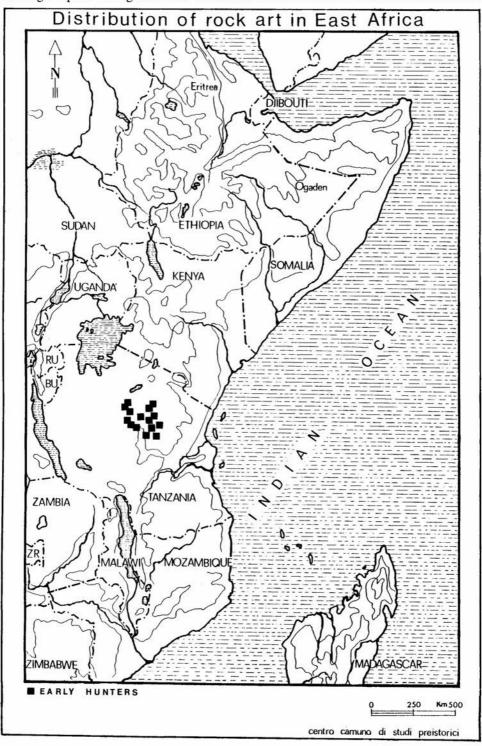
found, either isolated or overlapped, in at least five sites. So far, only the last two horizons of the rock art classification system are represented. In the vicinity of Lake Victoria and in the Victoria Nile region, as in Uganda,



Figg. 6-7-8
These three maps illustrate the spread

of the custom of producing rock art in East Africa.

various rock art assemblages reveal an original character. They show similarities to other groups of rock art from Tanzania, near the western and southern shore of Lake Victoria, and include figures of canoes, fish and fishing traps. Fishing is one of the most well-documented ecomonic activities



in the area. We have considered the possibility of placing these paintings in a distinct category and this might be a step taken in the future. For the purpose of the resent research, however, as no parallels to such types of rock art are known in central Tanzania and as they undoubtedly reveal a mixed economy, they have been classified in the FM group. In Kenya and Uganda, purely HG rock art has not yet been reported (L.H. Robbins, 1970; 1972).

In eastern Africa, Tanzania is the richest country in rock art. It is most heavily concentrated in the Central Highlands area where some 330 sites have been reported, out of which ca. 200 have been recorded so far, including over 550 decorated rock shelters and caves. A second area of concentration is the western and southern shore of Lake Victoria with about twenty sites. Elsewhere in Tanzania only sporadic sites have been reported, in the Kilimanjaro district, the Usambara Mountains, the Ukimbu district, near Nachingwea, and at Masasi in the Mtwara district. So far, these sites scattered all over Tanzania number less than twenty, while altogether some 370 rock art sites are know in Tanzania. (R.D.H. Arundell, 1936; F.J. Bagshawe, 1923; F.H. Bower, 1973; J.H. Chaplin, 1974; J.D.H. Collison, 1970; H.A. Fosbrooke, 1950; L. & M. Kohl-Larsen, 1938; id. 1952; H. Sassoon, 1972; R. Wright, 1961).

For the purpose of this survey it is worth stressing that the Hunting-Gathering rock art is concentrated in the Central Higlands. Elsewhere in Tanzania, and indeed all over eastern Africa, the sites belong either to the PA or to the FM groups. Near the shores of Lake Victoria a few fishermen's art sites are known with figures of fish, nets, fishing traps and canoes, as well as at Bwanga, Rukurongo near Bukoba, at Kikongo, and other nearby sites in the Mwanza district (J.H. Chaplin, 1974).

In central Tanzania, out of over 200 sites recorded, only two are of rock engravings; in three others there are rock engravings as well as rock paintings. Paintings predominate in this area of rock art. In other zones, rock engravings are sporadic; most of them appear to belong to the FM group and to have been executed quite late in time.

Further south, in Mozambique, rock art is little known. Fourteen sites have been reported so far (J.R. Dos Santos Junior, 1955; 1961; A.F. Marques Pereira, 1966). Most are paintings and belong to the PA group with overlappings of the FM group. There are figures of wild animals, but the style and the associations probably indicate that most of them illustrate hunting as a subsidiary activity of pastoral communities.

Some sites, at Chinhamaperevila de Manica and at Vumba, appear to be the products of very late hunters, showing affinities with Drakensberg and Lesotho paintings and likely to be connected to relatively recent San hunters. The Samo area, in the Tete district, has very interesting paintings, some of which most probably belong to a rather early phase of the HG group. But the few photographs published so far are not sufficient for a thorough evaluation.

Malawi is rich in rock paintings (P.A. Cole-King, 1973), mostly belonging to the PA and FM groups, and some sites may include figures of the HGL group. Again, the few published illustrations are insufficient for evaluation, though it is not unlikely that the San rock art province reached that area. Only further west, in Zambia, is the HGL group represented with some consistency, as at Katolola and a few other sites. It appears as a marginal

province of Zimbabwean rock art which is strictly related to southern African 'Bushman' rock art, but this is beyond the scope of this brief survey of eastern Africa.

Further to the south-west in Zambia and Zimbabwe, early hunting and gathering art may be present, as early phases of the so-called 'Bushman' sequence. To the north, HG rock art which is clearly and certainly of an early phase appears in the Ennedi and Tibesti ranges of Tchad.

Between these extremes, the general picture from eastern African rock art is that, at present, the only region in which hunting and gathering rock art is copiously represented, is the Central Highlands of Tanzania. Outside this area, the great majority of paintings and engravings belong either to the Pastoral (PA) group or to the Agricultural and Mixed Economy (FM) group. The image which emerges indicates that before the introduction of pastoraism in the considered geographical area, central Tanzania was a sort of island of intensive artistic creativity, in the middle of a very extended territory where no such artistic remains have been detected.

Such a geographical-historical situation could well imply that central Tanzania was a fairly autonomous center of early artistic creativity.

This consideration becomes particularly significant in view of the great antiquity to which the earliest central Tanzanian rock paintings are related. Many queries arise concerning the origin and development of this long, rich and diversified rock art cycle. We can already say that this sequence provides a documentation of paramount relevance to human history in this region of the world, and represents a cultural heritage of universal value.

History of the Discovery.

The rock art of central Tanzania has not yet been fully discovered. Only now are we beginning to grasp its significance in relation to world history and to the world's cultural heritage. It is still almost ignored in the general history of Africa. Often it is seen as an undatable 'curiosity' by old-fashioned archaeologists, and until recently was considered unimportant by most of the Tanzanians themselves. The record of visitors, which is kept at Kolo, shows that since 1959 between 120 and 400 annual visitors have come to see the sites, with peaks of 616 people in 1972 and of 562 in 1973. Obviously this cultural patrimony is as yet little known and has not been given the importance it deserves, despite the keen interest of several archaeologists and the constant concern of the Department of Antiquities. And yet it appears to provide one of the longest uninterrupted chronological sequences of artistic creativity in the world.

As we shall see, it is likely to include the earliest paintings known in Africa and perhaps in the world, and provides unique documentation of man's way of thinking, his intellectual achievements, the imaginative world and cultural changes which took place in the societies of eastern Africa during the last 40,000 years. The art is still alive, and it can be traced back and related to present-day populations, the creators of the latest part of this human cultural heritage. Eastern Africa should not be deprived of the consciousness of such an important patrimony, which is the rich constitution

of its history as a creative and imaginative province of the kingdom of Homo Sapiens.

Tanzanian rock art has always been known by the local population. For example, Gallege, chief of the Yranga tribe, received reports of the painted rock shelters in the Nyrange territory from oral teachings transmitted through 14 generations of chiefs, ever since his tribe reached that territory in the 17h century. Every initiated member of a tribe is expected to know all the details of whatever exists in the tribal territory and therefore is familiar with the painted sites of the region.

European written documentation began much later. The earliest European to have reported Tanzanian rock art appears to have been Karl Peters, about

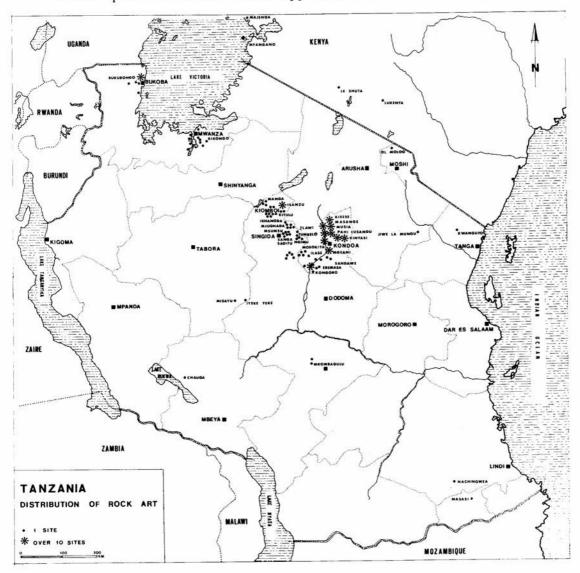


Fig. 9
This distribution map illustrates the Great concentration of rock art in the

Kondoa and Singida districts and indicates the other sites of rock art scattered over Tanzania. one century ago (1891). German missionaries recorded the presence of paintings in the Bukoba region, west of Lake Victoria, at the beginning of this century and were aware of the existence of painted shelters in the Singida region. But the first effort to examine the works is only just over sixty years old, when F.J Bagshawe (1923) published a paper in Man, entitled 'Rock Paintings of the Kangeju Bushman'. The first study in depth came a few years later and is the work of another British explorer, T.A.M. Nash, which was also published by the Anthropological Society: 'Notes on the Discovery of Some Rock Paintings near Kondoa Irangi in Tanganyika' (JRAI, 1929). Others simply mentioned the sites briefly in their articles describing the work as 'a puzzling curiosity' (Julian Huxley, African View, 1931).

