The peopling of ancient Egypt and the deciphering of Meroitic script

The general history of Africa
Studies and documents 1

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Proceedings of the symposium
held in Cairo
from 28 January to 3 February 1974

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Published in 1978 by the United Nations
Educational, Scientific and Cultural Organization
7 Place de Fontenoy, 75700 Paris
Printed by NICI, Ghent

ISBN 92-3-101605-9
French edition: 92-3-201605-2

Printed in Belgium

Foreword: Preparation of a *General History of Africa*

In 1964 the General Conference of Unesco, as part of the Organization's effort to further the mutual understanding of peoples and nations, authorized the Director-General to take the necessary measures for the preparation and publication of a *General History of Africa.*

It was considered that such a project would add significantly to our knowledge of the history of mankind. In particular, it was felt to be a matter of urgency to study Africa's past at a time when the continent's traditional institutions and their forms of expression were being threatened by an economic, social and cultural evolution that was to a large extent unplanned and uncontrolled. It was also felt that the project could provide a factor of cultural continuity among peoples and nations which had recently acceded to independence by enabling them to have a clearer understanding of their own identity with the past and with the present. Finally, such a project, if carried out under the aegis of Unesco, would afford an opportunity for bringing together scholars from various countries sharing common interests and would result in the publication of works that would be of immediate interest to the public, not only in Africa but everywhere. This was important at a time when the development of education was producing an increasing demand for historical and cultural works within the school systems and among the public at large.

Activities in the early stages of the project (1965-1970) consisted mainly of field operations conducted in Africa for the collection of oral and written sources.

At the same time international scientific consultations were organized to consider the methodology of the project. This led to a number of recommendations made by meetings of experts held in Paris (1969) and in Addis Ababa (1970), which launched the second phase of the project, i.e. the preparation and drafting of an eight-volume *General History of Africa* under the sole intellectual and scientific responsibility of a scholarly body, the International Scientific Committee for the Drafting of a General History of Africa.

This committee, under the Statutes adopted by the Executive Board of Unesco in 1971, is composed of thirty-nine members (two-thirds of whom are

African and one-third non-African) serving in their personal capacity and appointed by the Director-General of Unesco for the duration of the committee's mandate. The committee, at its first session, defined the principal characteristics of the work as follows:

Although aiming at the highest possible scientific level, the history will not seek to be exhaustive and will be a work of synthesis avoiding dogmatism. In many respects, it will be a statement of problems showing the present state of knowledge and the main trends in research, and it will not hesitate to show divergencies of doctrine and opinion where these exist. In this way, it will prepare the ground for future work.

Africa will be considered as a totality. The aim will be to show the historical relationships between the various parts of the continent, too frequently subdivided in works published to date. Africa's historical connections with the other continents should receive due attention, these connections being analysed in terms of mutual exchanges and multilateral influences, bringing out, in its appropriate light, Africa's contribution to the development of mankind.

The *General History of Africa* will be, in particular, a history of ideas and civilizations, societies and institutions. It will introduce the values of oral tradition as well as the multiple forms of African art.

The *History* will be viewed essentially from the inside. Although a scholarly work, it will also be, in large measure, a faithful reflection of the way in which African authors view their own civilization. While prepared in an international framework and drawing to the full on the present stock of scientific knowledge, it will also be a vitally important element in the recognition of the African cultural heritage and will bring out the factors making for unity in the continent. This effort to view things from within will be the novel feature of the project and will, in addition to its scientific quality, give it great topical significance. By showing the true face of Africa, the *History* could, in an era absorbed in economic and technical struggles, offer a particular conception of human values.

The committee has decided to present the work in eight volumes, each containing some 750 pages, with illustrations, photographs, maps and line-drawings. The eight volumes are the following:

Volume I	*Introduction and African Prehistory* (Editor: Professor Joseph Ki-Zerbo)
Volume II	*Ancient Civilizations of Africa* (Editor: Dr Gamal Mokhtar)
Volume III	*Africa from the VIIth to the XIth Century* (Editor: H.E. Mr Mohammed El Fasi)
Volume IV	*Africa from the XIIth to the XVIth Century* (Editor: Professor D. T. Niane)

Volume V *Africa from the XVIth to the XVIIIth Century*
(Editor: Professor B. A. Ogot)
Volume VI *The XIXth Century until 1880*
(Editor: Professor J. F. A. Ajayi)
Volume VII *Africa under Foreign Domination, 1880-1935*
(Editor: Professor A. A. Boahen)
Volume VIII *Africa since the Ethiopian War, 1935-1975*
(Editor: Professor A. A. Mazrui)

Drafting of the volumes began in 1972 and is still continuing. In addition, scientific colloquia and symposia on related themes are being organized as part of the preparatory work.

The papers prepared for discussion and the exchanges of views on a wide variety of subjects at these meetings have provided valuable historical material which Unesco has now decided to make known as widely as possible by publishing it in a series entitled 'The General History of Africa: Studies and Documents'. The present book, the first in the new series, contains the papers presented and a report on the discussions on them that followed at a Symposium on the Peopling of Ancient Egypt and the Deciphering of Meroitic Script, which was organized by Unesco at Cairo from 28 January to 3 February 1974.

Contents

In the presentation of dates the Christian era has been adopted as the international reference, but 'B.C.' and 'A.D.' have been replaced respectively by a minus sign and a plus sign: '2900 B.C.', for example, is rendered as '−2900', and 'A.D. 1800' as '+1800'. When the references are to centuries the expressions 'before our era' and 'of our era' are used.

Introduction

The Symposium on the Peopling of Ancient Egypt and the Deciphering of Meroitic Script[1] was held in two stages: the first took place from 28 to 31 January 1974 and concerned the peopling of ancient Egypt; the second dealt with the deciphering of Meroitic script and took place from 1 to 3 February 1974.

The meeting opened with an address by Dr Gamal Mokhtar, Under-Secretary of State, Egyptian Ministry of Culture, who was followed by Mr Maurice Glélé, speaking on behalf of the Director-General of Unesco. Mr Glélé emphasized the important place occupied by Egypt in the project for the *General History of Africa*, by virtue both of Egypt's historic and cultural ties with the rest of Africa and of the fact that Dr Mokhtar was a member of the International Scientific Committee responsible for the scientific supervision of the drafting, and the editor of Volume II. Mr Glélé reminded the meeting that Unesco's aim in the project was to present a new picture of the history of the peoples and of the continent of Africa through the use of new methods of approach, analysis and interpretation.

The members of the International Scientific Committee had thought it necessary to convene a symposium on the peopling of ancient Egypt to bring together a number of specialists of world repute from different countries. The purpose of this was to review the knowledge at present available about the ethnic origins and anthropological relationships of populations and about the cultural ties between Egypt and the rest of Africa. The participants, as scholars, were invited to clarify and establish the facts, providing rigorous scientific supporting evidence; to approach the questions put before them calmly and with an unwavering regard for scientific truth; and to adopt the genuinely scientific attitude of open-minded inquirers, prepared to countenance the possibility of having been wrong, or simply uncertain of the facts.

The symposium elected the following officers: Dr Mokhtar (Egypt), chairman; Professor Théophile Obenga (Congo), vice-chairman; Professor Jean Devisse (France), rapporteur.

1. The list of participants is given in Appendix 2, p. 133.

Part I
The peopling of ancient Egypt

The peopling of ancient Egypt

Jean Vercoutter

Present state of knowledge

The problem of the population of ancient Egypt is one of the most complex problems of all. It has been, and is still, clouded and obscured by 'sentimental', or at least irrational attitudes. To solve it, we must go back to the original sources, which have been subjected to so much 'interpretation', not to say distortion (usually unconscious), that they now need to be brought together and studied afresh.

Indeed, such 'knowledge' as we possess (or think we possess) nowadays on this problem, which is of such great importance to the ancient history of Africa, is much less precise and coherent than one might hope. It is, in fact, full of gaps which are a considerable obstacle to a correct interpretation of the sources at our disposal, and which, in the present state of our knowledge, make a solution to the problem difficult, if not impossible, to achieve.

The sources available for studying the population of ancient Egypt are: (a) scientific, in the strict sense of the term, i.e. derived by physical anthropology from the study of the ancient human remains themselves, which the dry climate of Egypt has preserved for us; (b) iconographic, i.e. covering all the representations, in the form of drawings, paintings, bas-reliefs and statues by the former inhabitants of the Nile valley handed down to us by the monuments; (c) linguistic, i.e. concerning the language and writing of a human group which may provide information on the origins and ethnic nature of that group; and (d) ethnological, involving a comparison between the foregoing sources as a whole and the characteristics of the ethnic or cultural groups known in antiquity.

There are two requirements for a correct interpretation of these various kinds of sources: first, accurate dating of the human remains or evidence in question, a principle which has not always been observed, since dating is often open to doubt when it is not borne out by the carbon-14 test, for example; and second, a consensus of opinion among the various investigators as to the meaning of the terms used in the final interpretation. For instance, the words 'Negro' and 'Negroid' seem to take on different meanings according to the

historians who use them; the word 'Hamitic', the application of which to an ethnic (Obenga, 1973, p. 101, and n. 17 and references; Cornevin, 1963, p. 71) rather than a linguistic group is universally deprecated, has nevertheless come to designate ethnic groups, and needs to be defined clearly in this sense—if it really fits the facts.

Futhermore, as it seems obvious that one can never speak of a pure 'race' or 'ethnic group' in Egypt (Vandier, 1952, p. 11; Massoulard, 1949, p. 424), a correct interpretation of the composition of the population of ancient Egypt calls *ipso facto* for a knowledge of the peoples who were Egypt's neighbours at the time. While such information is available—in varying degrees—for north-west Asia and Mediterranean Europe, the same is not true of Africa, the Sahara in particular. This fact makes for a certain amount of misinterpretation of the possible origins of the various elements of the Egyptian population. The problem which thus arises, is, as we shall see, whether human occupation of the Egyptian Nile valley was continuous or not.

Considering the impressive quantity of human remains, often in a very good state of preservation (Massoulard, 1949, p. 386–7), which has been discovered in the Egyptian and Nubian Nile valleys, one may be tempted to believe that there is enough anthropological evidence to form an accurate picture of the origins of Egypt's inhabitants at a particular point in time. In fact, numerous as these remains may be, they give us only a very incomplete idea of the original population of the Nile valley, being very unevenly distributed both in space and in time.

Until recent years, before the International Campaign to Save the Monuments of Nubia, launched by Unesco in 1960, nothing was known of Nilotic anthropology in palaeolithic times, and very little of that of neolithic times. The intensive excavations carried out from 1960 to 1964 have to a great extent closed the gaps in our knowledge, but the results have not yet been published, still less analysed; also they concern only northern or lower Nubia, and teach us nothing new about Egypt north of Aswan.

From the foregoing it may be seen that physical anthropology can tell us a lot, although the information is often incomplete, about (a) the palaeolithic period—in lower Nubia alone, the rest of the valley having yielded nothing relating to this period; (b) the neolithic period—in lower Nubia, and to a very inadequate extent in upper Egypt, if the Tasian culture is regarded as neolithic, a matter which is in dispute; at a site near Cairo, El Omari (Bovier-Lapierre, 1925, p. 280–1); and, lastly, on the western edge of the southern Delta, Merimde Beni-Salamah (Derry, 1929); (c) the predynastic period—in lower Nubia and upper Egypt, to the exclusion of lower Egypt (Delta) which has yielded nothing, or at least where the anthropological results of the excavations, confined moreover to the southern tip of the Delta near Cairo, are not yet known (Debono, 1950) or have yielded only very inadequate infor-

mation (Müller, 1915); (d) the protodynastic period—in lower Nubia and upper Egypt, the Delta having so far yielded scarcely any anthropological information on this period.

So, apart from a limited amount of information on the neolithic period, the Delta remains an unknown quantity from an anthropological point of view throughout predynastic and protodynastic times, and in fact we have continuous evidence only for lower Nubia and, with a lesser degree of certainty, for upper Egypt from neolithic times onwards. The interpretations which have been put upon this basic evidence have been summed up clearly by Dr Massoulard (Massoulard, 1949, p. 424). Owing to the date at which the work was published, it does not cover the discoveries made in Nubia from 1960 to 1964. Incorporating these results into Dr Massoulard's very objective account, one arrives at the following outline of the population of Egypt and lower Nubia from the palaeolithic until the end of the protodynastic period (−12,000/−3000). This outline, of course, takes into account only the evidence of physical anthropology.

In upper palaeolithic times (−12,000/−10,000), lower Nubia was occupied by a dolichocephalic race of medium height (Anderson, 1968, p. 998–1028; Wendorf, 1968*a*, p. 954–95). The archaeologist notes certain links between this population and the contemporary or earlier human remains discovered in North Africa and in Europe (Mechta man and Cro-Magnon man), but refrains from labelling it 'Negroid' of 'non-Negroid' (Anderson, 1968, p. 1031).

For the neolithic period (−8000?/−5000), until the results of the recent excavations in Nubia are known, analysis covers only twenty or so precise measurements and the archaeologist's 'impression' of the El Omari site, where the human remains were in too poor a condition to be measured (Massoulard, 1949, p. 392). These scanty data would appear to point to the conclusion that the population of Egypt in the neolithic period did not belong to the same race as the predynastic populations which were to succeed it in upper Egypt.

In the predynastic period (*c.* −5000/−3300), the Egyptian and Nubian population as a whole appears to have been mixed, consisting of 'Negroids', 'dark Mediterranean' types, and a type reminiscent of the Cro-Magnon race, and of half-castes derived from a mixture of these three elements. The proportions of each element in the population as a whole vary according to the analysts, but they hover in the neighbourhood of 30 per cent to 35 per cent 'Negroids' and 30 per cent 'Mediterraneans', the remainder being made up of Cro-Magnoids and half-castes (Fawcett, 1902; Warren, 1898; Thomson and Randall-MacIver, 1905; Falkerburger, 1946; 1950). This heterogeneity does not, however, prevent some people speaking of an Egyptian 'race' (Smith, 1923, p. 91–2).