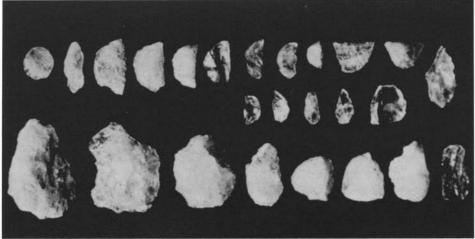
By the early 1930's several scholars had already visited central Tanzanian rock art and were researching it. Two papers by A.T. Culwick appeared the same year (1931 a & b). L.S.B. Leakey explored several sites, but only some years later (1936) did he come out with the first attempt at stylistic classification in the basic book Stone Age Africa. The same year R.D.G. Arundell published a lengthy description of rock paintings in the Bukoba district (JRAI, 1936). Ludwig and Margit Kohl-Larsen were pioneering eastern African exploration at the time, and shortly thereafter produced the classical Felsmalereien in Innerafrika (1938). By then a great deal of material was available for study and close examination, but only now is the research evolving into comprehensive and thorough studies. Some years later the Kohl-Larsen couple produced another book reconsidering their finds (1952). In their two books the Kohl-Larsens provided a valuable corpus of information and interpretation, and now finally some of their evaluations are being fully considered. Several of the sites they discovered have not yet been visited again or even located on a detailed map.

In the dark period of the Second World War, the rock art of Tanzania was temporarly forgotten; and only in the late 1940s did L.S.B. Leakey, H.A. Fosbrooke and others further the exploration. The results emerged in 1950 in Vol. 29 of *Tanganyika Notes and Records* which is almost entirely devoted to central Tanzanian rock art.

With their work Mr. and Mrs. Fosbrooke produced a major contribution to the knowledge of this province of rock art. L.S.B. Leakey further developed a theoretical scheme of styles and evolution which few scholars retained but which stimulated a discussion on chronological matters. Leakey was convinced of the great antiquity of this art while other students tended to consider it an ethnographic, rather than an archaeological, concern.

The discussion reached its peak when R. Inskeep, at the 1960 Panafrican Congress of Trevuren, Belgium, presented a report on 'The Age of Kondoa Rock Paintings in the Light of Recent Excavations at Kisese II Rock Shelter' (1962). He made a poor attempt to relate rock art to material culture, reaching the conclusion that '....the age of some if not all of the Kondoa paintings should be measured in centuries rather than millenia'. Leakey's commentary followed as soon as Inskeep ended his lecture, stating flatly that '....the earliest (Kondoa paintings) go back to the Middle Stone Age'. Few scholars then accepted Leakey's view, but shortly thereafter a series of C. 14 datings from Inskeep's own excavations at Kisese became known





painted rock shelter, at Kirungulempepo II. ters in the Kondoa district.

Fig. 11 Stone implements at the entrance of a Stone implements from painted rock-shel-

(H. Sassoon, 1968). One of the layers just below the west painted wall was dated 20,530 B.C. and, further down, another provided a date of ca. 27,000 B.C. Remains of ochre 'pencils' and other evidence of coloring materials were found in several strata, all the way down to level 17 which is nearly 30,000 years old. (M. Leakey, 1983, pp. 22). More recent discoveries from South Africa, mainly from the Apollo 11 Cave in Namibia, indicate exactly how sound Leakey's intuition was. (W.E. Wendt, 1976).

After the Inskeep excavations in the Kondoa District other excavations were undertaken in rock art sites of central Tanzania. S.E. West dug at the sites of two rock painting shelters in the Kondoa area (1964); and K. Odner (1971) excavated at the very important rock art site of Lululampembele, unearthing a sequence which again covered most of the Late and Middle Stone Age. More recently F.T. Masao, director of the National Museum at Dar es-Salaam, excavated several sites, four of which have been now published so far (1979). An overall view of the rock art of Tanzania is now available in Mary Leakey's beautiful color book Africa's Vanishing Art (1983).

The issues of dating and of correlations between styles and phases of rock art, as well as the archaeological horizons of material culture, are still controversial. Yet today the amount of material known, the quantity and quality of documentation from various archaeological, palaeo-climatic, palaeo-botanical, environmental, geological and sedimentological fields, may provide a good basis for analysis (E.M. Van Zinderen Bakker, 1962; 1972).

Today there are around 370 reported sites of rock art from Tanzania, out of which nearly 330 are in the central highlands where almost all the rock art of the Hunters groups is concentrated. Elsewhere the published sites contain either Pastoral rock art (PA) which cannot be earlier than 'Pastoral Neolithic'; or Iron Age rock art reflecting a mixed farming economy (FM) which cannot be earlier than the beginning of our era. In the Bukoba region there is an assemblage of rock paintings which may indicate a mixed economy with the presence of fishing. Its dating still demands a complex and thorough evaluation.

The central highlands of Tanzania are at present the major area of rock art in eastern Africa, from Eritrea to Mozambique, and the archaeological data collected so far is such as to provide the necessary tools for a comprehensive study. Its unique concentration of sites and different styles are difficult to explain at first sight.

The Chronological and Stylistic Sequence of Rock Art in Central Tanzania

Several authors have already attempted to identify stylistic and chronological phases in the rock art of central Tanzania, and two main approaches have emerged. One of these, from a stratigraphic perspective, is represented primarily by L.S.B. Leakey (1950, pp. 15-19); the other, of a more ethnological nature, has been assumed by P.M H. Fozzard (1959, pp. 94-100), K. Odner (1971, pp. 151-198), and F.T. Masao (1979, pp. 252-254).

Leakey was the first in eastern Africa to recognize the importance of superimpositions in rock art paintings in order to establish their relative chronology, and to stress the antiquity of the early phases, which he attributed initially 'to the closing stages of the Palaeolothic and Mesolithic times' (1950, p. 15) and subsequently 'to the Middle Stone Age' (1962: comments on R. Inskeep's paper at the Panafrican Congress in Trevuren, Belgium, 1960).

Already in 1936 he had undertaken a thorough stratigraphic study, publishing a tentative sequence of superimposed styles (L.S.B. Leakey, 1936). In the Kisese Cheke area (Sites A 1-17) he distinguished 'at least' 13 phases, while

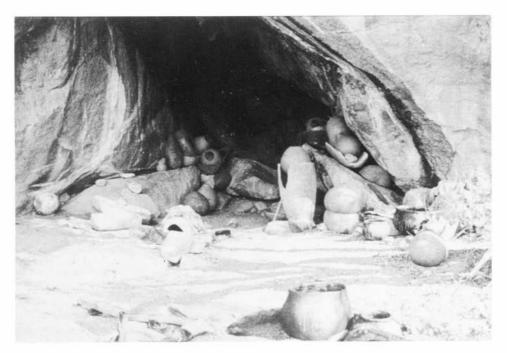




Fig. 12
A rock shelter at Kongoro,
Snadawe hills, which is still
in use today. Wooden mortars
and vessels of calabashes in
background are traditional elements of the Sandawe material
culture. The pot in front is
used to make beer and was
probably traded in a 'Bantu'
agricultural village.

agricultural village.
Fig, 13
The rock shelter of lende. In
front of a painted rockshelter
with ancient figures, an offering pot has been lied down
in recent times.

at Mungomi Wa Kolo (B1) (during later research in the 1940s) he recognized a sequence of ten phases (1950, pp. 17-18), which were further elaborated in a subsequence study in 1957. Some of his evaluations have been substantiated by our more recent analysis. Leakey proposed a succession of stylistic elements but made no serious attempt to understand the sequence in historical or archaeological terms. However, his intuitions were revealing and his observations have been very useful as a starting point for continuing analysis.

The second method of approach tends to disregard stratigraphy. Masao

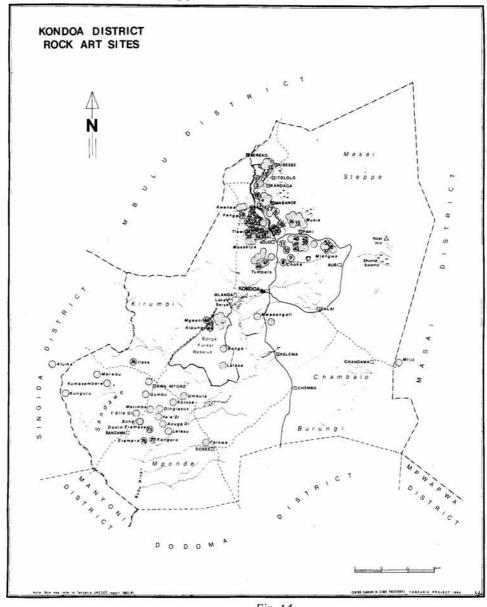


Fig. 14
Distribution of the rock art sites in the Kondoa District.

states that 'The order of superpositioning is so inconsistent that, other than the white semi-naturalistic style which in all cases overlies every other style, no general statements can be made about the relative age of the others (Masao, 1979, pp. 253-4). Masao proposes a sequence of four phases and relies primarily 'on the basis of pigment used, and on scenic association', insisting on 'the lack of any consistent order of superpositioning'. His last two phases concern the 'Late-White Bantu Style', which all researchers agree to be the latest.

His two earlier phases support his hypothesis that a horizon of coarsely

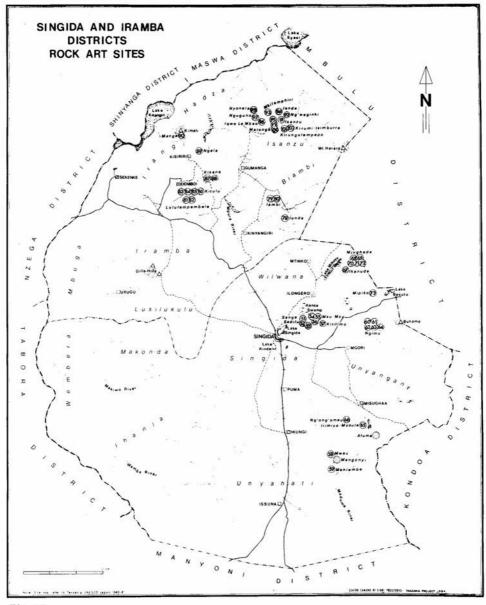


Fig. 15 Distribution of the rock art sites in the Singida District.

conventionalized and schematic human figures and of filled-in animal figures may be earlier than the bulk of the finer depictions with outlined patterned figures. Both phases primarily use a red colour, although in phase I 'the pigment varies from vermillion to scarlet red'; and in phase II 'red is the dominant colour, but a few examples of brown and white are also found'.

Some scholars are unable to see a consistent sequence of styles, but none deny that many different layers of painted figures overlap each other in numerous caves and rock shelters. Most scholars today agree that the rock art sequence of central Tanzania covers a time range of many millenia. The 'Late-White Bantu Style' alone, the most recent of the series, covers the last two millenia in its various phases. Prior to that, pastoral peoples left their marks on rock surfaces and earlier still, a very consistent sequence of superimposed styles and phases reflects the presence of hunting and gathering groups.

Out of over 200 decorated surfaces that we examined during a UNESCO Consultancy research trip in 1980, at least thirty-eight had more than ten well-diversified stylistic horizons of hunter-gatherer art, and in five sites over twenty horizons were identified. The specific characteristics which distinguish these various styles are quite consistent over the central Tanzanian highland area, with some variations between the Kondoa and the Singida districts. They indicate differences from one period to another in subject perception, choice of subject matter, significance of details, association of figures, and in the beliefs, practices and activities depicted. Also, the choice of animal species represented differs consistently from one phase to another.

All of this material has been catalogued and described in the course of the last four years. It is presently in the process of being analyzed, and detailed chronological sequences are emerging. Generally speaking, each of these phases and styles may be assigned to one of six major horizons which appear to reflect periods in the local rock art sequence. They show substantial internal homogeneity of elementary characteristics and are consistent with the basic subdivision into the four previously mentioned categories of East African rock art, and indicate six different ages in the history of man in East Africa.

Starting from the latest and uppermost, these major stylistic horizons are:

- 1) Late-White Bantu (FM)
- 2) Pastoral (PA)
- 3) Stone Bowl Culture (HGL?)
- 4) Late HUnters (HGL)
- 5) Early Gatherers (HGL/E)
- 6) Early Hunters (HGE)

Following this general stratigraphy, starting from the uppermost or later phases and going down to the earliest ones, an extremely interesting spectrum of cultural evolution is emerging.

The Late-White 'Bantu' Style

The most recent period consists of schematic and geometric depictions.

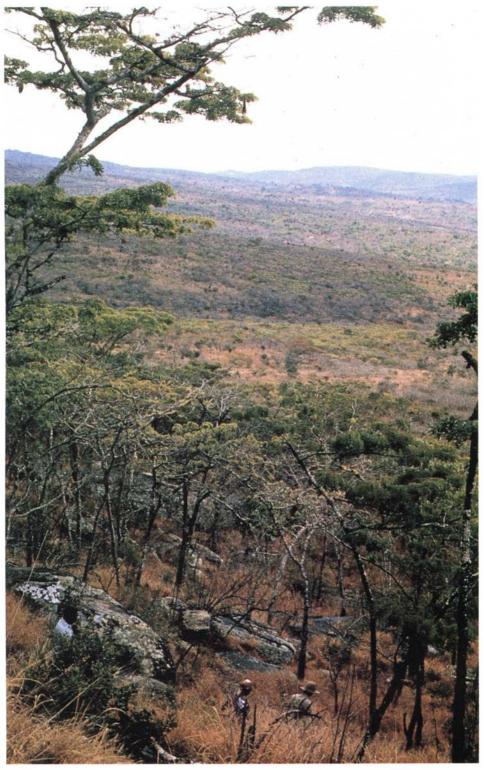
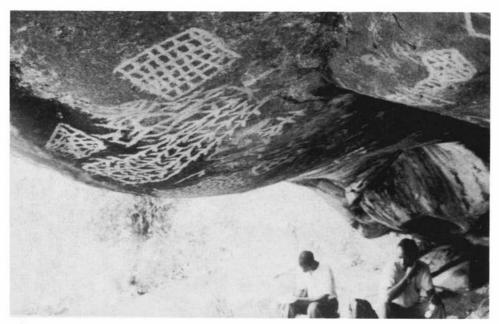


Fig. 16 landscape of the area with the major Mongoni Wa Kolo, Kondora. A typical concentration of rock art.



Figg. 17-18
Pahi Lusangi. A type site of the Late-White 'Bantu' Style.

Colours: White or 'dirty-white' is the dominant colour. Other colours are used sporadically (mainly yellow, pink, and black).

Subject Matter: The bulk of depictions is made up of shapes and geometric motifs, and includes rectangles, discs, astral and solar shapes, snake-like and zig-zag lines, series of parallel lines and hand stencils. Numerous animal depictions represent primarily domesticated animals: goats, sheep, oxen. Some groups of animals are quite large and in at least three cases amount to over 100 figures. Wild animals appear frequently as 'monsters' rather than as hunting game; they include snakes, alligators, giant lizards and predatory birds. Occasional figures of giraffes and antelopes are also present. Human figures are common; they are depicted both singly and in pairs, and frequently in connection with animals. Groups of several human figures together are rare. Anecdotal scenes are uncommon. Representations of weapons and tools include axes, bows and arrows, spears and hoes.

Economic and Social Background: This style reflects a mixed farming economy. From oral traditions we know that many of the caves containing this style were - and some still are - sacred places with various social and religious uses: such as performances associated with initiation training, meeting places of secret tribal societies, places of worship to ancestral spirits, etc.

Internal Subdivisions: Five main phases within this period have been detected in a chronological sequence, showing a gradual trend toward further schematization in the later phases. It is worth mentioning that there is a great deal of stylistic and contextual homogeneity in the early phases, while in later phases we recognize a growing differentiation in subject-matter and

style according to geographical areas. Each ethnic group seems to have developed its own characters and concerns until, in the later phases, such characters become rather extreme.

Chronology: This style is connected with traditions of the Bantu speaking people. It is widely distributed over large sections of eastern Africa, Zambia, Zimbabwe and South Africa, and shows specific sub-styles with geographical and tribal distinctions. The latest phase can probably be referred to ca. 200 years ago or later. The five phases of this style cover the entire duration of

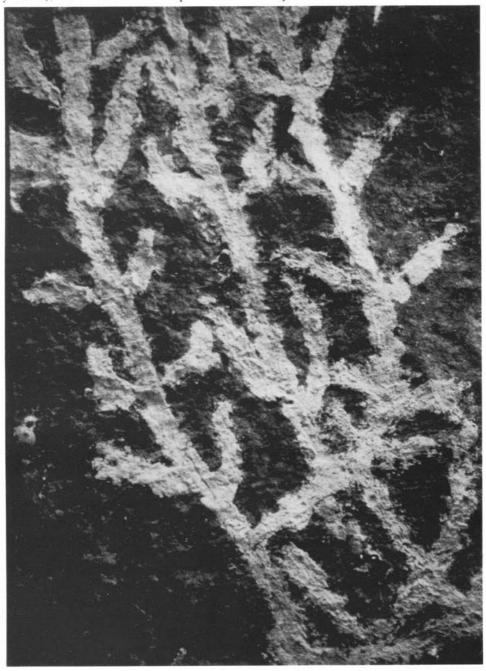
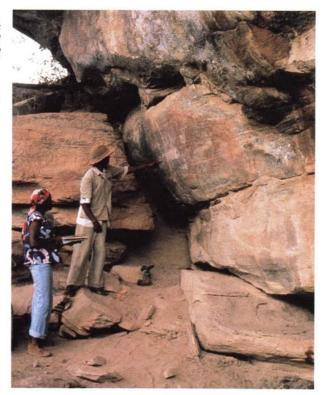


Fig. 19 Mungoni Wa Kolo. The panels of rock paintings are defined by cracks and by the natural shapes of the surface.

Fig. 20 The entrance of the painted cave at Itololo.



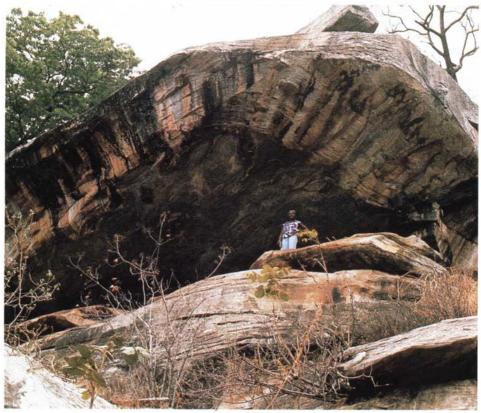
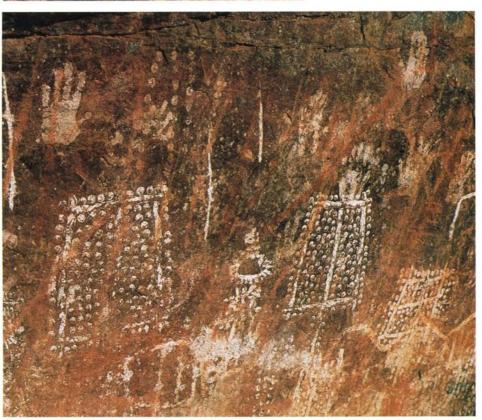




Fig. 21 Two phases of the 'Late White' style at Pahi Lusange are recognized by the different shade of the paint.