It is to be noted, first, that these results are not unanimously accepted,

even by anthropologists (Keith, 1905, p. 295; Zaborowski-Moindron, 1898, p. 597–611) and, secondly, that the word 'Negroid' is ambiguous. Anthropologists frequently draw a distinction between it and the word 'Negro', without, however, going into further details of its characteristics. This ambiguity has recently been pointed out (Obenga, 1973, p. 53 *et seq.*, referring to Diop, 1955, p. 21–253), whilst Anderson notes that 'the distinctive characteristics of the Negroid skeleton, if such exist' are unknown (Anderson, 1968, p. 1038).

In the protodynastic period (—3300/—3000), most of the human remains are identical with those of the predynastic period, and as a whole the Egyptian population remained the same. However, the royal tombs of Abydos, while not bringing to light any new racial elements, contained a collection of skeletons in which the 'Mediterranean' element seems to be markedly stronger than the 'Negroid' element.

In the predynastic period, as in the protodynastic, a few brachycephalic individuals appear, but they become relatively numerous only at the time of the Pharaohs (Massoulard. 1949, p. 425).

Such are the results obtained from physical anthropology. An attempt has been made to supplement or clarify these clues by using iconographic evidence. Taking the latter as a starting point, some have claimed to be able to distinguish six different human types in the pre- and protodynastic periods: a Libyan type; one type from the shores of the Red Sea and another from the Arabian desert; and three other distinctive types, one of which is believed to have lived in middle Egypt, one in lower Egypt and the third in upper Egypt (Petrie, 1901, p. 248–55). Furthermore, on the strength of the rock drawings in the deserts surrounding Egypt and Nubia, it has been suggested that four different major human groups should be recognized: (a) earliest hunters; (b) 'Hamitic' mountain dwellers, ancestors of the present-day Blemmyes and Bejas; (c) early Nile-valley dwellers; and (d) on the edge of the valley to the east, early oasis dwellers (Winkler, 1938, summarized in Vandier, 1952, p. 13–14).

Dr Massoulard has shown the futility of using iconographic sources, and particularly statuettes, for purposes of anthropological identification (Massoulard, 1949, p. 289–391). A better case can be made out for the use of rock drawings, which is based in part on the amount of patina on the figures, but it is difficult, if not impossible, to relate the results obtained to reliable anthropological criteria of race. In fact, these results are essentially a reflection of cultural, not anthropological, criteria. The theories put forward about the population of Egypt, which we are now going to examine, are based on a mixture of evidence drawn from physical anthropology and cultural or even historical characteristics.

The theories advanced

Following in the footsteps of G. Elliot Smith (1923, p. 53–69), and those of Sergi at an earlier date (Sergi, 1895), most Egyptologists (Vandier, 1952, p. 22) take the view that the primitive population occupying the Egyptian and Nubian Nile valley from the predynastic period onwards (Badarian and Amratean or Naqada I), and up to the first dynasty, belonged to a 'dark', 'Mediterranean' or again 'Euro-African' race, often incorrectly called 'Hamitic'. This population is taken to have been leucodermic, i.e. white, although its pigmentation may have been dark, even black; it is subdivided into two groups, one eastern (ancient Egyptians, Bejas, Gallas, Somalis and Danakils) and the other Western (Libyans, ancient Nubians, North African Berbers, the Tuaregs and Tudus of the Sahara, as well as the ancient Guanches of the Canary Islands and, lastly, the Fulani) (Cornevin, 1963, p. 71, 351–3). The distant origin of this human type might be the 'Olduvai man' of East Africa, signs of which are found from the end of the Gamblian period onwards, around −11,000, and which is related to the Combe-Capelle race of Cro-Magnon in Europe (Cornevin, 1963, p. 88, 136; Boule and Vallois, 1952, p. 466). This type, therefore, would appear to be African in origin without being 'Negro' in the usual sense. Indeed, even those Egyptologists who are convinced of the essentially African nature of Egyptian civilization stress the fact that the population which founded this civilization was not 'Negro' (Naville, 1911, p. 199; Bissing, 1929, Frankfort, 1950).

The authors are always at pains to point out that the pure Negro element appears to have been minute in the groups analysed; two skeletons in a hundred, for example, at Naga-ed-Der in early predynastic times, and one in fifty-four in lower Nubia (Massoulard, 1949, p. 396, 410–11), although all anthropologists concur in acknowledging the existence of a 'Negroid' component in the mixed population which constitutes the primitive Egyptian 'ethnic group', at least from neolithic times onwards. It will also be observed that, in spite of the composite character of this population, which is confirmed by all anthropologists, it is considered to belong to a single race or branch of humanity.

According to a well-known study by H. Junker, true 'Negroes' appeared in the lower Nile valley only from the eighteenth dynasty onwards, around −1600 (Junker, 1921, p. 121–32). Junker's conclusions have been accepted by all Egyptologists, who since 1921 have no longer translated the Egyptian word *nehesy* by 'Negro' as had formerly been the practice, and translate it instead as 'Nubian'.[1]

If Egyptologists are very nearly unanimous on the composition of the primitive Egyptian race from the end of the neolithic period until the dawn

1. cf. A. H. Gardiner, *Egyptian Grammar*, p. 575, Oxford, 1927.

of history (from approximately −5000 to −3300), the same is not true for the protodynastic period and the first dynasties of the Pharaohs. From these periods onwards there is a marked divergence of views. According to some (Naville, 1911; Bissing, 1929; Smith and Jones, 1910, p. 25–6), the Egyptian population remained fundamentally the same before and after the advent of writing; they consider that foreign penetration, anthropologically speaking, was numerically limited in the historical era and the few centuries immediately preceding it (Smith and Jones, 1910, p. 28). Others believe, however, that the speeding up of Egypt's cultural development in the protodynastic period was due to the entry of foreigners into the Egyptian Nile valley (Morgan, 1922, Chapter VI; Petrie, 1914*b*, p. 43; 1926, p. 102–3); this migration, spreading from Asia, either from Mesopotamia or from Elam, is considered to have changed the ethnic composition of the population (Petrie 1914*c*). A third hypothesis introduced a different ethnic group, presumed not to have come from Asia, or at least not directly, but from the Delta, where it is believed to have been established for an indeterminate length of time and to have developed, before pushing up the Nile, carrying civilization to the natives of the south; this is often called the 'dynastic race' (Derry, 1956).

The theory that civilization was brought in by foreigners from the east or the north seeks to explain two facts which are well known from archaeology; first, the spread southwards of pottery techniques from the north in the Gerzean era (Negada II), and, second, the appearance of writing in Egypt at the same time as that of Asian motifs and objects in Egyptian furnishings at the end of the protodynastic period. They also claim to explain a typically Egyptian historical phenomenon, namely, the division of the country into two kingdoms which, theoretically, were to remain separate until the end of the Greek period: the Northern Kingdom, symbolized by the 'Red Crown', and the Southern Kingdom, symbolized by the 'White Crown'. The union of these two crowns on the head of the Pharaoh symbolized the unification of Egypt in the royal person.

When speaking of 'the north' in prehistoric and protodynastic times, it is essential to remember that this excludes the Delta, since, as we have seen, nothing is known about it from either an archaeological or an ethnological point of view, with the sole exception of the border site of Merimde, and for one period only (end of the neolithic).

The term 'northern' refers only to the Nile valley region, a rich but very restricted area stretching from Fayum to the outskirts of Cairo, and including Heliopolis. It is only from an interpretation of much later texts that the Delta, from Heliopolis to the Mediterranean, is included in the predynastic 'Northern Kingdom', as we know it from the excavations.

In fact, the only known predynastic and protodynastic sites of the early 'Northern Kingdom' are Gerzeh—which gave birth to the typically northern

'Gerzean' culture—Harageh, Abusir-el-Melek and Wadfa (Massoulard, 1949, p. 189), to which must now be added El Omari, in the southern suburbs of Cairo, and Heliopolis (Debono, 1948, 1950 and 1956).

In the middle predynastic and protodynastic periods, the unification of Egypt seems to have occurred in two stages: first, there was a conquest of the south by the north, which imposed Gerzean culture on upper Egypt, at the beginning of Naqada II; then conversely, at the end of the protodynastic period came the conquest of the north by the south, leading to the unification of Egypt under Menes, between —3000 and —2800.

Here we are entering the field of culture, which lies beyond the proposed scope of this article. I would mention, however, that nothing warrants the claim that the population of the north was fundamentally different from that of the south. Moreover, it does not seem necessary to postulate any radical change in the ethnic composition of the population in order to explain the rapid crystallization of Egyptian civilization between —3300 and —2800. Despite unquestionable contacts with Palestinian and Mesopotamian Asia, Egyptian civilization remains profoundly distinctive and African, from the beginning to the end of prehistory, and even throughout historical times. The different 'ethnic' composition of the population of the north has yet to be proved: differences observed in the proportions of the different ethnic components of the population, both at Abydos and at Gizeh (Falkenburger, 1946, p. 24–8; Derry 1956), may stem from social or even family causes, and not from a fresh immigration.

Until 1955, it had been generally accepted that the population of Egypt was 'Caucasoid' (the expression is Cornevin's (1963, p. 103–4, 152)), but Cheikh Anta Diop was instrumental in causing it to be reclassified as 'Negroid' (Diop, 1955, p. 21–253; 1959, p. 54–8; 1960, p. 13–15; 1962*a*, p. 449–541). A recent publication gives a faithful and extended summary of Cheikh Anta Diop's thesis (Obenga, 1973), which is forcefully expressed: 'In fact, the neolithic and predynastic inhabitants of the Egyptian and Nubian valley were Negroes.... Negroes were responsible for building the prehistoric... and historic Egypto-Nubian civilizations.' (Obenga, 1973, p. 102.)

The arguments put forward to support the 'Negroid' theory are more often cultural and linguistic, or even literary, than based on scientific anthropology (cf. in particular Obenga, 1973, p. 55–6, on the accounts given by Herodotus and Diodorus; p. 221–321 on linguistics; p. 333–443 on the method of counting and the graphic system). When the evidence of anthropology, concerning hair, for exemple, is called in (Obenga, 1973, p. 59, 124–25), it sometimes clashes with the observations of certain archaeologists and anthropologists (Brunton, 1929, p. 466; 1937, p. 20, 26–7; Fouquet, 1896–1897; Smith, 1923, p. 53–69; Massoulard, 1949, p. 408, 410–11).

The theory that the Egyptian population should be classed as Negro has not so far, to my knowledge, been studied critically and in depth by

anthropologists. The reproach has been made (Suret-Canale, 1958, p. 54, quoted by Cornevin, 1963, p. 63) that it confuses the different concepts of race and culture. Egyptologists, with one exception (Sainte-Fare-Garnet), although given a brief idea of the current work of Cheikh Anta Diop by the *Bibliographie Egyptologique Annuelle* [1] have not yet made use of his work.

There are thus two theories, both of them categorical. According to some—a great many—the Egyptian population is 'white', 'Mediterranean'. As Vandier sums up: 'It may justly be claimed that the Egyptian race is of Hamitic origin . . . it is certain . . . that Negroes did not arrive in Egypt until . . . late' (Vandier, 1952, p. 22). According to others, as Obenga puts it, 'the Egypt of the Pharaohs, by virtue of the ethnic character and language of its inhabitants, belongs wholly, from its neolithic infancy to the end of the native dynasties, to the human past of the black peoples of Africa' (Obenga, 1973, p. 445).

Topics for discussion and lines of research

Faced with such firmly-held opinions, it is difficult to remain strictly neutral. I shall therefore express my personal opinion on this matter, and will, in so doing, feel all the more free from scruples or remorse, since this position should, or so I hope, make it possible to 'identify the topics for discussion and lines of research' as I have been asked to do.

The positions adopted both seem to me to be too uncompromising. I shall confine myself to the ethnic aspect of the problem; the cultural aspect is even more complex and would require a symposium to itself. In fact, central to this aspect is the question of the influence of the African interior upon Egyptian civilization, and, conversely, that of Egypt upon Africa south of the Sahara. Except by undertaking a long study, for which the sources of information are all too often inadequate, how is it possible to decide what belongs to a common African culture, and what, on the other hand, originated in the Nile valley before spreading into Africa? For this reason I shall not deal with this aspect of the problem.

Whilst acknowledging that the ancient Egyptian population was 'mixed', a fact confirmed by all anthropological analyses, writers nevertheless speak of an Egyptian 'race', linking it to a well-defined human type, the white, 'Hamitic' branch, also called 'Caucasoid', 'Mediterranean', 'Europid' or 'Eurafricanid'. There is a contradiction here: all the anthropologists agree in stressing the sizable proportions of the Negroid element—almost a third and sometimes more—in the ethnic mixture of the ancient Egyptian population; but nobody has yet defined what is meant by the term 'Negroid', nor has any explanation

1. E. J. Brill, Leyden, since 1947; cf. in particular 1955, p. 55; 1960, p. 59; 1962, p. 44.

been proferred as to how this Negroid element, by mingling with a 'Mediterranean' component often present in smaller proportions, could be assimilated into a purely Caucasoid race.

It seems that modern anthropology is beginning to realize how inadequate our knowledge is in this field. On this score, I need only quote, word for word, the recent conclusions of a study of palaeolithic human remains discovered in Nubia. Referring to the lack of material for comparison, and especially to the fact that the old anthropological studies from which such material is drawn are based essentially on craniology and not on morphology, an anthropologist writes: 'Comparisons make lumpers of us all, even the most ardent splitters, and any such study of African material raises the problem of Negro origins. In the absence of fossil epidermis, caution is wise, there are no skeletal attributes that are diagnostically Negroid, and we are aware of the great morphological variations among those living groups that are classified together on the basis of skin pigmentation' (Anderson, 1968, p. 1025). The author concludes: 'Any use of this material to elucidate Negro originals must await a more sophisticated search for distinctive features of the Negroid skeleton, if such exist. Vague references to prognathism and limb proportions are of little value' (Anderson, 1968, p. 1038).