Fig. 22 Kandaga. Several phases of the 'Late White' style are present on this surface. The orange lines are also quite late, while earlier paintings in red and brown are detectable all over.



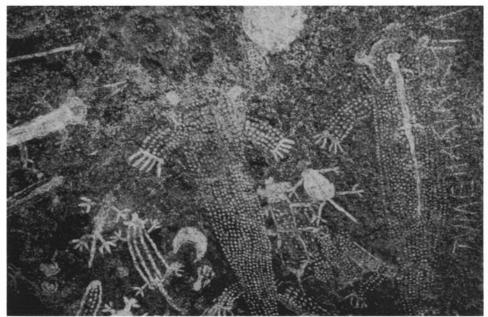


Fig. 23 Several early pahses of the 'Late White' Two early phases of the 'Late White' style are present at Erimiya Musule. style overlap earlier paintings in red and Several superimpositions allowed to es- brown. tablish a sequence of sub-phases in this site.

Fig. 24

Bantu presence in central Tanzania from the time of their arrival some 2,000 years ago.

The Pastoral Style

In several sites, the White-Bantu style overlaps assemblages of realistic Pastoral rock paintings. The style is quite coarse and most of the figures are small. It is rare to find very elaborate or well-designed assemblages within this horizon.

Colours: The main colours used are black, grey, and a sort of green-grey, , which is likely to represent an altered pigment originally darker than today.

Subject Matter: The main subject represented is domesticated cattle, some of which are zebu or humped cattle. Large herds are occasionally depicted. A few weapons and tools, primarily consisting of spears and shields, are also represented. Some non-figurative signs seem to be tribal marks.

Economic and Social Background: These depictions are the artistic expressions of nomadic pastoral groups. Most of the caves where such a style is present were probably used as living shelters for both men and animals. Usually these figures are found in rather large caves having various openings allowing substantial light and ventilation. Most of this art appears to be merely descriptive; and we have not yet located any assemblages which might have had deeper religious or conceptual motivations. In several cases the figures seem to have been made by pastoral tribes as statements of presence or possession of the site.



Internal Subdivisions: Three phases of this style have been identified. Humped oxen appear in all three, although they are most common in the later phases. In the earliest phase the horns of the animals are emphasized, probably reflecting species with very large horns.

Chronology: Stratigraphy and alternate overlappings indicate that the last phase of this Pastoral art was contemporary with the early phases of the Late-White Bantu style. As a working hypothesis we place the bulk of this Pastoral style in the first millenium B.C., also considering the possibility that it might have begun somewhat earlier and persisted into the beginning of our era. In its later phases the Pastoral style certainly coexisted with the 'Bantu' art.

The general impression is that this style is connected with similar assemblages in Kenya and Ethiopia and may have been brought from the north in to the area by people who originated in these regions.

The hypothesis that this style may reflect early waves of Nilotic people cannot be confirmed or dismissed. Interesting stylistic and thematic parallels with Saudi Arabia may raise some puzzling queries (cf. E. Anati, 1972, vol. 3, p. 64).

The Stone Bowl Culture Style

A rather specific style can be distinguished by the predominance of large animal figures, some of which are over 2m. long, and are made of homogeneous painted surfaces, giving the impression of animal-shaped shadows. The colour is flat, and the shapes are heavy and lack details.

Colours: The colours consist of the earth or mud taken from the immediate vicinity of the cave, and thus range from brown, brown-grey to grey. In



several cases it is clear that the coloration was made by splashing handfuls of mud onto the wall and then smearing it and marking the outline with a finger dipped into the mud.

Subject Matter: So far, only animal figures have been attributed to this particular style. These include a few giraffes and some wild caprines. The most common animal depicted is the elephant, which frequently appears in a central and prominent position and is much larger in dimensions than the other figures. This gives the impression that the elephant might have had a special significance in the minds, and perhaps the conceptual world, of these artists.

Economic and Social Background: In several cases this style was found in caves where tombs and material culture remains related to the 'Stone Bowl Culture' were found. This culture, which is well-known all over northern and central Tanzania, is characterized by heavy, thick bowls made of stone. The same people also made pestles, polishers, grindstones and a variety of other polished stone tools. Their material culture also includes pottery vessels with impressed decoration, bone points, eggshell beads, and a rather elaborate stone industry characterized by blades, burins and scrapers, microlithic crescents and triangles. In addition to the local quartz, they also used obsidian and flint which sometimes appears to have been brought from far away. The Stone Bowl Culture economy has sometimes been defined as 'Neolithic', but this term is not fully appropriate. They were hunters and incipient farmers-collectors, who had a series of well-developed tools to grind cereals and vessels in which to cook liquids. In fact from some of their containers it seems that they prepared a sort of beer or other alcoholic beverage. Now we also know that they produced their own particular style of rock art which seems to be connected, a least in some cases, with burial grounds.

They devoted particular care to their dead. The burial mounds and structures

Fig. 25

Two phases of the Pastoral style showing schematic figures of oxen with exaggerated horns. Some are humped bovines.

Fig. 26

In the lower part of the photograph three phases of 'Late White' paintings are found in a superimposed series. A the centre two animal figures are painted in 'dirty white' and have a thin brown outline. On the upper part of the photograph two giraffes depicted with flat smearing of brown mud, are likely to belong to the 'Stone bowl culture'.

Fig. 27

Fenga Hills. This panel displays a sequence of seven phases, belonging to the 'Late Hunters' style, and one phase of the 'Early Hunters' style.





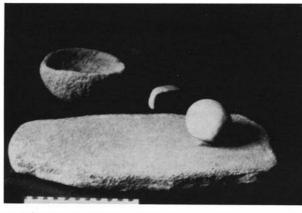


Fig. 28
Objects of daily use of the 'Stone Bowl culture' in the Archaeological Museum at Dar es Salaam.

at Njoro River Cave, Ngorongoro Crater and elsewhere in northern Tanzania are especially original expressions of their culture and beliefs (M.D. Leakey & L.S.B. Leakey, 1950 b; M.D. Leakey, 1966; H. Sassoon, 1968 b).

Internal Subdivisions: No sub-phases have been distinguished so far within this style.

Chronology: The precise duration of these people's presence in central Tanzania is not known. Further north, in northern Kenya near Lake Rudolf and in Ethiopia near Lake Besaka, their presence goes back at least to the middle of the third millenium B.C. (L.H. Robbins, 1972). They seem to have expanded further south into northern and central Tanzania in the course of the second millenium B.C., where they appear to have maintained their characteristic patterns well into the first millenium B.C. (J.E.G. Sutton, 1966; 1973, pp. 107-15; J.R.F. Bower, 1973).

Thus the Stone bowl Culture rock art style should occur between the second and first millenium B.C., according to this chronological timetable. This hypothesis fits several stratigraphic sequences which it overlaps and others in which it appears to be contemporary to the previously described Pastoral style.

The Late Hunters Styles

The basic characteristic of the Late Hunters style is the dynamic movement given to the figures depicted. Scenes are abundant, beautiful, complex yet harmonious. They reveal vigour, imagination and a highly developed aesthetic sense. Figures are usually small in size but depicted with much care and with great attention to detail.

Colours: Figures tend to be monochrome, mostly in various shades of red. Other fairly common colours include orange, yellow, brown and violet. Some sporadic cases of bichrome and polychrome figures do occur.

Subject Matter: Scenes of hunting and of daily life are very common. Human figures are shown using bows-and-arrows, with careful attention paid to body decoration, hairstyles, headdresses, necklaces, skirts, and other assorted ornaments. The antelope is by far the most frequently depicted animal, making up over 50% of all animal figures, and nearly 85% of the animals composing hunting scenes. In some cases herds of antelopes are depicted,

but a whole variety of other wild game is also represented.

Economic and Social Background: By far the most important economic activity represented is hunting, which must have been the main food resource. Scenes of honey collecting and other food-collecting scenes are present, though unusual. Honey may have been used to produce an alcoholic drink.

In many cases, the caves with rock art of this style have produced a microlithic industry which archaeologists refer to as the 'Wilton Culture'. However it is uncertain whether a direct association may be made at present between specific phases of rock art and specific assemblages of material culture. In fact several of the excavated caves and rock shelters with Late Hunters rock art have revealed a rich stratigraphic sequence of levels with microlithic and Late Stone Age cultures, as well as a complex series of different styles and phases in the rock art itself.

It seems likely that the hunters responsible for this horizon of rock art lived in the same sites which they painted, or in their immediate vicinity. The Late Hunters (HGL) styles are widely distributed in southern Africa. Scenes and figures similar to those of central Tanzania are found in the Matopos Hills in Zimbabwe, in the Drakensberg range in Lesotho and Natal, and in other regions of South Africa and of Namibia.

Internal Subdivisions: The amount of data referring to the Late Hunters style is enormous; in at least 12 sites, over seven different phases of assemblages belonging to this style have been identified. The analysis is not yet completed and further details are likely to emerge regarding the succession of styles and phases within this period.

As a preliminary working base the period has been divided into three major internal phases which have been named respectively: Final Late Hunters (or HGL. 3), with a large variety of local styles and motifs of specific character localized in limited geographical areas; Middle Late Hunters (or HGL.2), which includes the large majority of 'patterned animals' (animal figures depicted in elegant outline with the body filled in with dots, lines and other decorative patterns); and Classical Late Hunters (or HGL.1), characterized primarily by beautiful, elegant and well-balanced hunting scenes and groups of wild animals running, either in outline or with their bodies entirely covered by paint.