These remarks remind me of an observation by a nineteenth-century man of letters, a layman, not an anthropologist, which I think is also worth quoting, as it goes straight to the heart of the problem: 'At Kosseir . . . we saw pilgrims from all parts of Africa . . . I became convinced that the Negro race is even more varied than the white race. All kinds of profile are to be found among them, ranging from the purest Caucasian to the cretin and almost the imbecile.'[1]

This observation on the diversity of the black race shows, I think, how much the problem of the population of ancient Egypt has been distorted, how wrongly it has been approached and how, in the last analysis, it is a false problem. On the one hand a 'white' Egyptian racial type and on the other a 'black' or 'Negro' type have been conjured out of thin air. Both types are, in some respects, caricatures: how is it possible to speak of a 'white' type when, as statistical studies prove, more than a third of the population was 'Negroid', and, conversely, how can one claim that the Egyptians of Pharaonic times were Negroes, which means, according to those who use the term, that they were of the same physical type as the present-day inhabitants of West Africa, when the ancient Egyptians themselves, in their very accurate wall paintings, admirably contrasted this West African Negro type with their own, which is totally different?

1. G. Flaubert, *Correspondance*, Vol. I, p. 655, Pléiade edition, Paris, 1973.

A distinction should be drawn between race and culture. In its language, writing and mentality, there is no doubt that Egyptian civilization is first and foremost African, even if, over the millenniums, it borrowed certain cultural elements from its eastern neighbours. Its population, on the other hand, is clearly a product of the Nile valley's position in the north-east corner of the African continent. As a corridor between central Africa and the Mediterranean, for thousands of years a crossroads between the Africa of the Atlantic and East Africa, the Africa of the Red Sea, and between Ethiopia and the Indian Ocean, it was the melting-pot in which, from predynastic times, if not earlier, the various prehistoric African types, and the occasional representative of the races of the eastern marches, met and mingled. It would be a vain and useless task to look here for a pure, primitive 'race', or homogeneous population.

This is the real state of affairs which should, I think, provide the basis for the topics planned for discussion. Little remains to be said concerning contacts between Egypt and Asia and between Egypt and Europe (Petrie, 1901, 1914*b*, 1939; Frankfort, 1924 and 1951, p. 109; Christian, 1925; Bissing, 1929; Waddel, 1929 and 1930; Childe, 1929, 1934; Scharff, 1935; Kantor, 1942, 1952; Vandier, 1952, p. 21, 606; Baumgartel, 1965, p. 18, 21–2, 26–8,), but much still remains to be done, especially from an anthropological point of view, in order to get a true picture of the links between Egypt and Libya, the eastern and the south-eastern Sahara, Kordofan, Darfur, eastern and southern Sudan and what is now Ethiopia.

If an attempt to study these various contacts is to be fruitful, it is essential, I think, to start by clarifying what different people understand by the words 'Negro' and 'Negroid'. To take an example: Junker defines one type of Negro on which he bases his discussion (Junker, 1921, p. 121), but Obenga uses the word quite differently, since he applies it to the Nubians who have nothing in common with Junker's 'Negro' but the pigmentation of their skin (Obenga, 1973, p. 82–3). The same is true of the word 'Negroid', which also stands in urgent need of definition, as Anderson (1968, p. 8) has clearly pointed out.

A second topic which I think ought to be discussed is that of the definition of the 'Hamites', and of whether they really existed as a separate race in Africa (Obenga, 1973, p. 35; Seligman, 1913, p. 593–605, 1930, p. 457; Eickstedt, 1949; Naville, 1911, p. 199; Palmer, 1926; Spamous, 1929, 1931; Frankfort, 1950; Drake, 1960). This topic should be extended to cover the connections linking this race—if it is allowed to have existed—with the Negroes on the one hand, and, on the other, with the fossil African races discovered in Africa in the last vew decades (cf., *inter alia*, Clark, 1962; Cornevin, 1963, p. 87–100).

For a study of the peopling of Egypt, it would be important, in my opinion, to take a fresh look at the problem of the origins of the Egyptian neolithic period; this might form a third topic for discussion, and would be

all the more important since recent work in lower Nubia, in Sudan and in Asia, is producing new evidence about a problem which is very largely an ethnic one and is more complex than is generally supposed (Arkell, 1957; Wendorf, 1968*b*; Giuffrida-Ruggeri, 1916; Obenga, 1973, p. 446).

Related to the above topic, but different from it, is the discussion of the role of the African fertile crescent in the peopling of Egypt. By 'African fertile crescent'—from the palaeolithic period to the sixth Egyptian dynasty (from approximately −12,000 to −2000)—I mean the eastern part of the Sahara stretching between Fezzan in the north, the Tibesti, the Ennedi, Darfur in the south and the Egyptian and Sudanese Nile valley. Although the problem is primarily an ecological one, it has repercussions on the ethnic origins of the Egyptions, since it is linked, first, to the development of the neolithic culture in Egypt and, second, to the origins of agriculture in the Nile valley (Arkell and Ucko, 1964; Balout, 1955; Beck and Huard, 1969; Breuil, 1931; Briggs, 1957; Butzer, 1958, 1959*a*, 1959*b*, 1965; Butzer and Hansen 1968; Caton-Thompson, 1934; Eickstedt, 1943; Huard, 1955, 1959, 1964, 1966; Huzzayyin, 1939; Mitwalli, 1952; Newbold, 1945; Passarge, 1940; Scharff, 1926, 1942; Schott, 1950*a*). In this field, the recent death of Dr A. Fakhry is sorely felt, depriving us as it does of his important discoveries and observations in the Khargeh oasis.

Possible lines of research are very plentiful since, as I have emphasized on several occasions, the sources at our disposal for a study of the population of ancient Egypt are far fewer than is generally believed, and it is therefore indispensable to add to them (Baumgartel, 1952; Vandier, 1952, p. 532).

The most serious gap in our knowledge concerns the Egyptian Delta. Except for the Merimde site, the Delta north of Heliopolis is unknown territory for prehistoric archaeology and anthropology. In spite of the tremendous difficulties involved, excavations of the very ancient levels in the Delta, particularly the eastern Delta, should be encouraged, as should palaeo-ecological research, which can provide information on the natural conditions in which the population of the Delta lived in very early times (Rosen, 1929; Rizkana, 1952; Butzer, 1965, p. 30–7; on p. 17 Butzer mentions the present inadequacy of field studies). Research is very important in this connection since the Delta is often taken to be the original home of the populations which brought 'civilization' to upper Egypt (see above).

Apart from Junker's work on the appearance of the typical Negro in iconography and physical anthropology during the XVIIth dynasty (Junker, 1921), the problems of the appearance, date of appearance and distribution of the various types of African in the Nile valley have not yet been thoroughly studied; they are, in fact, likely to throw light on the ancient population of Egypt and on the characteristics and geographical location of the various African races in antiquity. Thus, for example, the problem of the pygmies in

Egypt (Dawson, 1938, MacRitchie-Hurwitz, 1912; Stracmans, 1952*a*, 1952*b*), which is connected with that of the ethnic relations between Egypt and Africa south of the Sahara, would repay more intensive study.

Concerning the origins of the population of the Nile valley, there is a big gap in our knowledge between the later palaeolithic and the neolithic periods, especially in Egypt. Many writers believe that there was an interlude in mesolithic times during which the Egyptian valley remained uninhabited by man. Recently, the existence of this gap has been challenged, on the grounds that the apparent gap is an accident due simply to the lack of adequate field research (Butzer-Hansen, 1968, p. 188–9). In view of the importance of this question in relation to the origins of agriculture in Egypt and hence in relation to its settlement, there would be a case for undertaking serious archaeological research along the Egyptian Nile valley while waiting for all the results of the work carried out in lower Nubia to be published, so as to obtain an overall view of the Nilotic mesolithic period.

Lastly, although the neolithic and protodynastic periods are known in lower Nubia and to a lesser extent in the Khartoum area, they are, on the other hand, almost entirely unknown between the second and sixth cataracts. In view of this area's importance in the contacts and movements of populations between southern and northern Africa, it would be worth while to encourage prehistoric research in this part of the Nile valley, and similarly along the east–west axes which run from the Nile to the Sahara in one direction and to the Red Sea in the other. These axes, archaeologically speaking, are also very underexplored.

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The peopling of the Nile valley south of the twenty-third parallel

Nicole Blanc

The history of the peopling of the Nile valley throughout its length, and not merely in the Egyptian part of it, has only in very recent years been recognized as important. Previously, the classic historical view generally accepted had been that the history of the lands bordering the Nile could be traced back, as it were, against the current, with the river serving, but only in the upstream direction, as a great artery of communication, along which peoples and cultures had spread from the civilized shores of the Mediterranean to the dark regions of Black Africa, across the arid zones of upper Nubia and the swamps of the southern reaches of the White Nile. It was also generally taken for granted by classic writers that no serious reconstruction of the historical past could be made unless it were based on archaeological remains, written records or various kinds of figurative art, which gave the Egyptian Nile valley an indisputable superiority.

For a long time, travellers and archaeologists were discouraged by the rigours of the climate and the inaccessibility of the area from venturing beyond the First Cataract (Aswan); finally, in 1844, a Prussian expedition led by the Egyptologist Lepsius, the real founder of the study of Meroitic archaeology, began a methodical exploration. But all progress along these lines was abruptly cut short by the Mahdiya (1885–98) and only began again with the construction of the Aswan Dam and the systematic exploration, by Reisner and Firth among others, of lower Nubia, which was threatened with submersion. In 1929, work for raising the height of the dam prompted a fresh excavation campaign. But it was not until 1946, with the construction of the Aswan High Dam (Sadd-el-Aali) and the upheavals caused by the total disappearance of the valley over a distance of 500 kilometres—as far as Dal, in the Sudan, upstream of the Second Cataract—that a veritable swarm of archaeological expeditions descended on Nubia. The material collected, though somewhat scanty by Egyptian standards, has still not been exhaustively studied.

Further south, the Nile valley and the deserts in the vicinity of the Dongola reach had been largely neglected by explorers because of their inaccessibility. At Meroe itself, J. Garstang had done a certain amount of excavation from 1909 onwards, but this had been fairly limited in scope. The major sites,

the immense Meroitic necropolises around Napata and Meroe, began to be seriously explored only in 1916 by the American G. A. Reisner, one of the founders of Sudanese archaeology. But the results of his work were not published until nearly fifty years later. Other sites along the Nile were, however, explored during the same period, in particular by F. Griffith, who deciphered the Meroitic inscriptions (1909–11), and by a large number of amateurs, many of them British administrators, whose findings were regularly published in the periodical *Sudan Notes and Records*. Up to 1945, therefore, archaeological research in the Sudan remained more or less unorganized. Shortly after the end of the Second World War, the resumption of the activities of the Sudan Antiquities Service (directed, in turn, by A. J. Arkell, P. L. Shinnie, J. Vercoutter and Thabit Hassan Thabit) led to noteworthy achievements: a systematic inventory of sites was drawn up, excavations were begun both by the Antiquities Service and by foreign institutions, and the results of these appeared regularly, from 1953 onwards, in *Kush*, the journal of the Antiquities Service, published in Khartoum.

Enormous advances were thus made, but almost exclusively in regard to the areas to the north of Khartoum. South of the Sudanese capital, the banks of the White Nile and the Blue Nile, deserts and savannahs were still practically unexplored; only a few studies had been made of the shores of the Red Sea, whose links with the Nile valley are obvious. As for the population inhabiting the swamp or woodland areas in the extreme south of the Sudan, or the areas near the sources of the Nile in Uganda, they were traditionally regarded, until quite recently, as having no history, and these regions were visited only by anthropologists.

This lack of traditionally recognized sources meant therefore that there was less and less historical research the further south one went. But the development of Sudanese archaeology in the post-Second World War period nevertheless had extremely important consequences: for the first time it was possible to contest the Egypt-centred view of the history of the Nile valley. The results of excavations led research workers to start considering to what extent African influence had shaped the civilizations along the Nile, and to contemplate, on sound scientific foundations, the hypothesis that there had been a reverse current of influence from Black Africa towards the Mediterranean. Although there was no attempt to minimize the influence of Egypt south of the twenty-third parallel, the evidence from excavations increasingly demonstrated that that influence was not the only one to have left its mark on the more southerly regions and that the physiognomy of these regions might be, not a pale imitation of a foreign model, but rather something new springing from an encounter of cultures. A multiplicity of diffusionist theories and a number of supposed migrations had been put forward from time to time as explanations for a particular cultural or physical characteristic found in equatorial East Africa—the origin of the Interlacustrine Kingdoms, the Caucasoid features of the pasto-

ral people of Western Uganda or the shape of certain stone implements—or even in West Africa—in support of the thesis that the divine Kingship of the Akan was of Pharaonic origin, or that the Yoruba came from the Nile valley, etc. Such theories, which were already tenuous, came to seem more shaky and today have been almost totally abandoned. The archaeology of the Sudan had ceased to be 'a somewhat disregarded offshoot of Egyptology' and the material evidence it produced made it possible to hope that 'one of the most important chapters in the history of Africa' might be pieced together (Leclant, 1970, p. 153).

Nevertheless, archaeological excavations alone cannot be expected to provide answers to all questions: while they undoubtedly make it possible to draw certain conclusions with regard to the material aspects of people's everyday life, their habitations, etc., it would be hazardous to try to make them do more; furthermore, although archaeological remains are common in areas with the climate and terrain of the northern Sudan, for example to the south of the tenth parallel, the nature of the soil and the climate make it unlikely that any major discovery will be made (although it should not necessarily be inferred that important cultural developments have never occurred in these other areas); lastly, written material concerning these difficultly accessible areas is scarce and of relatively recent date.

For a few years past, what are commonly known as 'oral sources' have been more and more often used by historians. Such sources, which include all kinds of information and evidence, the preservation and recall of which depend on the powers of memory of successive individuals, have proved particularly productive in the case of the sub-Saharan societies, all of which have developed the use of memory to a high degree among their members, with the community ensuring accuracy of recollection: almost everywhere, indeed, the law, religion, family tradition and artistic expression have relied on oral communication in order to pass on the knowledge necessary for the functioning of the society concerned. Today, these different characteristics justify the use of such sources for historical purposes.

Inevitably the oral tradition is not of equal richness or importance among all the African peoples. The traditions of societies having State systems (such as the Interlacustrine Kingdoms) are different from those of Stateless societies (Nuer, Dinka, etc.) which generally do not have the specialized 'traditionists' who are to be found in the former. The traditions also differ in the time span which they cover and in their area of distribution: some concern very ancient events (foundation of a kingdom, a people, or a dynasty, for example); others concern only a village and may go back barely a century. One must, of course, adopt a critical attitude in evaluating the historical significance of such sources, but this is not peculiar to oral tradition: any form of oral tradition implies a purpose and fulfils a function which is primarily social in character (but this

surely applies also to any written record, any monument, any graphic representation). The purpose may be to justify power, to secure material advantages or prestige, to ensure the cohesion of a group, etc., and all these purposes must be taken into account by the historian. To take an example, heterogeneous populations under a strong, centralized authority often have a number of rival traditions, certain of which appear to be dominant whereas others are 'peripheral' and hidden. It is important to collate these and to specify in which group or social stratum each tradition originated. The historian must also apply in his criticism certain external criteria: he will thus compare the evidence with what is available from other sources, whether oral, written or archaeological, and will check its consistency with such anthropological or linguistic data as may have been gathered, etc.

The progress of African linguistics and its increasingly frequent use for historical purposes—as a means of checking certain hypotheses—exemplified by Bruce G. Trigger's work on the northern Sudan (Trigger, 1966) concerning the origin of the Nubian languages and the classification of Meroitic in Greenberg's eastern Sudanic group, provides the historian of the purely African part of the Nile valley with another important tool, the use of which is only just beginning.

Lastly, anthropological data are today being increasingly used by historians. Whereas the major traditional sources, whether written or monumental, undeniably tell us more about the history of governments in many instances than they do about that of peoples, anthropological data often give an insight into the mechanism of changes directly affecting the people, link them to their environment and shape their everyday life. One very good example of the anthropological approach to history in the region with which we are concerned is provided by Bruce G. Trigger in his *History and Settlement in Lower Nubia.* Another example is provided by the anthropologist, Emeka Onwubuemeli (1972), is his recent essay 'Early Zande History', which is very different in that it is intended primarily as a critique of the use made hitherto of data derived from oral tradition, from linguistics and from anthropology and as an attempt to consolidate and reinterpret these three types of data in connection with the history of the Azande of southern Sudan and the origins of the Vongara aristocracy. This latter example is of particular interest in that it brings out the weaknesses of oral tradition and is also an object lesson showing how a good analysis of available linguistic and anthropological data may remedy the shortcomings of such sources.

If the peoples of the Nile valley are considered as a whole, it is apparent that, from the twenty-third parallel to the Great Lakes, and from the Red Sea and the Ethiopian border to the frontier of Chad, the present population is extremely heterogeneous in its racial, social and economic characteristics. Many of these peoples, in all probability, led a very isolated existence before the Turco-Egyptian colonization. Nevertheless, although it seems inaccurate

to describe the Nile basin as a 'geographical entity', one cannot escape the conclusion that, notwithstanding the diversities, from north to south, and from east to west, the river basin did act as a link and as a centre towards which different regions tended to gravitate although separated by every other factor: West Africa, East Africa, the Arab world. If we are to be able to trace the existence of this link throughout the course of history, one of the first requirements seems to be to restore the balance of historical research in the Nile basin, to abandon entirely the classic historical tradition to which we are still drawn, although sometimes unwittingly, by the imperialist ideology of former times and the legitimate fascination exercised by the magnificent abundance of Egyptian archaeology. As has just been demonstrated, the means required for restoring the balance of research are now available to us. It is doubly important to accomplish this task: from the scientific standpoint, it is imperative and, from the human and political standpoints, it can and must contribute to reducing tensions and to furthering the cause of African unity.

In outlining the principal geographical and ecological characteristics of the Nile basin to the south of the twenty-third parallel as far as the source of the river in Uganda, and in briefly describing the present peopling of these regions, we shall try to show in what areas these peoples have mainly moved, to which points they have tended to gravitate and what routes they have followed, so far as our present knowledge goes. In particular we shall try to bring out the role of the Nile in the overall picture and to show to what extent, over a large part of its course, the contrast between the fertile lands which it irrigated and the deserts situated further from its banks gave rise in certain places to a dialectical interplay between the centre and the periphery which, over the centuries, has occasioned manifold movements of population.

It is well known that the Nile is not only the longest river in Africa (5,600 kilometres from Lake Victoria to the Mediterranean) but also that, from south to north, it crosses a wider variety of geographical regions with a more varied population than any other African river. Its source furthest from the Mediterranean is that of the Kagera River which drains the Mfumbiro highlands to the south-west of Lake Victoria. Below the lake, it is known as the Victoria Nile, passes through Lake Kyoga, flows over the Murchison Falls and into Lake Albert. Further north it adopts the Arabic name of Bahr el Jebel (Mountain River) and crosses the swamps to Lake No. In this region a number of watercourses flow into the Nile, including the Bahr el Arab and the Bahr el Ghazal to the west and the Bahr el Zeraf and the Sobat to the east. Between Lake No and Khartoum, the river is known as the White Nile, a name which refers to the pale colour of its waters, in which there is a large amount of decomposing vegetable matter. At Khartoum the White Nile meets the Blue Nile coming down from the Ethiopian plateau. From there to the delta, in Egypt, the river is known simply as the Nile.

The Egyptian part of the Nile has been known and studied since the dawn of historical times. But the origin of its annual flood and the location of its sources have been disentangled from myth and superstition only within the last hundred years or so. The sources of the Blue Nile had been known since Portuguese missionaries made their way into Ethiopia in search of Prester John in the sixteenth century. Lake Victoria and Lake Albert, on the other hand, were first explored by Speke, Grant and Baker in the second half of the nineteenth century, though indeed rumours of their existence were current as early as Ptolemy's time,[1] but these rumours had been unsubstantiated, and the sources of the Nile remained shrouded in mystery for over a thousand years.

Today the characteristics of the whole course of the Nile (from the Great Lakes to the Mediterranean) and its hydrological régime have been extensively studied. Dams have been built to control its flooding and wherever it is navigable, between the Equator and the delta in Egypt, it is used for the transport of passengers or goods. Notwithstanding its many different names and the great variety of territories and climatic belts which it crosses, the river has regained a certain unity and, as a result of technical advances, the time-honoured view of the Nile as a series of separate 'reaches' is gradually being abandoned The interdependence of Egypt and the Great Lakes is a reality embodied in the dams, and the economic development of the three countries crossed by the Nile is indubitably bound up with the exploitation or harnessing of its waters.

But while technological progress is thus today giving the Nile an economic significance which tends increasingly to promote the integration of distinct geographical regions having dissimilar climates, the natural conditions prevailing until the nineteenth century, as recent history has emphasized, were not conducive to such a process. Between the twenty-third parallel and the Great Lakes the Nile crosses the whole of the Sudan belt. This belt includes every variety of climate between the Sahara in the north and Equatorial Africa in the south and generally has little marked relief. But at the tenth parallel, in the very middle of what is now the Democratic Republic of the Sudan, there occurs a sudden change of a kind which is to be found nowhere else across Africa from the frontier of Chad to the Atlantic Ocean. This geographical 'break' which throughout history and, no doubt, in prehistorical times marked a natural frontier between the peoples inhabiting the north and those living to the south of the tenth parallel is undoubtedly one of the most striking features of the Nile valley and also one of the features which have most profoundly affected the history of the peoples of East and North-East Africa. There is a sudden and considerable change in the nature of the soil, the climate and the relief. The Nile itself alters in character in its southern reaches and is no longer a means of transport and communication; it disappears among the swamp

1. H. H. Johnston, *The Nile Quest*, 1903.

grasses which make both navigation and overland travel difficult. At the period during which the Arabs were sweeping in successive waves over the Sudan, their southward advance in the direction of Equatorial Africa was checked by this formidable natural barrier. The spread of Islam, which had been rapid and relatively easy in most of the regions to the north of the tenth parallel, was abruptly halted at this latitude. For a very long time there was only local, sporadic and superficial contact between the Arab immigrants and the local populations.[1]

For our purposes, that is to say the study of the geographical background to the peopling of the area, the country south of the twenty-third parallel may be divided into four regions. The north extends from the Egyptian border to Khartoum and, from east to west, comprises two zones: the desert and the river banks. To the east lies the Nubian desert which is almost featureless except on its eastern margin, where there are a number of small water courses originating in the Red Sea hills. The Libyan desert to the west is still more arid, having relatively few oases, which are too small at present to support settled populations but which have been of importance on routes for caravans coming from the Nile. The main place where water is found in this desert is a depression near Dongola where there is some sparse vegetation including some date palms and where, today, the Gawarra Arabs graze their flocks. As for the Nile valley itself, this reach of the river has a narrow strip of alluvial land on either bank, rarely more than 2 kilometres wide, where all the life of the region is concentrated. The vegetation, consisting of date palms and various grasses, is sparse; it becomes a little denser south of Berber where the rainy season lasts two or three months. The river itself is only intermittently navigable and the floods, from August to November, vary greatly in magnitude from one year to another.

South of Khartoum, the central clay plains extend southwards as far as the present boundary of Upper Nile Province. To the west, they stretch to the Nuba mountains and to the east they reach the Ethiopian frontier. They are very flat and featureless, the soil is heavy and they are the richest region of the Nile valley south of the twenty-third parallel. There are three distinct belts of vegetation, determined by the amount of rainfall. The Gezira is today considered as the 'granary' of the Sudan and is by far the most fertile region. It is also a major crossroads: on the While Nile, navigation is easier than it is further north and although the present rainfall in the region is adequate both for agriculture and stock raising, the economic importance of the river remains very great. It is in this region that the great modern towns of the Sudan have developed: Omdurman, Khartoum, Khartoum North, Wad Medani, etc.

1. This account of the Nile valley is based, as far as the Sudan is concerned, on K. M. Barbour (1961).

Lastly, no study of the peopling of the Nile valley between the twenty-third and the tenth parallels should leave out of account two other major regions which, although situated at some distance from the Nile, have nevertheless had an influence on the areas bordering the river. To the west the provinces of Kordofan and Darfur, together covering an area of 850,000 square kilometres, have a numerically small population in which there are many African elements going far back into the past; these regions are, for the most part, in the sandy belt called the Qoz, and have no permanent watercourses.

To the east, the regions east of the Bleu Nile of a line running roughly from Sennar through Gedaref to the Setit river valley have a very harsh and arid climate, the only exceptions being the Butana, the Gash delta and the zone between the Atbara river and the Red Sea.

Conditions in this area make life hard and communications very difficult. The coastal strip beside the Red Sea has no economic potential and the nomadic herdsmen who make up the majority of the population are still living on a subsistence economy.

A number of points emerge from this brief survey of the four main geographical regions associated with the Nile and of the course of the river north of the tenth parallel: although the Nile does not have the same vital economic importance in the central clay plains and in the area north of Khartoum, this difference is merely one of degree. In both these regions, the river is a factor of undoubted economic importance, a channel of communication and cultural diffusion, a line round which life is organized.

The Nile is one of the oldest navigable inland waterways known. Within Egypt, it has always been important for the transport of goods or armed forces. According to R. C. Anderson (1963) the earliest evidence of the use of oared boats comes from the Nile. By −4000 it was already used as a route of communication with sailing vessels plying on it. Navigation on the river is admittedly not possible throughout its source, particularly within the Sudan. Upstream of the First Cataract, in the extreme south of Egyptian territory, many obstacles prevented the development of river traffic: between Aswan and Khartoum there are six cataracts but in very ancient times the first and second of these were bypassed respectively by a canal (in the reign of King Merenré in −2400), and by a portage, probably built during the third millennium.

Furthermore, as the terrain is generally flat throughout northern Sudan there has been no serious hindrance to population movements, to cultural diffusion or to trade, which since ancient times has followed a number of major routes of which more will be said later. This lack of contrast in the relief and the broadly similar ecological conditions throughout the Nile valley as far as the tenth parallel have undeniably, in the course of history, facilitated to a considerable extent the penetration and progressive settlement of successive waves of Arab immigrants. In the two regions furthest from the Nile, Kordofan

and Darfur, on the one hand, and the Red Sea hills, on the other, the high ground has sometimes afforded refuge to the indigenous populations which have thus been able to preserve their languages and their traditional social organization down to the present day. But it did not prevent the penetration of Islam, which was the first step towards cultural uniformity. The Arab populations settled around these highlands, enclosing these small ethnic groups within a great area of Arabized territory.

There is another very important feature marking this territory: it is relatively open to the outside world, so that the section of the Nile valley between the twenty-third and the tenth parallels has been both a thoroughfare and a meeting place. It is very generally accepted that this region played an important part in the transmission of cultural traits between East Africa and sub-Saharan Africa: in this connection the aspects so far most extensively studied are those which relate to cattle, iron and various political institutions. But, to the east, the melting pot of the Nile valley was also the scene of contact with Asian influences: the Sinai Peninsula, the Red Sea and the Gulf of Aden were crossed by routes along which peoples and ideas passed in both directions between the two continents. The most ancient of these routes are probably those in Sinai. But the sea route along the shores of the Red Sea, already frequented by Egyptian ships in the reign of Solomon, was used for trade with Ethiopia and southern Arabic and carried people and merchandise from both Asia and Africa. There were other great routes crossing the Red Sea, in particular through the narrow strait of Bab al Mandab between Ethiopia and south Arabia; on both sides of the strait the prevailing ecological conditions are identical, a fact which was conducive to the movement of men and ideas between the continents.

The most extensively used of these routes, in historical times at least, and probably even earlier, was that which went from Sinai through Egypt and south-wards along the valley.

Archaeological discoveries indicate that trade between the Sudan and Egypt along this route was taking place as early as —4000 or even earlier. This trade—in gold and slaves from the Sudan—was certainly thriving between —700 and —400.