Chronology: From the numerous styles represented in the three phases, and from the sequence of overlappings and superimpositions of assemblages found at several sites, one gathers that the Late Hunters period lasted a rather long time. Final Late Hunters (HGL.3) assemblages may be quite late. In some cases in the Kondoa area they appear in stratigraphic sequences which indicate that they are earlier than both the Pastoral group and the Stone Bowl Culture group. Elsewhere, in the Singida and Sandawe areas, in at least three cases, they seem to be contemporary (or almost) to figures of the early phase of the 'White Bantu' style. In general terms, HGL.3 is likely to cover the last two millenia B.C. and in fact, is partly contemporary with the above-mentioned groups. Its last phases may well persist after the beginning of our era.

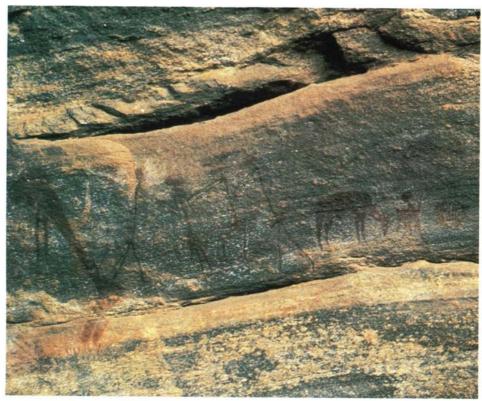


Fig. 29

Mungoni Wa Kolo. The so-called 'Abduction Scene' thought to illustrate the rivalry between two men. Its meaning may be far more complex. Left, a larger human figure of a later phase of the same 'Late Hunters' style. Fig. 30

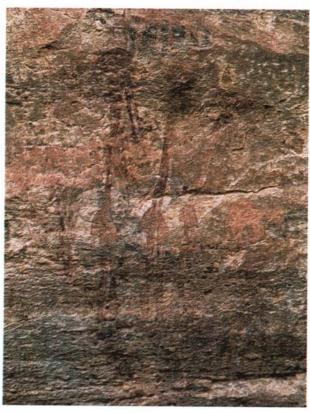
Kwa Mtea. Finely depicted human figures belonging to an early phase of the 'Late Hunters' style.

Fig. 31

Majilili. So-called 'Scene of Possession': several individuals seem to be in a state of trance. Evolved phase of the 'Late Hunters' style.

Fig. 32

Mungoni Wa Kolo. On the left, several figures of elephants, early phase of the Early Hunters'. Right, three human figures of 'Late Hunters' style, repeated almost identically in another cave.





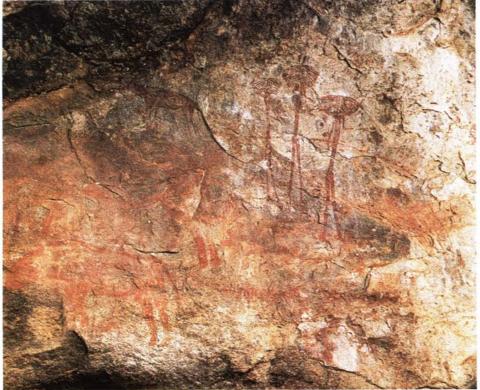




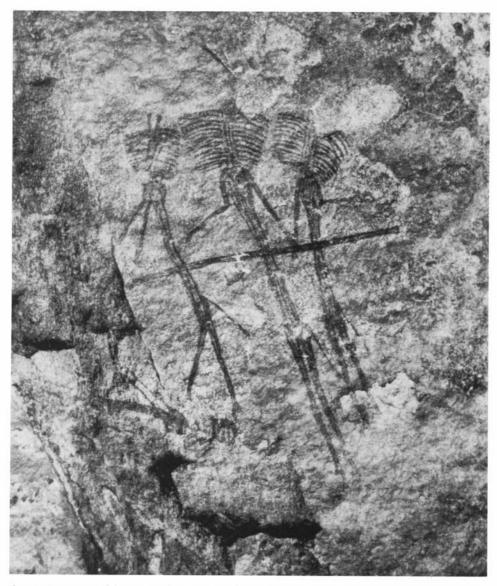


Fig. 33-34-35
This Faceless trinity repeated in two different caves near Kolo is likely to represent mythic beings. It has awakened several hypotheses still to be verified.

Middle Late Hunters (or HGL.2) undoubtedly had a very long duration, and the same may be said of the Classical Late Hunters (HGL.1). It does not seem possible, at present, to define these dates more precisely, but no doubt it is a matter of several millenia. Probably the beginning of the sequence of HGL styles, characterized by the eland hunters, the use of the bow-and-arrow and the beautifully realistic-dynamic scenes, may go quite far back in time.

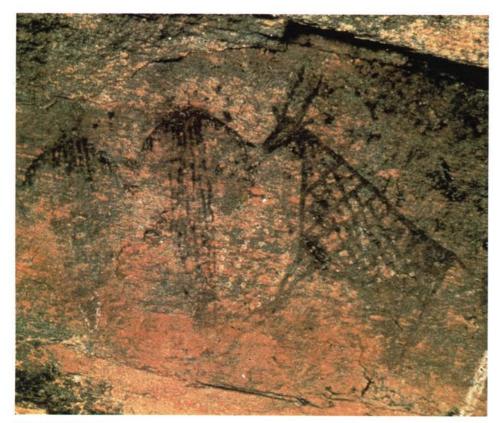
The Art of the Early Gatherers

One of the most surprising and interesting horizons of rock art detected in central Tanzania is repeatedly found in the stratigraphic sequence beneath



the HGL assemblages and on top of (and thus more recent than) the Early Hunters (EG) art. Constituting a rather original group both for its style and for its subject matter, it is characterized by impressive scenes of anthropomorphic beings dancing, participating in performances or ritual activities. It includes a variety of mythological scenes and of supernatural beings, among which are some of the most intriguing assemblages in the entire series. Several of the actions described, which involved large, well-organized groups of human beings, are not always immediately comprehensible to us today.

Colours: The dominant colours consist of various shades of red and brown. Dirty white is also present and bichrome figures are frequent. A darker colour usually marks the outline while the filling-in of surface is depicted in lighter shades. Depictions are often made with thin parallel lines that fill in the bodies of humans and animals alike. The brushes were surely



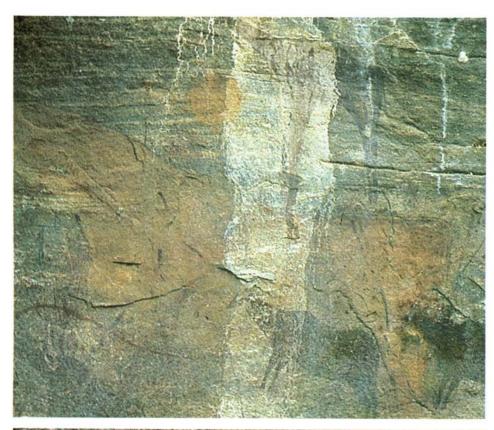


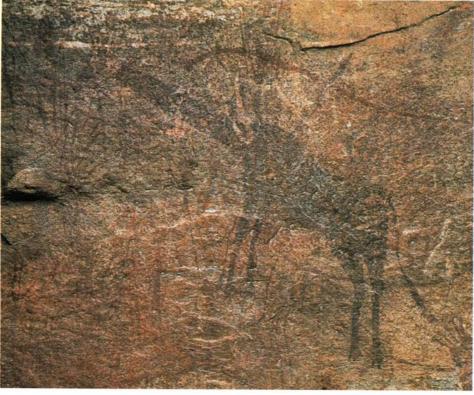
Chora. Depiction of stylized vegetation (palm trees?) are a character of the 'Gatherers' style. The stylized antelope with pattern decoration on the body is likely to be a later addition and to belong to the 'Late Hunters' style. Fig. 37

Talwi. Two human figures with garments seem to belong to an early phase of the 'Late Hunters'.

Figg. 38-39

Figg. 38-39
Cheke. View of the central panel and a detail of the same. The study of this surface has provided a sequence of over 10 phases ranging from late 'Late Hunters' to early 'Early Hunters'. The tradition of painting over this surface is likely to have persisted several thousand years.





used by masterful hands.

Subject Matter: The main subject painted during this period is anthropomorphic beings, Hundreds are depicted in scenes and groups. Some of them are human beings engaged in dances and in social and religious activities, whereas others are more likely to be imaginary creatures, spirits, ghosts, or other supernatural beings. They are frequently accompanied by symbols: balloon-like forms, net-like patterns, complex assemblages of lines, dots or zig-zags, and wavy patterns. Facial details, such as the eyes, nose or mouth, are never depicted, as if this were forbidden by some sort of taboo. Another peculiarity of this style is the presence of vegetal depictions such as fruits, leaves and branches and in fact they are very rarely represented in other periods of central Tanzanian rock art. Animal figures are not common and less care is given to them than in the preceding or subsequent periods.

Economic and Social Background: This period seems to represent a sort of idyllic age lived in a 'Garden of Eden'. Social activities and mythological scenes seem to have been the main concern of men, rather than food procuring. Hunting scenes are almost totally absent, and the presence of plants and fruits seems to indicate that these people's economic concern was focused on food collecting rather than on hunting.

It is likely that the diet was predominantly vegetarian. Some scenes may indicate that drugs and other hallucinogens were in use. Interestingly enough, several groups and assemblages of this style show surprising similarities to another group of rock paintings located a considerable distance from these: the so-called 'Style of the Round Heads' from the Tassili'n'Ajjer in the Central Sahara (H. Lhote, 1958, J.D. Lajoux, 1962).

Internal Subdivision: in this period numerous successive phases and substyles are present. At several sites, people of this period have returned again and again to the same rock surfaces in order to add new paintings. Though it is not possible as yet define internal subdivisions, it nevertheless seems that a detailed definition of phases may become possible once the entire documentation is fully analysed.

Chronology: The further back we go in the sequence the less reliable are the elements of absolute chronology. For the period discussed only two basic chronological elements are available. The first is that the art of this period is stratigraphically located between the Late Hunters and the Early Hunters, and may well have constituted an 'intrusive' phenomenon. We cannot decide, however, what kind of intrusion it reflects: a foreign people may have reached the area at that time, or new natural resources and climatic changes may have created new living conditions, or perhaps both.

This style must reflect a well-defined period of human life, which lasted for several millenia and which is quite distinct from both the Early Hunters and the Late Hunters episodes. It appears to be a new and very intriguing element in the cultural sequence of eastern Africa, and still demands clarification.

The second chronological element which characterizes this style concerns the calcareous coating in which many of the figures are located. It seems that heavy incrustations were in the process of forming on the rock surface during a very humid period while the artists were at work. This layer of calcareous formation is likely to be the same recurring 'heavy incrustation' layer which at several sites separates the Early Hunters figures, which are covered by it, from the Late Hunters ones, which lie on top.

From the contextual documentaiton provided by the depictions themselves, we know that an exuberant forest at the time must have provided plenty of natural resources such as fruits and vegetables.

As a working hypothesis we have postulated that the age of heavy humidity which occured during this horizons of rock art may correspond to a period of maximum expansion of the central African lakes. However, there is disagreement amongst scholars concerning the absolute dating of this episode (J.D. Clark & E.M. Van Zinderen Bakker Sr., 1962, 1964; J.A. Coetzee, 1967; D.A. Livingstone, 1969; M. Morrison, 1969).

Until definite datings are established, all we may postulate is that the episode most probably took place sometime around the transition between the Pleistocene and Holocene eras, and may have lasted a presently undermined length of time ranging from a minimum of two thousand years, up to five or even six thousand years.

A wealth of imaginative speculation may be awakened by this beautiful rock art style which illustrates a people who lived some 10,000 years ago is small caves and rock shelters, and who most likely relied primarily on a vegetarian diet, in a generous and exuberant Eden-like forest where 'out of the ground, every tree that is pleasant to the sight, and good for food' was growing for the benefit of man.

The Early Hunters

The oldest stylistic sequence identified so far contains within its duration a long and varied succession of subsidiary phases. At least twenty sub-styles have been detected within this Early Hunters period and these have been organized into eight groups which reveal a more or less consistent chronological succesion

Due to the difficulty in reading and in tracing the remains of the earliest stages (which are often simply bits to be located below numerous later overlappings, and tend to occur beneath heavy calcareous coatings), the making of a stratigraphic sequence within the Early Hunters period has turned out to be an extremely slow and stressful process. However, several points have been fixed already and the task does not seem impossible.

The stylistic common denomination of this wealth of depictions is the apparent lack of scenes. There are associations between figures, yet they are of a rather simple nature and one, two or more animal figures appear correlated with symbols.

Human figures are very rare and the few that do appear are plain and small. Animals are usually of rather large dimensions, sometimes reaching up to five meters in length. In different phases, their styles show consistent differences. In the later phases animals are fully painted in varying shades and



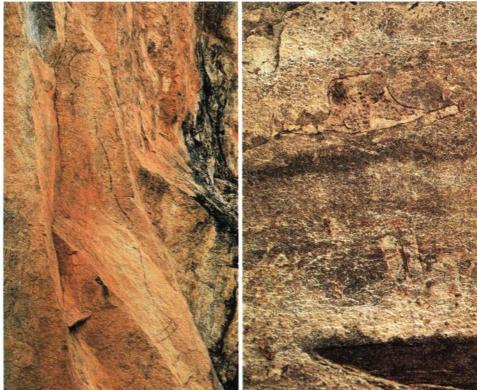






Fig. 40 Chora. Superimposition of Anthropomorphic figures of the 'Gatherers' style, upon a giraffe of the 'Early Hunters'.

Fig. 41 Mgeani. Large anthropomorphic figure of the 'Gatherers' style in dark brown outline.

Fig. 42 Itololo. 'Gatherers' style. Anthropomorphic figure painted in dirty whitecolor, with red thin outline. Three such figures appear on the roof of the cave.

Figg. 43-44
General view and detail of a painted surface at Cheke where at least three phases of the 'gatherers' style are overlapping each other.

occasionally with a well-defined contour. One carefully depicted assemblage belonging to an early stage is characterized by animal figures having part of their body fully painted and part defined by a line of contour. Earlier figures have a refined contour made of parallel lines, or a thickly shaped band of colour varying in thickness from one point to another. Details such as manes and other hairy parts, ears, horns, tails and genitals are depicted in a rather impressionistic though very effective fashion. The type of distorted perspective employed here is quite similar to that of European cave art.

Colours: The dominant colour is a dark reddish-brown, but many other colours are also present, including the entire gamuts of red and brown, various shades of 'dirty-white', ivory, yellow, orange, ochre, grey, blue-grey, dark brown, and black.

Bichromatic depictions are quite common, especially in the middle and later phases. The final phase, which appears to be virtually contemporary to the early phases of the subsequent Early Collectors style, has some magnificent examples of polychromed, large-scale animals which bear close resemblance to depictions of Magdalenian cave art in Europe.

Subject Matter: As mentioned above, human figures are absent or very rare. A few cases detected are ambiguous as they might be later additions. A few weapons and tools are represented: throwing sticks and boomerangs, spears, perhaps some kind of 'boleador' or bolus. The bow, so far, is totally absent. Recurrent subjects are animals and symbols, the most common animals being the elephant and the giraffe which appear frequently in association with one another. Antelopes, gazelles and elands, which are the most common animals in the Late Hunters style, are very rare in this context. Rhinoceroses and wildebeests are sometimes represented. Several symbols and signs are quite common: sticks, 'batonnets', discs, series of concentric circles, astral discs with rays, net-like patterns, 'vulvar' signs, dots, and series of parallel lines.

Economic and Social Background: The general impression is that this art reflects the thoughts and concerns of communities relying on big game as their main economic resource. Elephants and giraffes may have been of particular value for them. The constant association of animal figures with symbols is a conceptual element which was not stressed in the later Hunting and Gathering periods of the same region.

Internal Subdivisions: At least twenty different substyles have been isolated and subsequently clustered into eight groups. This study is still in progress and a full specification will be possible only after having completed the complex analysis of superimpositions. As a preliminary working scheme these eight groups have been further assembled into three main categories:

- Archaic Early Hunters (or HGE-1), including groups I and II;
- Middle Early Hunters (or HGE-2), including groups III, IV and V;
- Evolved Early Hunters (or HGE-3), including groups VI,VII and VIII.

Basic diagnostic elements in HGE-1 seem to be animal figures with multiple contour lines, and animal figures whose bodies are partly filled and partly in outline. The depictions are well shaped and rather sophisticated. They may well have as yet unknown antecedents.

HGE-2 is primarily characterized by fully painted figures and by elegantly outlined figures. Most of this art is monochromatic. The outlines of certain figures are darker than the surface filling; occasional examples of bichromatic figures might also pertain to this sub-division.

HGE-3 is characterized by a large variety of patterns including beautiful figures whose bodies are depicted in various shades of the same colour, and bichrome and polychrome animal figures. A large quantity of symbols and marks are included in this subdivision.

Chronology: The stratigraphic successions of the studied sites indicate the sequence of HGE sub-styles as being the earliest of the Tanzanian series. The Late HGE-3 appears to be partially contemporary to the Early EG group, while the beginning of HGE probably goes back many millenia.

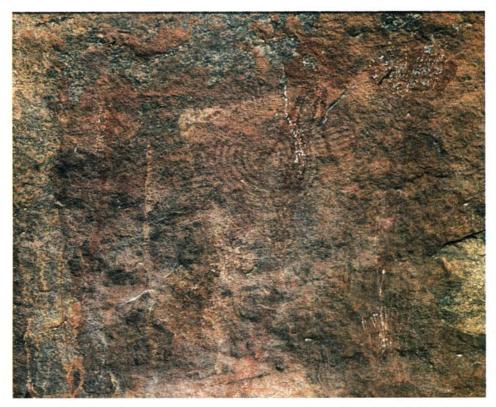
At the present stage of research it is possible to state that the entire HGE series must date to the Pleistocene era, the end of the HGE corresponding roughly to the end of the Pleistocene, after a long series of stylistic and conceptual variations. Its beginning is much older than previously suspected, a point which will be discussed further in the following pages.

General Evaluation of the Chronology

Until quite recently, the antiquity of rock art in Tanzania and, indeed, in the whole of southern and eastern Africa has been grossly underestimated. It is still too early to establish the extent to which the sequences detected in central Tanzania may reflect the general succession of styles in other parts of southern Africa. It seems, though, that the four main subdivisions established in a previous chapter for eastern Africa (HGE, HGL, PA and FM) may well fit, in general terms, the situation in most countries of southern Africa as well. In some of them the Late Hunters sequence (HGL) has had a much longer duration and was still being produced only a few generations ago. Additionally, in some areas, the Late Hunters art may have started later or earlier than in Tanzania. Early Hunters assemblages are difficult to discern almost everywhere because of the numerous overlappings and the calcareous incrustations which cover them, and because they are often poorly preserved. Thus, very few thorough studies have been conducted on them, and in this respect the Tanzanian series is of unique value. From an examination of reproductions of the decorated rock surfaces, early assemblages resembling those of central Tanzania seem to be present in Zimbabwe, Namibia, Lesotho and South Africa.