Before the introduction of the camel, caravans of donkeys and porters followed the bed of the Nile. The busiest route was 'the great Nubian route' on the left bank of the river between Aswan and the Second Cataract (Mutwakil 1970). The south Arabian route through Ethiopia, on the other hand, which involved crossing the contrasting terrain of the Ethiopian highlands and the Sudan plain, seems to have been less popular (Arkell, 1955; Barbour, 1961) and even contacts between Aksum and Meroe, which competed in trade with the north, appear, on present evidence, to have been on a limited scale.

With the introduction of the camel into this region, which cannot be

dated exactly but which may have occurred in the last few centuries before our era, the importance of the Nile valley as a communication route declined. In medieval times particularly, when travellers were endeavouring to avoid the constraints imposed by the Nubian kingdoms, major routes were opened up across the desert to the west of the river, such as the Darb el Arba'in (forty-day route) between Egypt and Darfur and on to West Africa (Wadai and Bornu) and Nort-West Africa (Tripoli, across the Fezzan). With the spread of Islam the 'Sudan Road' from west to east, at right angles to the Nile, was developed, bringing pilgrims from West Africa to Mecca through Darfur, Kordofan, Shendi or Sennar (according to Burckhardt) and Suakin (Umar al-Naqar, 1963). Darfur thus gradually assumed great importance. But as far as earlier contacts are concerned, the thesis propounded by Arkell (1955, p. 174–5) that, after Meroe was crushed by Aksum (+350), the royal family of Meroe took refuge in Darfur and founded a kingdom there, and that populations such as the Kaggidi (south of Jebel Meidob), the Kaja (north Kordofan) and the Birkid (central Darfur) came from Kush, remains mere speculation. It is possible (Trigger, 1969, p. 95) that Christian Nubia maintained regular commercial contacts with Darfur and influenced it culturally. It is also possible that such trade relations led to the foundation of kingdoms such as that of Tungur, which was probably destroyed by Bornu round about 1535.

Today, what is generally known as northern Sudan is relatively sparsely populated. Outside the urban areas, the population is divided between agriculture and stock-raising. Most of the settled cultivators live in the central clay plains (Gezira) but they are also to be found in Darfur, in the Nuba mountains, and near the Ethiopian border. Before the 'pax Britannica' and the establishment of strong centralized government in these regions, the cultivators settled on the hillsides overlooking the plain and were thus able to defend themselves against raids by nomadic herdsmen. They have since come down into the fertile valleys and agriculture has spread to the savannah and as far as the fringe of the desert. In the Red Sea hills, a similar process has occurred and agriculture has recently also spread to the Gash and Tokar deltas. Its importance varies; for certain populations it is their sole means of subsistence; for others, it supplements stock-raising. But, in the main, the traditional economy of northern Sudan was and remains pastoral, which implies a nomadic way of life or the seasonal movement of flocks. Attempts have been made wherever possible to encourage settlement, because of the needs of modern development, but the percentage of nomads remains very high even today. These can be divided into camel-owners in the semidesert regions north of Khartoum, and cattle-breeders further south (beyond the thirteenth parallel camel-breeding becomes impossible); in the northern belt, there are also populations which combine camel-breeding with cattle-raising (Zaghawa, Beja, Shukhriya, etc.).

As far as its population is concerned, northern Sudan is today considered essentially an 'Arab' zone. In 1935, a British administrator, L. F. Nalder, wrote that the remaining differences between the northern tribes were 'mainly superficial' and that a district commissioner, on being transferred from Berber to Bara, from Kassala to Kordofan, 'finds that he is dealing, in different local conditions, with the same kind of people, the same mental outlook'.

The almost total Arabization of northern Sudan, however, dates only from the sixteenth century. Until that time, since the conquest of Egypt by Muslim Arabs between 639 and 641, there had been merely a steady southward infiltration of Arab herdsmen. The Nubian territories south of the First Cataract then formed two Christian kingdoms: the northernmost of these, known by the name of al-Maqurra, was itself an amalgamation of two earlier kingdoms, those of Nobatia and Makuria; its capital was Old Dongola and it extended along the course of the Nile to a point south of the confluence of the Atbara. Beyond that was the kingdom of Alwa, the capital of which was Soba, on the right bank of the Blue Nile.

Frontier raids south of Aswan began with the conquest of Egypt: the nomadic Beja who had settled to the east in the Red Sea hills and the Christian Nubians along the Nile harassed the Muslims of Egypt. The counter-attack in 651 by the Arab governor of Egypt, Abd Allah b. Sa'd b. Abi Sahr, ended not in conquest but in the signing of a treaty which, for some six centuries, provided the basis of a *modus vivendi* and trade relations between Muslim Egypt and Christian Nubia and prevented the permanent settlement of Nubians in Muslim territory or of Muslims in Nubian territory.

Apart from an expedition in 969 by an Arab adventurer, al-Umari, and another in 1172 by Turanshah, no military expeditions were launched against Nubia until the intervention of the Mameluke, the Sultan of Egypt Al-Zahir Bibars, between 1260 and 1277; it was not, therefore, by military conquest that the Arabs began to make their way into the Sudan prior to the thirteenth century. It was only gradually that the desert nomads, impelled by the hostility of the non-Arab governors of Egypt, advanced first into upper Egypt and then, as the Nubian kingdoms became weaker, increasingly infiltrated the region of the cataracts and beyond. By the end of the fourteenth century, this had reached such a point that Ibn Khaldun could write that the Juhayna Arabs were masters 'of Aswan and beyond, in Nubian territory and in Abyssinia'. According to Ibn Khaldun, however, it appears that the whole of the Nubian territory was not then under Egyptian control and that 'pockets of resistance' remained. Between the fourteenth century and the beginning of the sixteenth and the rise of the Funj sultanate, the numbers of Arab immigrants increased. The Egyptian military expeditions launched by the Mamelukes bent on the conquest of Nubia later opened the way to massive Arab immigration in the Nile valley.

These immigrants became established without great difficulty, particularly as they followed the practice customary among nomads of marrying indigenous women: as inheritance was matrilineal among the great majority of peoples inhabiting Nubia at that time, and patrilineal among the immigrants, they quickly acquired material and political power, while entire indigenous groups became Arabized. At the same time, the ascendancy of Islam was also established without great difficulty, as its frequently demonstrated flexibility enabled it to avoid any sharp clash with local customs.

To the east, the Beja themselves offered only slight resistance to the penetration of the Arabs who had come to work the gold and emerald mines of the Red Sea hills. The Arabs controlled the commercial exploitation of these mines and trade for at least four centuries, from the signing of the treaty in 831. But in spite of intermarriage, the Beja were only very superficially and partially Arabized and, even today, have retained their own language.

Sir Harold MacMichael (1912, 1922) assigned these immigrants who came to the Sudan either from Egypt or across the Red Sea from Arabia to two main groups on the basis of tribal genealogies: the Ja'aliyin and Danaqla, stemming from northern Arabia, and the Guhayna who came from southern Arabia, the Yemen and the Hadramaut.[1]

The Ja'aliyin, who began to enter the area at the time when the Christian kingdom of Dongola still existed, came through Egypt and colonized the Nile valley. They appear to have adopted a settled mode of life fairly early. Many of them are now prosperous cultivators in Gezira and Kordofan. The Guhayna, on the other hand, who appear to have come from Arabia by a more direct route across the Red Sea, settled in zones which were ecologically similar to their homeland. They are represented today by a number of large pastoral tribes: in the west, the Kababish who are camel-owners, travelling great distances and wholly nomadic; in the east, the Shukriya, in the Butana, whose means of livelihood is a combination of camel- and cattle-raising; and, lastly, in south Kordofan and Darfur, the Baqqara tribes, who have adopted cattle-raising because camel-breeding is no longer possible in that latitude. As for the Kawahla, who are also of Guhayna origin and came by way of the Red Sea, they have intermarried to some extent with Beja. Today, they are found in the northern Butana and along the White Nile as far as an area just south of Khartoum.

1. The use made by H. A. MacMichael of Arab genealogies in these two books has recently been criticized by the anthropologist I. Cunnison (1968) on the basis of research carried out among the Baqqara Arabs: in societies of this type, genealogies are constantly rearranged and adjusted in accordance with the political situation of the day and with the strategies of the different social groups. This being the case, it is, so Cunnison says, very risky to use them as historical sources, unless various critical criteria are applied to them, which is not the case in H. A. MacMichael's work.

In addition to these main groups, the same author distinguished a number of less important Arab tribes of Guhayna origin, such as the Rashaida in Kassala province and two groups of Zebaydia, one to the east of the country and the other in Kordofan; and in the Bayuda desert and further west in Darfur and Kordofan, a nomadic tribe of Berber stock, the Hawawir, who, according to MacMichael became Arabized and Islamized when they settled for a time in upper Egypt and who fled southwards from the Mamelukes; although differing from the Arabs in physical type, they are indistinguishable from them as far as their language and customs are concerned.

The history of Arab penetration in the Sudan has, since Sir Harold MacMichael's work, been the subject of a book by Dr Yusuf Fadl Hasan (1967). This survey, which traces the history of Arab penetration in northern and central Sudan over several centuries and shows the political and economic causes of the migrations, is an attempt to explain and to link up what we have been able to discover of the remote past of the Sudan as a result of archaeological excavations and what we have learnt from literature and records about the history of the region from the fifteenth and sixteenth centuries onwards. Previously there had been a break, a 'dark age' roughly corresponding to the Middle Ages in Europe, and it was difficult to understand how a population culturally and linguistically so similar to that of ancient Egypt, and which had subsequently adopted Christianity, had abruptly become the Arab and Muslim population of the Sudan. This attempt to restore historical continuity marks an important step forward.

Clearly, this brings us back to what is known of the peopling of northern Sudan before the arrival of the Arabs.

The groups which can still be distinguished today are markedly different, both physically and linguistically, from the rest of the Arab or Arabized population. They are regarded as forming two groups: the 'Hamitic' (Lepsius), later known as the 'Brown of Mediterrancan race' (G. Sergi, 1901), and the Negro who have inhabited the Sudan since very ancient times. It is also a matter of general agreement that a mingling of these two races occurred in ethnic frontier zones. It is still difficult to establish with any certainty exactly what areas were occupied over the centuries by one or other of these groups.

Wyatt MacGaffey (1961), writing of northern Sudan, considers that successive waves of migrants of the Negro race came down the Nile and entered Nubia, such waves being interspersed with periods in which the invaders mingled with the 'Hamitic' populations of the desert and thus lost their identity. A recent example of these endemic struggles between riparian Negro populations and desert dwellers is provided according to this theory by Arab penetration itself and what some regard as the 'Shilluk-Funj reaction'.

The contrary thesis—penetration of successive waves of immigrants from the north—has been put forward by the Egyptian historian A. Batrawi, but

incontrovertible proof has not so far emerged. An interesting insight is, nevertheless, provided by the work of Greenberg (1963, p. 25) who shows that the languages to which the Nubian languages are probably most akin are those of the Nilotes of southern Sudan (the 'Eastern Sudanic' group). Furthermore, Bruce G. Trigger (1966), studying the different theories relating to the homeland of the Nubian languages in the light of Greenberg's work, points out that their original location is generally thought to have been in Kordofan and Darfur and that Nubian is supposed to have made its appearance in the Nile valley some time between +200 and 500, where it replaced Meroitic, which appears to have been spoken in the area for a very long period. Trigger concludes that lexical and grammatical similarities, though not amounting to conclusive evidence, suggest that Meroitic, like Nubian, may belong to the Eastern Sudanic group but that it is less closely related to this group than Griffith believed. This might be the explanation of a certain cultural continuity in this region. If this is indeed the case, it would have to be acknowledged that it was a language belonging to this group that was spoken by those who built the first African civilization remote from the shores of the Mediterranean. The hypotheses that were previously put forward, by Lepsius, who regarded Meroitic as a Cushitic language or an old form of Nubian, and by Carl Meinhof and E. Zyhlarz, who regarded it as a Cushitic or Hamitic language, have, in any case, led nowhere and have been more or less abandoned today.

There is no doubt, however, that Darfur's position at a crossing of routes, and the ecological conditions prevailing there which, according to Trigger (1969, p. 95), made possible 'limited occupational specialization' and the emergence of a stratified society, made this region a pole of attraction to the west of the Nile valley. But, again according to Trigger (1964, p. 96), it could never achieve the same level of development or stability as the states lying besides the main Nile and, to a lesser degree, along the Blue Nile, which were based on intensive agriculture, had relatively well-defined frontiers and a large settled population who could attain a higher level of 'occupational specialization' than was possible in Darfur, where the need to supervise caravan routes and the collection of tribute left considerable scope for nomadic herdsmen making for instability. Going still further, Bruce G. Trigger explains the relative underdevelopment of the civilizations which arose on the banks of the Nile in the Sudan, in comparison with those which flourished in ancient Egypt, by similar factors: unlike the situation in Egypt, the Nile valley between the twenty-third parallel and Khartoum, did not lend itself to large-scale irrigated agriculture and was thus incapable of producing the food surpluses required to maintain a large population and to develop a powerful civilization. Moreover, the presence of nomadic herdsmen to the east, the west and the south was a continual external threat to the States in question, particularly at times of weakness or internal dissension. This combination of factors could serve

to explain the discontinuous manner in which the civilizations along the Nile in the Sudan developed, a pattern reminiscent, though to a lesser extent, of that found among the different States of the savannah, which is in sharp contrast with the development of the Nile valley societies north of the twenty-third parallel, where the situation differed from that in the Sudan in that cultivators greatly outnumbered nomads.

However that may be, this discontinuous development contributed to making the States in the Sudan more subject to Egyptian influence; this pattern of development also tended to lend colour (Adams, 1949) to theories which attributed the civilizations of the Sudan to successive waves of migrants from the north, with periodical recessions.

The striking differences which have been noted, however, between contemporary cultures in the Sudan and in Egypt in the late Mesolithic period (Arkell, 1955, p. 33–4) seem indeed to indicate that the Libyan desert, although smaller and less arid than it is today, nevertheless acted as a barrier, and that in the late Mesolithic and Neolithic periods the Nile valley was no more a unified cultural area than it was in later times. Everything thus leads to the conclusion, if we accept the arguments of B. G. Trigger, that just as there were two fertile zones in the Nile valley, there were also two cultural traditions, and that, if Egypt appears to have given more to the Sudan than it received from it, this is to be attributed to Egypt's favoured geographical and ecological situation. What is important in studying the cultural history of the Sudan, concludes Trigger (1969, p. 88), is to realize that 'in addition to accepting traits from the outside, the Sudan had its own traditions into which its people were able to incorporate their borrowings'.

If further research in this field were to substantiate the hypotheses of W. MacGaffey or B. G. Trigger, Meroe and pre-Islamic Nubia would have to be regarded not as intermediate civilizations between the Mediterranean world and Black Africa but as African civilizations. In any case, and this appears to be generally admitted today, the possibility that earlier African cultures made an important contribution to these civilizations is a hypothesis that deserves to be taken very seriously.

Admittedly, as W. MacGaffey points out (1961, p. 7), it would be extremely hazardous to apply the concept of race dogmatically to African historiography and to try to establish once and for all whether the peoples of Nubia were or were not Negroes at a particular time or whether the 'Hamitic' element predominated. For one thing, concepts of race are ill-defined, imprecise and likely to vary in acceptation as a result of the application of differing criteria; secondly, dogmatic assertions on this matter are inherently incapable of proof. The extent of disagreement among different specialists on these matters makes it abundantly clear that what is involved here is mainly ideologically coloured speculation. The models adduced are, furthermore, the product

of political and social ideas current in the late nineteenth century; they very largely originated in the colonial situation and have so far done little to advance the progress of research.

For example, certain authors—including A. J. Arkell, C. G. Seligman, A. H. Keane, etc.—have kept up controversy rather than advancing knowledge by trying to apply the concepts of Brown race and Negro race to groups inhabiting ancient Nubia from —3000 onwards and referred to as groups A, B and C. Groups A and B, which are closely similar, have been almost unanimously regarded as Mediterranean. The difficulties began with the C group which settled in lower Nubia about —2300 and which had a pastoral culture. This group, like the Meroites and the famous 'X group' (which was at one time identified with the Blemmyes and Nobatae), seems to have had Negroid features. On this very insecure foundation, many different hypotheses concerning the Negro presence and influence in Nubia, probable migrations, etc., have been constructed and refuted, without a single one of them being firmly supported by evidence.

In northern Sudan today, the Negro race appears still to be represented by the various tribes inhabiting the Nuba mountains, by the inhabitants of the Ingessana hills and by certain peoples living in Darfur.

The first are not a homogeneous group: the various tribes in the Nuba mountains are of widely varying physical type and the languages they speak belong to different groups: these settled cultivators were pushed back into the highlands on the arrival of the Baqqara Arabs. They have, apparently, no tradition concerning an original homeland which might make it possible to put forward a hypothesis as to their likely migrations in the past.

The most important of the Negro groups of Darfur is the Fur, who are settled cultivators of still unknown origin inhabiting the immediate neighbourhood of Jebel Marra. Here again, there is no current tradition of the migration of these people from any other region, and their physical characteristics seem to indicate that there has been relatively little admixture with other peoples According to Father Santandrea (1964), it is possible that they are related to certain populations of Bahr el Ghazal, particularly the Feroge; and according to G. Lampen (1951, p. 18), such links are even recognized in Fur tradition. Linguistically, however, the Fur are isolated and their language is unlike any other spoken in the region. All that is known is that, before the rise to power of the dynasty which probably had its origin in a Fur Kayra chiefdom in the first half of the seventeenth century, there seem to have been two successive dynasties or States in this area: first the Daju, who are believed to have emigrated subsequently to Wadai, and then the Tunjur, who were later displaced by the Fur. But scarcely anything is known about these peoples or the power of these states: what little is known has been collected by H. G. Balfour-Paul in *History and Antiquities of Darfur* (Khartoum, 1946); significant advances

in our knowledge of such matters will require a major campaign of archaeological excavation and the systematic collection of the oral traditions of the surviving Daju and Tunjur groups.

North of the Fur live the Zaghawa, who are semi-nomadic and are apparently a people of mixed Negroid and Mediterranean racial origin; their own traditions and their language suggest a kinship with the Kanuri of Bornu and with the Bedeyat. There is evidence that they have inhabited their present territory for a very long time. Small groups having more or less mixed racial characteristics are still found in the same region, such as the Meidob people in north-eastern Darfur, who may be a mixture of Zaghawa, Tibbu and Beja and whose language and traditions, according to G. D. Lampen (1928), point to a Nubian element. Further south there are also the Berti, who are closely similar to the Zaghawa. In southern Darfur, groups of Negro race are particularly numerous: Daju, Beigo, Birkid. The latter appear to be more or less akin to the Meidob and perhaps have Nubian blood also. Lastly, groups are still found in southern Darfur, known today as Fellata, who are Bororo herdsmen from West Africa who have intermarried quite extensively with the Baqqara Arabs among whom they live.

To the east of the Nile, in the Sennar region, live the Funj, whose origin has been the subject of much speculation and controversy. For three centuries (1504–1821) they were part of a kingdom, with Sennar as its capital, which dominated the whole of central Sudan before being finally overcome in 1821 by the Egyptian forces of Ismail Pasha. Sennar was separated from the Kayra sultanate of Darfur by the While Nile and Kordofan and appears to have competed with Darfur for control of Kordofan and of trade in this region. It is not possible here to enumerate all the hypotheses which have been put forward concerning the origin of the Funj and of the populations of the Sennar kingdom (Holt 1963, Spaulding 1972). Nevertheless, our present knowledge does enable us to state that a few centuries ago these populations were neither Arab nor Muslim, and that their dynasty was traditionally known in the Sudan as the Black Sultanate. The Scottish traveller James Bruce, who visited Sennar in 1772, recounted a tradition according to which the Funj were a group of Shilluk warriors who had come down the White Nile and had settled in the region of Sennar. This hypothesis has several times been refuted and current research is pursuing other lines of inquiry (Holt, 1963). Today, the Funj live alongside other populations of Negro race in the region of the Blue Nile (such as Fazugli, Berti and Hameg) and, as has been shown by the research carried out by W. R. James (1968) in the southern part of Funj territory, it has become extremely difficult today, for sociological reasons, to use many peoples' claims of Funj descent as historical sources.

The representatives of the 'Brown' or 'Hamitic' race who still stand out in northern Sudan from the Arabized mass were long divided by historians

into two groups: Nubians and Beja. So far as the former are concerned, we have seen that their origin in the distant past is today a matter of considerable disagreement. As for the Beja, who are pastoral nomads inhabiting the Red Sea hills, they at present form four large tribes: the Bisharin to the north, the Amarar and the Hadendowa further south, and, to the east of the latter, spanning the Kassala-Eritrean border, the Beni Amer. Their languages are Tu Bedawi, a Cushitic language (Hadendowa, Amarar, Bisharin), and Tigré, a Semitic language (Beni Amer). Their origin remains a mystery and no archaeological evidence has so far been found to substantiate any hypothesis on the subject. According to a document concerning the Beja tradition and preserved in the Khartoum archives, the Beja 'are attributed to Kush, son of Ham, son of Noah, and emigrated to the Sudan from Asia after the flood'. To date, although historians have obviously not regarded this bald statement as adequate evidence in itself, it has strengthened the belief held by many of them that the Beja were a 'Hamitic' people who came across the Red Sea, from Arabia, and settled, in the very remote past, between the Nile and the sea. This thesis was maintained, in particular, by A. Paul and involved rejection of the thesis propounded in 1885 by A. H. Keane (p. 101), that the Beja were the true aboriginal inhabitants of the eastern desert. A. Paul (1954) considers that the Beja settled in the region between −4000 and −2500 when they were recognized by the Egyptian dynasty. Since then, historians have identified them with varying degrees of certainty with the Bugas of the Axumite inscriptions, with the Blemmyes of Roman times, with the Bugida of Leo Africanus and with the Bugians of the seventeenth-century cartographers. Since medieval times they have been known as the Beja.

The history of the peopling of the Nile valley south of the tenth parallel, to which we now turn, differs fundamentally from that of the north. The formidable natural barrier which geographically cuts the Sudan into two has, over the centuries, prevented the movement of peoples and ideas from north to south; and the populations of the south have thus been kept isolated from the major currents which have affected the populations of the north. These Negro populations which were cut off from the north obviously had a variety of contacts with one another and constantly influenced one another, invaded one another's territory and defended themselves against one another. However, the colonial ideology, which, as we have already seen, left a considerable mark on the historiography of the Nile valley between the twenty-third and tenth parallels, regarded all these people as being 'without a history' and, consequently, as being of interest only to anthropologists. Historical research in this region is therefore of quite recent date. Anthropologists such as E. E. Evans-Pritchard had, indeed, emphasized the need for such research in regard to these populations, as they rightly considered it was impossible to understand their present-day social existence unless an effort was made to grasp their

past. But the difficulties were immense and only isolated attempts were made, by missionaries or by British administrators during the condominium, or by anthropologists such as E. E. Evans-Pritchard to chart the movements of population, the migrations, and also the cultural influences in this region which, except in the extreme south in the vicinity of the Great Lakes, is largely inhabited by what anthropologists call acephalous societies, with a segmentary social system, a feature of which is often that they have a somewhat meagre oral tradition.

But we must start, as we did in the case of the north and using the same source of information (K. M. Barbour, 1961), by giving a brief sketch of the geography of this part of the Nile valley, that is to say between the tenth parallel and the Great Lakes.

There are three distinct types of country in this belt: the clay plains which extend over almost all of what is now Upper Nile Province and over the eastern part of Bahr el Ghazal and stretch south as far as Juba. They cover a total area of 300,000 square kilometres. Differences of relief are negligible and the gradient of the Nile extremely slight. The considerable rainfall during the rainy season in summer, and the overflowing of the Nile, make the region subject to seasonal or permanent flooding, thus determining the vegetation and the ecology. The area is predominantly marshy. As for the climate, an equatorial rainy season alternates with a short dry season; the hard, dry, cracked soil in which the parched vegetation has difficulty in surviving, rapidly becomes waterlogged and plants tend to decay, thus making agriculture extremely difficult. Vegetation is restricted to papyrus and reeds, either rooted or floating. Clumps of reeds are sometimes torn loose by gusts of wind and block up watercourses or are compacted together with other clumps at a bend in the river, forming a barrage or 'sudd' which obstructs navigation. By an extension of the term, the whole of this region of inhospitable swamps, in which watercourses are unsuitable for navigation and overland communications are often impossible, is called the Sudd.

The Sudd land is thinly populated, and isolated villages are situated on firm ground among the permanent swamps and watercourses. Throughout the region the principal sources of livelihood of the population—chiefly seminomadic herdsmen—are cattle-raising, fishing and a certain amount of agriculture; they move away from areas of flooding in summer.

For centuries, the people living here were completely isolated, each family and each tribe being self-sufficient, suffering from famine in certain years when the Nile floods lasted an inordinately long time or when the rainy season was unusually wet. The hardships of this way of life and the constant threat of illness or hunger have given these people a very singular mental outlook.

Lying to the south and west of the Sudd are very different regions. Along the Nile-Congo watershed, K. M. Barbour distinguishes, to the west and south–

west of the country, a region of ironstone plateaux which are similar in relief, soil, climate, vegetation and population to areas lying on the other side of the frontier in the Congo basin. These ironstone plateaux are separated by the Nile between Nimule and Juba from the hill masses lying to the east of the river; here also the natural conditions are similar on both sides of the present political frontier, and in Uganda the same kinds of relief, landscape and population are found. The climate in the western part of the ironstone plateaux is very moist and favourable to the equatorial forest. As a result of the irregularity of the rainy season, agriculture is very difficult. There are no cattle, as the tsetse fly makes stock-raising impossible. On these plateaux, as well as further east in the mountainous belt, communications are difficult; these two regions, cut off to the north by the Sudd, have no major axis of communication towards the south either, because of the climatic conditions and the relief of the terrain.

As for the Nile itself, in the Sudd and to a lesser degree throughout southern Sudan and northern Uganda as far as the edges of the Great Lakes region, far from being the source of life which it is to the north of the tenth parallel, it becomes an unfavourable economic factor, making the existence of the inhabitants precarious. It renders travelling extremely difficult and is unusable as a channel of communication; along the reach of the Nile between Nimule and Juba there are a succession of rapids and impassable gorges making the river unsuitable for navigation; in the Sudd, where the river seems less turbulent, it is constantly obstructed by drifting clumps of reeds and its banks are almost everywhere impassable. The region as a whole, therefore, is not organized around a major line of life in the same way as the north has been shaped around the Nile valley and the clay plains of Gezira and Darfur. Here we find none of the natural factors which, over the centuries, might have favoured the emergence of an economic and cultural centre or the sort of pole of attraction of which there are a number, of varying importance, in the north. On the contrary, everything in this area contributed to the emergence of a multiplicity of tribes and of small independent villages, cut off from one another by impassable natural barriers that could not be overcome by the rudimentary technology which was the only kind that could evolve in such an environment. This vicious circle was broken only by the arrival of a foreign technology under the condominium.

In this section of the Nile basin, hemmed in by the Great Lakes and by the geographical 'break' along the tenth parallel north, a large number of ethnic groups have remained relatively isolated from the outside world; for the most part they are pastoralists (usually subdivided by British anthropologists into Nilotic and Nilo-Hamitic peoples) [1] whose origin and history are

1. The appropriateness of the latter term has been disputed and it is used here only in order to avoid inconsistency with the terminology current in anthropological literature.

still almost entirely unknown. There has never been any archaeological excavation in the region and, in any case, the nature of the soil makes it unlikely that remains would have survived. Furthermore, the populations concerned are of the kind known as 'acephalous', with a segmentary system, in which oral tradition is particularly meagre and difficult to use on account of the many gaps and inconsistencies in it. This explains why all the existing literature on the subject is the work of anthropologists and linguists, the greater part of it having been written under the condominium for the purposes of the colonial administration.