Unfortunately no precise chronological datings are available for the HGE rock art in Tanzania. Several excavations have been made in shelters and caves containing rock art where archaeological levels have been found and some indirect clues are available, but the dating of specific painted figures within their archaeological context is not possible as yet.

Ochre pencils, sometimes with signs of use, have been found in different archaeological levels within decorated shelters from Late Stone Age levels all the way down to strata of the Middle Stone Age (Inskeep, 1962; Leakey, 1936; Masao, 1979). According to R. Inskeep, at Kisese, they have been found through a sequence of levels which cover more than 29,000 years (M.D. Leakey, 1983b). Polishers and rubbing stones with marks of red and



other colouring pigments are not uncommon in archaeological levels. One of these at Kwa Mwango, from a level excavated by Fidelis Masao, provided a C14 dating of 3,270 + X

a C14 dating of 3,270X

a.C14 dating of 3,270 1

figures

Ochre pencils, sometimes with signs of use, have been found in different

Ochre pencils, sometimes with signs of use, have been found in different archaeological levels within decorated shelters from Late Stone Age levels all the may down to strata of the Middle Stone Age (Inskeep, 1962; Leakey, 1936; Masao, 1979). According to R. Inskeep, at Kisese, they have been found through a sequence of levels which cover more than 29,000 years (M.D. Leakey, 1983b). Polishers and rubbing stones with marks of red and other colouring pigments are not uncommon in archaeological levels. One of these at Kwa Mwango, from a level excavated by Fidelis Masao, provided a C14 dating of 3,270 + 110 BP. Another such rubbing stone with red pigment was exposed at Kirumi, in a level dated by C14 to 3,665 + 140 BP.

These findings simply tell us that between three and four thousand years ago there were people producing rock art in these spots. However, this data does not reveal which specific figures or phases those people were responsible for.

At the very important rock art site of Lululampembele (Rhino's Cave), K. Odner (1971) unearthed a long sequence of archaeological strata with several cultural horizons of the Late Stone Age and part of the Middle

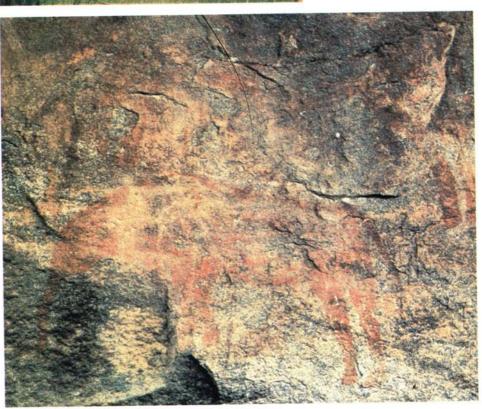


Fig. 45
Mungoni Wa Kolo. A stratigraphic sequence showing anthropomorphic figures of the 'Late Hunters' superimposed upon animal figures of the 'Early Hunters'. The series of concentric disks appears to be below (earlier) the anthropomorphic figures. This kind of depiction is often connected to the 'Early Hunters' style.

Fig. 46

Two ostrich depictions of the 'Early Hunters' style.

Fig. 47
Mungoni Wa Kolo. A series
of elephant depictions of the
'Early Hunters' style.



Stone Age, covering a time range of over 30,000 years. The numerous rock paintings of the site illustrate both Late Hunters styles and Early Hunters styles, but it was not possible to determine the direct correlations between archaeological layers and the superimposed styles of rock art.

The same may be said for Inskeep's excavations at Kisese II, where levels at the foot of a decorated surface containing colouring materials with markings of use, produced C.14 dating ranging from 18,190 + 306 BP to ca. 29,000 BP.

Attempts at relating specific rock art styles to defined levels of material culture have been made in several regions of southern Africa. At Matjes River Shelter, in South Africa, Willcox (1963, p. 10) was able to relate a group of paintings belonging to the Late Hunters style to a level of Wilton microlothic culture with a C.14 of 5,758 + 150 B.C. At Solwezi Cave and Chifubwa stream, in Zambia, painted engravings found in a level defined as 'Nachikufu' I' were given a date by the excavator of 'later than 8,000 B.C.'.

In her splendid book *People of the Eland* (1976, p. 143) Patricia Vinnicombe examined the dating of the rock paintings of the Drakensberg range, on the border between Natal and Lesotho. She considered that micro-blades presumably used as arrowheads were dated by C14 at ca. 11,050 B.C., by which time the people of the area must have already known how to use the bow-and-arrow. Further more, she mentions that '.... Ochre fragments' found in archaeological levels in painted rock shelters 'suggest practicing of paintings between 11,000 and 1,000 B.C.'.

Obviously this refers specifically to rock art known in the Drakensberg, which is primarily of the Late Hunters type. Vinnicombe, probably thinking of the Apollo Cave, then considers that 'four painted slabs from a shelter north of the Orange River were overlain by a horizon dated to 12,400 B.C., while a layer below the paintings contained artifacts of the Middle Stone Age referring to ca. 43,000 B.C. The evidence from these slabs implies that the paintings go back to an era somewhere between these two dates'. Vinnicombe concluded that rock art in southern Africa may have begun well before the currently assumed dates.

Several excavations have revealed the presence of stone pebbles and plaques decorated with figures similar to those of the cave paintings and these have provided a great deal of relevant chronological data. J. Rudner (1971) has examined a series of about forty of these painted stones from various sites in the Cape province of South Africa, some of which were found in connection with burials. Most of them represent animal figures of Late Hunters type, and are connected with the 'Wilton' microlithic industry which may go back as far as 10,000 to 12,000 years. From radiocarbon datings of the stratigraphic series at Boomplaas Cave, several decorated stones with animal figures have been dated as 'later than' 6,400 + 75 B.P. (H. Deacon, J. Deacon & M. Brooker, 1976 pp. 141-145). They include monochrome and bichrome figures of antelopes, an ostrich and other marks, and quite clearly belong to a middle stage of the Late Hunters. They are easily comparable with similar figures from the rock art of South Africa .nd of Tanzania. There are several other such findings which relate to slabs with figures of Late Hunters styles.

The only site in southern Africa so far having produced stratigraphically dated evidence of mobiliary rock paintings belonging to the Early Hunters series is Apollo 11 Cave in Namibia. Wolfgang E. Wendt found there during the seventies what is still considered today to be the oldest dated art in Africa (W.E. Wendt, 1974; 1976).

The stratigraphic sequence of Apollo 11 Cave is worth a brief description, as it is relevant to the general chronological view of prehistoric art in southern Africa.

Wendt defined the seven archaeological levels he recognized as follows:

Levels A-B: 'Later layers'. Dated by C.14 tests from 320 \pm 40 to 1,670 \pm 55 B.P.

Level C: 'Later Stone Age Wilton'. Microliths and crescent; decorated ostrich eggshells. Six C.14 datings range between $6,200 \pm 65$ and $10,420 \pm 80$ B.P.

Leveled D: 'Early Later Stone Age'. Numerous scrapers, few microliths, engraved stones, worked ostrich shells.

Nine C.14 datings range between 12,510 X 120 and 19,760 ± 175 B.P.

Level E: 'Middle Stone Age'. Blade industry, pigments and cores of minerals likely to be raw material for preparing colours. Eight painted slabs in the upper layers of this level, seven of which bear animal figures. They appear to be connected with burials. Eight C.14 datings range between 26,300 ± 400 and 46,400 + 2,500 B.P. Three C.14 tests of materials directly connected with the painted slabs provided the dates of 26,300 ± 400, 26,700 ± 650 and 28,400 ± 450 B.P.

Level F-G: 'Middle Stone Age'. Blade tools, backed blades, burins, retouched lakes, bifacial points, worked ostrich eggshells, bone tools, lumps of colouring pigments. Twelve C.14 datings range between $47,500 \pm$ and $50,000 \pm$, B.P.

Level H: 'Basal Middle Stone Age' with points, flake-blades, notched and denticulated tools. Beyond the range of C.14 dating, older than 50,000.

Wendt found well-designed, figurative paintings representing animals, in a context which is dated by C.14 (not calibrated), to between 26,000 and 30,000 years ago. These are, so far, the earliest artistic productions in the world to receive a direct C.14 dating from their archaeological context. Furthermore, he found lumps of colouring materials, brought to the spot by man, obviously with the purpose of using them, between 47,500 and 50,000 years ago. This is an indirect but quite unmistakable clue that some use of colours was made there as early as then.

It is noteworthy that these very early artistic manifestations appear to be related to a stone blade industry, although their absolute age is much earlier than the first appearance of blade industries in North Africa, in the Mediterranean basin and in Europe. Blade industries, as compared to more archaic 'flake industries', reflect not just the use of specific techniques of stone working but also specific intellectual characteristics of logic, abstraction and synthesis which in most cases, are an indicator of *Homo*



Figg. 48-49
Animal depictions of 'Early Hunters' style from Kwa Mtea and Tlawi.

Sapiens Sapiens. In all the verified cases, around the world, the earliest art is a product of this early ancestor of contemporary human kind. Apollo 11 cave, despite its very early dates, does not seem to be an exception.

Wendt writes '....this surprisingly old art mobilier has been discovered in the first excavation exposing such old layers in a vast area This area is archaeologically still rather unexplored. Therefore this is not necessarily the very oldest expression of art in this part of southern Africa....' (Wendt, 1976).

The painted slabs of Apollo 11 Cave show a high degree of artistic sophistication in form and colour, as well as a distinct set of stylistic characteristics. One animal figure is evenly painted over its whole body in a red-purple colour; another, that of a rhino (?), right next to the first, is painted in outline in a similar colour. There are two bichromatic animals: a zebra in yellow and brown, and an antelope in red and brown.

Their colouring techniques and style show very strong similarities to a well-defined stage in the Tanzanian sequence, that is, of an early HGE-3 horizon: groups VI and VII of the Evolved Early Hunters. If the dates of Apollo 11 Cave have any value at all for a general chronology of the early art of southern Africa, we can consider that the Tanzanian sequence includes six long and very diversified stylistic groups previous to the HGE-3 horizon mentioned above; namely, the entire range of the Middle Early Hunters and, still earlier, the entire range of the Archaic Early Hunters. This certainly implies quite a long period time comprised of many millenia.



A clear date for the beginning of rock art in central Tanzania is not yet available, but there can be no doubt that we are dealing here with one of the earliest zones of artistic creation known in the world so far. Here rock paintings and occasional engravings appear to have been executed long before European Upper Palaeolithic art, and certainly before any other art known in northern Africa, the Near East and Asia.

Nonetheless it remains to be seen whether central Tanzania, which certainly contains the earliest known rock art in eastern Africa, might be paralleled to other as yet undiscovered creative provinces of southern Africa. The author does not exclude that in nearby countries other very early clusters of Early Hunters art may some day be detected.

The Place of Tanzanian Rock Art in the East African Context

The oldest art dated so far in Africa is from the Apollo 11 Cave in Namibia, where painted animal figures on stone slabs have been found at an archaeological level defined by W.E. Wendt as 'Middle Stone Age', and dated by three C.14 tests to 28,400, 26,700 and 26,300 B.P. These figures are stylistically of the same type and character as those found in period HGE-3 (VI-VII), in the Tanzanian sequence. In Tanzania, the earliest rock art found in the Kondoa and Singida districts is likely to be considerably older, but no C-14 dates are available so far. A sequence of different styles of Early Hunters rock paintings recorded during our UNESCO consultancy survey in 1980-81 is likely to have begun earlier than any other rock art area dated so far in the world over, and may well be more than 40,000 years old. Besides Namibia and Tanzania, other preliminary documentation on

the presence of very old groups of Early Hunters rock art comes from the Matopos Hills in Zimbabwe and from the Cape Province in South Africa. (E. Holm, 1984). Southern Africa appears to be the region of the world with the most ancient evidence of human creative and artistic capabilities.

In northern Africa, the earliest available dates so far for the beginning of rock art are much later than in southern Africa; they refer to Early Hunters art from the Acacus Range in Libya, going back to the late Pleistocene, and date, according to F. Mori, from ca. 12,000 B.P. (F. Mori, 1970). Similar stylistic assemblages are known from the (Tassili'n' Ajjer in Algeria and from the Ennedi in Chad (J.D. Lajoux, 1962; H. Lhote, 1958).

The African continent may be divided into two major regions as far as rock art is concerned, which roughly represent the north and the south. In the south, major concentrations follow the general geographical area of the Rift Valley from Kenya and Tanzania, down to the Limpopo Valley. There is then a wider dispersal in southern Africa, and major sites are found in Zambia, Zimbabwe, Mozambique, Namibia, Botswana, South Africa and Lesotho. Malawi, the eastern provinces of Congo, and southern Angola have yielded preliminary reports of sites which may result in quite substantial and valuable sources of information.

In North Africa most major concentrations are located in the central Sahara region. Some are well known and have been profusely publicized, such as the Tassili'n'Ajjer in Algeria, the Fezzan and the Acacus in Libya. Others, no less significant, in the Tibesti and Ennedi in Chad, in Niger's Tenere and in the Adrar range of Mali, have yet to be adequately explored. Other major sites are found in the Moroccan and Algerian Atlas range, along the Nile valley, both in Egypt and in Sudan, and in the Canary Islands.

A distinction has been made as far as southern and eastern Africa are concerned, between the four stylistic assemblages having a chronological succession of four main periods which appear to reflect major historical eras. From the oldest to the latest they illustrate human group practices: 1. Early Hunters of big game who did not know the use of the bow (HGE); 2. Evolved hunters with the use of bow and arrow (HGL); 3. Pastoralists (PA); 4. Farmers with mixed economies (FM).

In eastern Africa, rock art reflecting a mixed economy appears to be primarily connected with Bantu-speaking people. It is widely spread in south-eastern Africa and includes vast areas of Kenya, Tanzania, Mozambique, Uganda, Malawi, Zambia and Zimbabwe. Most of the sites seem to be connected with initiation practices and ancestral worship. They are comprised primarily of schematic designs principally in white, and cover most of the last 2,000 years.

Pastoral rock art is mainly concentrated in Kenya and Tanzania, with isolated locations in other countries. Domestic cattle, some humped, are the main subject matter, while the common colours used are black, white and brown. The latest phase of this art group is chronologically parallel to the early phases of the FM groups; its early phases are older, and some may go back as far as the second millennium B.C. A series of local styles are present in the area during the last two millenia B.C.; they seem to indicate the presence of various patterns of culture. One of the most clearly defined

in Tanzania is frequently associated with the material culture the 'Stone Bowl Culture'.

Late Hunters' art includes scenes of mythology, hunting, and other daily activities. Numerous scenes of daily life are present. Stylized and dynamic human figures with bows-and-arrows constitute the most widespread pattern in central Tanzania. Similar assemblages are known all over and are particularly well-represented in Zimbabwe, South Africa and Lesotho. The Matopos Hills in Zimbabwe, and the Drakensberg in Lesotho and Natal each count well over 200,000 figures of this style. The total number of its figures is estimated to be over 2,000,000. In certain areas artistic production reached a peak of creativity using polychrome depictions in exceptionally well-conceived, elegant and harmonious assemblages. The beginning of this type of rock art may go back over 10,000 years, as confirmed by recent finds of painted tablets in the Cape Province, by excavated funerary caves and excavations in the Drakensberg and in some areas it was still practiced as late as the last century by San tribes.

Towards the end of the Pleistocene, or at the beginning of the Holocene, a particular art style developed in the Central Highlands of Tanzania. It describes the life of gatherers who relied primarily on a vegetarian diet, showed great concern for mythology and for a very imaginative supernatural world. They enjoyed ceremonies and social events, and probably indulged in some sorts of hallucinogens. Quite surprisingly the nearest parallels to their art creations do not come from southern Africa but rather from the central Sahara region, from the group named 'styles of the Round Heads'.

The earliest stage, that of the Early Hunters, is frequently found superimposed by later paintings. Unfortunately, because it is sometimes faded and badly visible, this stage has been consistently neglected. The only area where the art of Early Hunters is known to be well-represented and can be studied thoroughly, appears to be the districts of Kondoa and Singida in the Central Highlands of Tanzania. Here a UNESCO consultation in 1980-1981 allowed us to identify a consistent series of overlapping styles which may well prove to be the earliest rock art examples known so far in the world. This style is primarily made up of large animal figures and a limited typology of recurrent symbols. Eight major stylistic phases have been detected, and one of the later ones, as mentioned already, shows depictions similar to those represented in the slabs of Apollo 11 cave. In some sites with rock ing all of the Late Stone Age and part of the Middle Stone Age, a time range of over 50,000 years. The earliest levels detected so far, which contain evidence of the use of colouring pigments, are dated between 47,000 and 50,000 years ago.

Somalia and Ethiopia have so far revealed primarily pastoral art, with the exception of one site in Ethiopia (Porck Epic) which may include some figures from the Late Hunters. The Horns of Africa are clearly connected stylistically and conceptually with the Sudan, as well as with southern Arabia. It appears to be a transition region with little stylistic autonomy as far as the known sites are concerned. This region is, however, largely unexplored and future research may modify this view.

In northern Africa, as mentioned previously, the most abundant and im-



Fig. 50
Mungoni Wa Kolo. A peculier animal style using very delicate outlines and depicting stylized silhouettes is likely to belong to the 'Early Hunters' style.

portant rock art sites are in the mountain ranges, of the central Sahara in territories belonging to Chad, Libya, Niger and Algeria. Here the earliest stage appears to belong to a final phase of the Early Hunters, and to have been created in the late Pleistocene, before or around 12,000 B.P. It consists of engravings of large animals. Elephants, giraffes and wild cattle are profusely represented in what is now a desert area. It is followed by a widely diffused and extremely peculiar horizon which some researchers define as 'Round Heads' because of this specific feature in anthropomorphic depictions. Most of the figures are painted in monochrome or bichrome but using a variety of colours. It illustrates a wealth of mythologies developed by people who relied principally on a gathering economy, living in a sort of 'paradise on earth' when the central Sahara mountain plateaus may have been very fertile gardens. The striking similarities between this Saharan style and the Early Gatherers Style of Tanzania, has been mentioned.

In the Sahara, the human groups of this cultural horizon appear to have lasted until approximately 8,000 B.P., after five or six thousand years of survival, when the earliest pastoral people reached the area with domesticated oxen. The central Sahara was then, for nearly 4,000 years, a land of semi-nomadic pastoral people that had come from outside the region. They produced a very complex type of rock art, including both paintings and engravings, which is primarily characterized by large herds of cattle



Fig. 51 Kisese. Large figures of elephant and giraffes from the 'Early Hunters' style are being traced on polythene sheets.

and by detailed descriptions of family and social life.

The second millennium B.C. saw another change, with the introduction of the horse and with rock art reflecting intensive trading and warfare. Shortly thereafter the camel was also introduced. It arrived with nomadic people and some of their offspring may still survive in the area. The rock art reveals the drastic changes that took place in the ecological conditions and in human life in the Sahara where populations succeeded each other for ages with different traditions using different resources.

In this general African context, the rock art of Tanzania emerges as having the longest and probably the most detailed history. Through depictions made by the direct protagonists which have been preserved at the very same spots where they were produced, some 40,000 years of cultural history provides new insight into the evolution of man and his intellectual adventures. Such art contributes to a new understanding of the formation and early evolution of African society.

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