According to these accounts, the different Nilotic groups (the most important of which are the Nuer, Dinka, Shilluk, Anuak, Acholi, Luo and Lango) come from the same original homeland, which C. G. Seligman (1913, p. 18) places to the south of their present territory, in the region of the Great Lakes. From there, he thinks, there were two major movements towards the north: Dinka and Nuer on the one hand, Shilluk, Luo, etc., on the other. Seligman attributes these migrations to the northwards pressure of different populations on the watershed between the Nile and Congo basins. Chazzolara (1950), for his part, on the basis of elements contained in the Luo and Shilluk traditions in particular, believes that all the Nilotic peoples stem originally from the region of Lake No and that successive waves of these people migrated in various directions and settled in different areas more or less remote from their homeland. E. E. Evans-Pritchard, in an article on the Mberindi and Mbegumba of Bahr el Ghazal, also concludes, on the basis of information gained from oral traditions, that the Nilotes probably dispersed from a common homeland. Thus a common genetic origin is a possibility that must be considered, particularly as the manifold traditions of different groups lend support to it. But the contradictions which can be detected in these traditions make it impossible to go beyond the stage of hypothesis. Nor can any confident assertion be made as to what prompted these migrations, or how distinct and separate identities emerged. The identity of the Nuer and Dinka, their relations and the origin of their traditional mutual hostility have recently been the subject of research by American anthropologists, who have tried to make a theoretical approach to the problem.[1] But their conclusions, too, remain in the realm of speculation. As for the Shilluk, P. Mercer (1971), drawing on the work of J. P. Chazzolara, thinks that the present-day Shilluk society was formed in the fifteenth century following an invasion of the White Nile region by a small group of Luo from the south which can be traced in the tradition. The invaders supposedly mingled with the local populations,

1. In particular: M. Salhins, *The Segmentary Lineage: An Organization of Predatory Expansion, 1963*; P. J. Newcomer, *The Nuer are Dinka: An Essay on Origins and Environmental Determinism*, 1972; M. Glickman, *The Nuer and the Dinka: A Further Note*, 1972.

some of whom were 'red men', and this process gave rise to a society which, by comparison with those of other Nilotic populations, was relatively stable and centralized, was sedentary and had a mixed economy. But, here also, nothing is certain.

Even more obscure is the question of the origin and migrations of the numerous ethnic groups known as Nilo-Hamitic, but which J. H. Greenberg and others prefer to regard collectively as Nilotes (Bari, Mandari, Lotuko, Kuku, Kakwa, Lokoya in Sudan, Karamojong, Teso, Turkana, Toposa in Uganda, to name only the most important). In most cases, the only available sources of information are local traditions, which are often contradictory and overlapping and which recount small-scale movements in many directions. Various hypotheses have been put forward by anthropologists or by British administrators interested in history but none of them so far seems to be very solidly based.

It is possible, however, that the migrations of various groups of herdsmen living in the Nile basin were partly due to the relatively recent expansionist thrust northwards to Bahr el Ghazal of populations of cultivators speaking a language belonging to J. H. Greenberg's Eastern Sudanic group, who settled to the west of the Nile in the equatorial forest and along the Nile-Congo watershed. The Azande, numerically the largest of these populations, who were under the domination of the Avongara, a warlike aristocratic clan of Bantu origin according to E. Onwubuemeli (1972), are said to have made an expansionist thrust south-eastwards and northwards in the mid-eighteenth century, which continued until the last years of the nineteenth century, by which time several ethnic and linguistic groups (Bantu, Sudanic and Nilo-Hamitic) had been overcome and assimilated into the highly centralized Zande-speaking State dominated by the Avongara.

South of the vast territory occupied by the so-called Nilitic and Nilo-Hamitic herdsmen, towards the region of the Greak Lakes, in the heart of Ugandan territory, the natural conditions change once more, but without a dramatic break such as that which occurs between the northern and southern sections of the Nile valley in the Sudan. Between Lake Victoria and Lake Albert, the relief of the terrain is much more marked. Lake Victoria itself is shallow and each of its shores provides a link between the central plateau of Tanganyika and that of Uganda. Along the north and west shores of the Lake lies the Buganda peneplain, at a relatively high altitude. The altitude falls as one follows the course of the river down to Lake Kyoga, and the Victoria Nile between the two lakes has a fairly steep gradient (Owen Falls). Between Lake Kyoga and Lake Albert, the course of the river is again broken by the Murchison Falls. It is not navigable at any point, but overland communications are possible in this region, which they are not, as has already been shown, in the region lying immediately to the north. Furthermore, this sector of the river

does not constitute an unfavourable economic factor and the vast system which it forms with the Great Lakes, combined with the relief and a favourable rainfall pattern, particularly in Buganda, has been a positive factor in the life of the region.

Was there any contact by way of the Nile between the Great Lakes region and ancient Egypt? This is the question which certain nineteenth-century explorers asked themselves. By way of answer, various hypotheses were put forward which somewhat inhibited research until, as a result of work carried out in East Africa itself, it was finally shown that there was no need to postulate Egyptian influences in order to explain certain cultural traits specific to the region of the Great Lakes, as these were perfectly explicable in terms of local responses to particular ecological conditions. It must be pointed out, however, that so far there has been no archaeological research in southern Sudan and very little in northern Uganda and north-eastern Zaire, so that there is a notable gap here. In any case, not a single object which can irrefutably be said to have come from the lower or middle valley of the Nile has so far been discovered in the region of the Great Lakes.

In addition, we know nothing at all about the changes that may have occurred in the course of the Nile in the Sudd land over a period of thousands of years. According to M. Posnansky (1968) certain observations made in the Uganda sector support the belief that the habitat may have been very different there in the past from what it is today. The first Stone Age excavations in the Sudan were carried out by A. J. Arkell as late as 1949. Since then, there has been some progress but the evidence discovered so far is not adequate to justify anything more than hypotheses. It is quite likely, says M. Posnansky, that there were contacts between the Nile valley and East Africa—perhaps indirectly—during the period when East Africa was adopting agricultural methods; available data on the early Iron Age, on the other hand, provide no conclusive evidence even of indirect contacts.

The idea that iron-working originated in Meroe and spread throughout Africa cannot be accepted as far as East Africa is concerned, and we have no evidence of any kind as to how a knowledge of iron-working reached this region. It may equally well have come from West Africa through the forest or along watercourses as from the east along the coast. What is certain, concludes Posnansky, is that no Meroitic pottery has yet been discovered in East Africa and that the order in which agriculture, iron-working, Negroid cultivators or the Bantu languages reached this area during the first half of the first millennium A.D. is just as much in doubt as is the origin of those languages.

As far as the second millennium is concerned, however, archaeological research in Uganda, Kenya and Rwanda has yielded evidence of the presence of pastoral populations associated with the Hima group in Uganda, who are today Bantu speakers but whose ancestors may have come from southern

Sudan. The oral tradition of the Bacwezi dynasty, roughly between +1350 and +1500, refers to an invasion of Nilotic Luo herdsmen who overcame the Bantu of the Bunyoro region. The latter, again according to M. Posnansky, whose work has been based on linguistic data, were very similar to the western Nilotes, Dinka, Nuer, Shilluk, who still inhabit the Sudan today. These herdsmen seem to have arrived around 1200-1300 and their settlement and development coincided with the emergence of States which, in the early stages, were not highly centralized. It is difficult to be certain what the institutions which developed subsequently in the various interlacustrine States owed to the herdsmen from the north and this question has been a matter of controversy; it is probable that these States developed institutions which suited their conditions at the time and which may very likely have differed from those they had known previously.

The motivation of these migrations from the north is believed by M. Posnansky to be connected with the environment and with the political situation from the thirteenth century onwards: coinciding with a fall in the level of the Nile waters and with a certain degree of population pressure in Bahr el Ghazal, the weakening of the Nubian kingdoms and the threat from the peoples of Darfur and the Lake Chad region, are believed to have prompted firstly the migration to Uganda of a wave of Madi, a Sudanic people stemming from Bahr el Ghazal, and then a migration of the Luo themselves.

The fact that there has been little or no archaeological excavation south of the tenth parallel means, as we have seen, that the remote past of the Nile valley in this area can only be a matter for speculation. So far as the recent past is concerned (the eighteenth and nineteenth centuries), research has been concentrated mainly in the interlacustrine region and has taken evidence from the oral tradition, linguistics and anthropology as its starting point. This concentration of the research effort on the interlacustrine States—as compared with the relative neglect of the peoples with no State system in southern Sudan and northern Uganda—can undoubtedly be accounted for by the richness of the oral tradition in the centralized States, which springs from and reflects their twofold origin, as compared with the general poverty of this tradition among acephalous peoples with a segmentary social system. The study of the various oral traditions in the Great Lakes region (as witness the series of monographs published in the *Journal of World History* in 1971 and 1972 concerning the precolonial States of north-western Tanzania, or the recent book by D. W. Cohen (1972)) has made it possible to show that, in the interlacustrine region there were numerous contacts and cultural exchanges between peoples and that the States bordering on Lake Victoria and Lake Albert—in particular Buganda, Bunyoro and Busoga—all seem to have come into existence as a result of the subjugation of Bantu populations by herdsmen from the north.

In a sense these interlacustrine kingdoms form a bridge between the

Africa of the Nile region and the cluster of Bantu-speaking peoples in Central Africa; they also represent a belt of constantly shifting populations and a meeting place; at the same time, they mark the demarcation line between cultivators and herdsmen, between politically organized State systems and Stateless systems. They are thus an element of continuity but also mark a terminal point in the south of the Nile valley. It is now possible to piece together a detailed picture of their historical past and of the way in which they came into existence; this cannot fail to be of the greatest importance for Africa as a whole and for the Nile valley in particular.

By way of conclusion, one or two major lines of thought may be emphasized.

First, a geographical approach to the history of the Nilotic peoples would seem to be of the greatest importance. The dominant geographical features are the desert and the savannah to the north and the swamps to the south; the population is predominantly nomadic or semi-nomadic. In our view, this nomadic predominance, which is the direct opposite of the Egyptian population ratio, is one of the keys to an understanding of the past of the Nile valley between the twenty-third parallel and the Great Lakes.

Second, similarly, it is extremely important to exhaust all the possibilities of explanation by local conditions and, accordingly, to undertake a large number of multidisciplinary regional studies, before resorting to the influence of external factors. But, at the same time, such regional studies should take account of the overall context of the Nile valley. Indeed, the polarization of research in zones where State systems and 'civilizations' have emerged has a twofold effect: for one thing, it tends to distract attention, in general theoretical work, from the preponderant nomadic element and the dynamics it has created and, for another, to minimize the part played by areas where the historian's task is particularly difficult (southern Sudan, for example) although there is as yet no justification for saying that such areas were not a decisive force for change. In other words, it is hazardous to allow the formulation of working hypotheses to be affected by the bias of classic historiography or by ideological presumptions inherited from the last century. The existence of a geographical discontinuity and a corresponding change in the population along the tenth parallel has done much to give currency to the notion that there are two Nile valleys, one white and civilized, the other black and primitive. This kind of stereotype is especially pernicious in that, while being the product of a relatively recent historical event (Arab migrations from north to south) originating outside the region, it has the effect of blinding us to the possibility that northwards migrations by African populations took place at an earlier date.

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The genetic linguistic relationship between Egyptian (ancient Egyptian and Coptic) and modern Negro-African languages

Théophile Obenga

Preliminary I

The purpose of this article is to provide details, under the third category of sources available as enumerated by Professor Vercoutter, for the study of the cultural origin of the Egyptian people who created the civilization of the Pharaohs.

This requires a certain amount of linguistic experience, for which scientific publications, such as the following, can only provide objective, practical evidence: *Cahiers Ferdinand de Saussure* (1969), *Africa* (Rome) (1970), *Cahiers Ferdinand de Saussure* (1972), *General History of Africa*, Vol. II, Ch. 8 (in press).

The work of the American linguist Professor Greenberg, particularly in connection with his 'Afro-Asiatic' language family, cannot be regarded as invalidating the argument, for he ignored one vitally important methodological rule, namely the establishment of phonetic correspondences (I. Fodor).

Preliminary II

This brings us logically to the problem of methodology, to which reference must be made here.

Since Ferdinand de Saussure, it has been accepted that the most obvious, relevant and conclusive method of proving that there exists a cultural connection between two, or more than two, peoples is to adduce linguistic evidence.

Our problem, therefore, consists in establishing the existence of a genetic linguistic relationship between Egyptian (ancient Egyptian and Coptic) and modern Negro-African languages.

It must be made quite clear at this stage that it is important not to confuse 'typological linguistic' relationship and 'genetic linguistic' relationship, which are two entirely different matters (L. Hjelmslev).

Typological linguistic relationship is based on structural similarities

in words and grammatical categories, and does not show whether the languages being compared can be traced to a common predialectal source.

Thus, if the grammatical categories only of Semitic and Egyptian, for example, are compared, the following results are obtained:

Pronouns (the Semitic third person forms /*S*-; *h*/ are totally lacking in Egyptian).

Systems of conjugation (conjugation prefixes *yaktubu, taktubu,* etc., not found in Egyptian).

Feminine inflexion in *-t*

Dual in *y*.

Biliteral and triliteral roots.

Names of cardinal numbers (4, 5 and 9 not identical).

On strictly linguistic grounds there is no warrant for the assertion that a comparison of these languages indicates a common language of origin, for the fundamental reason that the typological comparative method does not reconstitute this common language of origin. At the most, typological comparison shows to which linguistic type the languages being compared belong.

Linguistics teaches us that, within a given linguistic type, there may be languages which belong to fundamentally different families. Modern English, which is an isolating language, has affinities with Chinese from the typological point of view; but from the genetic point of view English and Chinese belong to different language families (Indo-European and Sino-Austro-Asian).

I should like to clarify one further notion, that of a mixed language, which is in fact linguistic nonsense. It is evident, for example, that French has undoubtedly been influenced by Germanic but French is nevertheless not a 'mixed' 'Germano-Latin' language; French remains a Romance language belonging to the Indo-European family.

Genetic linguistic relationship is established on the basis of 'sound-laws', that is to say enduring correspondences and regular similarities between complete forms, morphemes, and phonemes in the language being compared.

'Genetic relationship', as L. Hjelmslev wrote, 'is a function which links languages: it consists in the fact that each element of expression in one language is linked by a function to an element of expression in another; and the function of each element is conditioned by what surrounds it and by the position it occupies in the word.'

The aim here is to reconstruct earlier common forms on the basis of these morphological, lexicological and phonetic correspondences and comparisons. It will be appreciated that the same approach is potentially a means of identifying a common cultural macrostructure embracing the different civilizations which are supported by languages now having their own evolutional tendencies.

This comparative and inductive method is the one used for the purpose of establishing genetic links between two or more languages.

Preliminary III

Are we entitled to compare ancient Egyptian and modern Negro-African languages?

It is perfectly legitimate to do so, precisely in order to demonstrate the identical origin of the languages in question and even though we may not have before us all the successive stages of development of the Negro-African languages. Language has an oral tradition which is independent of its written form. Lithuanian, which has existed in written documents only since the sixteenth century (1540), nevertheless provides an image of Indo-European which is, generally speaking, just as authentic as that provided by Latin in the third century before our era.

But the comparison must satisfy clearly defined criteria.

Morphological, phonetic and lexicological correspondences, established by the comparative and inductive method, between Egyptian (ancient Egyptian and Coptic) and modern Negro-African languages cannot be fortuitous, but necessarily imply a common original identity because: (a) criteria of the comparison are guaranteed by Pharaonic Egyptian, which is the most ancient exemplar of the languages being compared; (b) the fact of geographical discontinuity militates against the probability of borrowings in these ancient times; and (c) the separation from the common stock which occurred in very ancient times also rules out borrowing of general morphological (grammatical), phonetic and lexicological features.

Morphological (grammatical) correspondences

Gender categories

The feminine grammatical gender in Egyptian is formed by the suffix *-t* probably vocalized as *-at*.

A large number of Negro-African languages do not now possess these grammatical feminine gender categories; however, this is the end result of a process of simplification which began, as early as the Middle Kingdom, in Egyptian itself.

Mr Clère thinks it probable that, as early as the Old Kingdom, this *-t* was not invariably pronounced.

Nevertheless, valuable survivals of archaic forms still exist throughout Negro-African languages:

Galla (Oromo): *lafa/lafa-ti* 'the earth'.

Sidamo (the Omo): *-sa*, *-ttà* or *tsa* depending on the dialects (Studi Etiopici, Cerulli).

Ronga (southern Africa): 'The particle *ati* is added to certain words to confer on them an idea of femininity'.
Zulu: *azi.*
Hausa: *ita, ta,* 'she'.

Formation of the plural

Egyptian forms the plural of substantives by means of the suffix *-w (-on, u).*

This method of forming the plural of substantives in Egyptian does not coincide with that found in Bantu.

Nevertheless, certain separate modern Negro-African languages have features which seem to indicate a common linguistic heritage; thus, a linguistic tradition never disappears entirely if a given language family is considered as a whole:
Kanuri (Kanem-Bornu): *fur, furwa,* 'horse'.
Ewe (Togo, Ghana): *ati, atiwo,* 'tree'.
Bambara (Mali): *malba, maon/baon,* 'mother'.
Dyula (Mande dialect): *morho, morhon,* 'man'.
Azer (medieval Soninke): *sane, sanu,* 'star'.
Dogon (Mali): *ana, anaũ,* 'male' (ũ, nasalised vowel).

Complete forms

In ancient Egyptian we find: *m* or *mi* 'take'.

The corresponding Coptic (Sahidic) and Bantu (Mbosi, Congo) forms are: *ma* and *mā,* respectively.

This form of the imperative occurs in ancient Egyptian only in old religious texts.

It is a very curious fact that in Mbosi this imperative form has no infinitive; it is therefore, in this language, a very significant survival.

Furthermore, lexicological and syntactic features overlap in this instance, in that the word *ma,* which is the same in Coptic (Sahidic) and in Bantu (Mbosi, Kongo, Teke, etc.) is a phraseological unit, a syntactic element. Thus the identity is striking. Such correspondences can reasonably be explained only in terms of diffusion by tradition.

The substantive *bw* 'place', is used as a prefix in ancient Egyptian where it is prefixed to adjectives to form abstract nouns. This Egyptian method of forming abstract nouns is attested in ancient Egyptian (Maxims of Ptahhotep, 18 and 24): *bw nfr bpr m bw bin,* 'good has become evil'.

The *Pyramid Texts* also exemplify this construction (Pyr. 4C; sarcophagus of Teti, sixth dynasty).

In Negro-African there is a comparable paradigm of grammatical structure:
Byanda: *lungi*, 'beautiful'; *ofu-lungi*, 'beauty'.
Kongo: *mbote*, 'good'; *bu-bote*, 'goodness'.
Wolof: *rafèt*, 'beautiful'; *bu-rafèt*, 'beauty'.
Luganda: *bi*, 'bad'; *obu-bi*, 'badness'.
Kongo: *mbi*, 'bad'; *bu-bi*, 'badness'.
Wolof: *bōn*, 'bad'; *bu-bōn*, 'badness'.

In ancient Egyptian and Wolof, furthermore, the parallelism is complete:
Ancient Egyptian: *bw nfr zμ m bw bin.*
Wolof: *bw rafet mél ni bw bōn.*

But to revert to the set of facts noted above.

All this evidence brings out strikingly the plain fact that a class of derivatives in which abstract nouns are formed from a noun form *(bw)* used as an abstract prefix *(bu)*, and from an adjectival qualifier occurs in both Egyptian and Negro-African.

Let us take the analysis further. First, this formation of noun derivatives (*bw* + *bōn; bw* + *bin*, etc.) always indicates, where it occurs, a particular quality rather than, for example, a collective idea.

The form *bw bin/bu bōn* constitutes a phrase: the constituent elements *bw/bu* and *bin/bōn* in the languages under consideration are thus set out in a certain order which, of itself, creates this abstract quality. The thought can be correctly expressed only in this significant order: *bw* + *bin/bu* + *bōn.*

The interpretation is complete: morphological, lexicological and syntactical. The evidence is irrefutable.

This highly significant fact, which covers both a lexicological structure and a grammatical structure, is, in itself, a cogent demonstration of the close relationship between Egyptian and modern Negro-African languages.

I maintain that it would be impossible to demonstrate such a clear parallelism between Semitic, Berber and Egyptian as we have just established between Egyptian and Negro-African on the basis of this complete and precise form, which is attested in Egyptian about −2450 Indeed, Hebrew, for example, gives: *tov*, 'good', and *tova*, 'goodness'; *ra*, 'bad'; *tsara*, 'badness', 'mischance'.

Let us consider the verbal-noun element 'to be'.

The verb 'to be' in the Bantu languages (Central and Southern Africa) is: *i, e, li, re, di, ni*, but the common archaic stock is *i*, an invariable pronoun-copula which is often absorbed into a verbal root.

In Coptic, the affirmative auxiliaries can be reduced to these four original types: *ē, a, nē* and *rè*. It is immediately apparent that the Bantu forms *e, ni* and *re* are also found in Coptic.

It is extremely significant that the common archaic form in Bantu is

exactly the same as the form of the verb 'to be' in the most archaic form of ancient Egyptian, the Egyptian of the Pyramids.

Egyptian roots based on the radical *i*, 'to be', will all have the same meaning of 'to be': *iw*, *pw*, *tw*, *nw*, *wn*.

Pw, *tw*, *nw*, are regarded by grammarians as 'demonstrative pronouns' whereas, strictly speaking, they are pronoun-verbs (*Ré pw*, 'he is *Ré*'; literally: '*Ré*, he is'; it is *Ré*), exactly as in Bantu.

Negative morphemes

All the negative affixes and other negative morphemes are also to be found in Negro-African.

The negation *n* and *nn*:

Ancient Egyptian: 'The mouth is silent *n mdw. n.f.* and does not speak' (Maxims of Ptahotep, 13).

Ancient Egyptian: *nn wts.f dśrt* 'he will not wear the red crown'.

In the eleventh dynasty, *n* and *nn* were used interchangeably.

Coptic: the same negative morpheme, *an*, which is placed after the subject: *nanès*, 'he is good' (impersonal; verb *nané* 'to be good') and *nanès an*, 'he is not good'.

Modern Negro-African languages:

Songhai: *ay na bey*, 'I did not know'.

Lifonga: *kula*, 'run'; *ni kula*, 'do not run'.

Libobi: *yaka*, 'come'; *neiya*, 'do not come'.

Kongo: *ni muntu*, 'nobody'; *ni muntu mosi*, 'not a single man'.

Ronga: *a nga na wali*, 'he has no money'; *a ku na mhunu*, 'there is nobody'.

The negation *bw* in neo-Egyptian occurs as early as the Middle Kingdom in proper names.

This negation in ancient Egyptian becomes, in Coptic: *mè*, *mpè*. Wolof has: *bwal*, 'not'.

In Central Africa, negations often begin with *b*, *w* and *v*: Zande: *awë* 'no'; Mangbotu, *ba*; *ve*; Kongo: *voo*, *vili*.

The negative morpheme in Ewe (Togo, Ghana) is *ma*.

Emphatic future (explicit)

By '*na*'.

Old Egyptian: *in skr wcb.f N... in R*^{c} *di.f n c.f n N...* 'Sokaris, he will purify N...; *Rê*, he will give his hand to N....

Middle Egyptian: *in ntr nb mk.f m.K,*; 'every God will protect your name' (Battiscourb Gunn, p. 54) *Studies in Egyptian Syntax.*

Coptic: *na-*: *k - na - mè*, 'you will love'.

Negro-African: Kongo: *mbazi ni kwiza*, 'I shall come tomorrow'; Mbodi: *li yaa*, 'I shall come'; Lingala: *na koya mosala*, 'I shall come to work'.

By '*n*'.
Ancient Egyptian: *iw.f r. smr*, 'he will be a companion'.
Azer: *ri/li n li tere*, 'I shall depart'.
Mbosi: *li* : *nga li ya*, 'I shall come'.

By *k (Ka)*.
Ancient Egyptian:
Mbosi: *Itoua ka a moya*, 'Itoua must come'.

Linking particles

m, 'into', 'in', 'with', 'from'.
n, 'of' (genitive).
n, 'to' (dative), etc.

Conclusion: a single linguistic type, the same formal and grammatical structure.

Symposium on the Peopling of Ancient Egypt

A report on the discussions

Professor Vercoutter presented his paper to the symposium, and drew attention to a number of points dealt with in greater detail in it. He also made a number of further observations.

In spite of recent progress, physical anthropology had so far provided relatively little reliable data except in Nubia. The information available was insufficient to enable provisional conclusions to be drawn with regard to the peopling of ancient Egypt and the successive phases through which it may have passed. Furthermore, this information was not homogeneous as regarded either time or space and historians often disagreed as to how it should be interpreted. The methods themselves were being called in question; but it was now generally agreed that craniometry did not meet the requirements of such research.

A number of regions had still not been studied in any depth. This applied to the entire Delta during the predynastic and protodynastic periods, and to upper Egypt prior to neolithic times. Little was known of the area between the second and sixth cataracts in neolithic and protodynastic times. Similarly, the links existing in ancient times between the Sahara, Darfur and the Nile had as yet been very little studied.

In that respect, the work that had been done lagged behind what had been achieved in North Africa and in the Syria-Palestine zone.

Evidence at present available did not warrant the assertion that the populations of northern Egypt had been different from those in the south. Similarly, the gap between palaeolithic and neolithic was probably due to the fact that insufficient research had been done so far in that field.

Insufficient and unsatisfactory use had been made of iconography; the studies which had been carried out were based mainly on cultural criteria. The iconographic material available, however, has extremely significant characteristics from the eighteenth dynasty onwards.

The two opposing theories in their most extreme form were:

The people who lived in ancient Egypt were 'white', even though their pigmentation was dark, or even black, as early as the predynastic period. Negroes made their appearance only from the eighteenth dynasty onwards. From the protodynastic period onwards, according to some, the population remained the same; others believed that foreign penetration into Africa profoundly altered the conditions of cultural life.

Ancient Egypt was peopled 'from its neolithic infancy to the end of the native dynasties' by Black Africans.

Before defining the characteristics of the mixed population of Egypt, if mixed it was, it was essential to reach agreement on the meaning of the terms used, for example 'Negro', 'Negroid', 'Hamite'. In the case of ancient Egypt, Professor Vercoutter considered it incorrect to speak either of a 'white' population, the existence of which had already been ruled out by anthropological research findings, or of a 'Negro' population, which could not be reconciled with Egyptian iconography.

Particular attention should be paid to the transition from the palaeolithic period to the neolithic period in Egypt; new data were available which made this possible.

Ms Blanc introduced her paper which dealt with the peopling of the Nile valley south of the twenty-third parallel. She stressed that it was important to approach the problem being discussed by the symposium without being influenced by the inheritance of the nineteenth century and the first half of the twentieth, or by the racial assumptions associated therewith. She also hoped that a pluridisciplinary and interdisciplinary approach would be adopted, as the ecological zones which she distinguished called for the application of differing methods and disciplines. Neither archaeology alone, nor oral traditions alone, nor any other form of traditional sociological, anthropological or historical inquiry could be expected, in isolation, to provide answers to such complex problems.

Each discipline had contributed information which was sometimes of decisive importance and of which the author had cited examples. Mindful of the fact that, for reasons which were themselves historical, the historiography of the valleys of the Nile had been based on the assumption that there was a civilized Egyptian valley providing a wealth of historical evidence, and another valley further south, which was black and primitive, and of interest only to anthropologists, Ms Blanc hoped that historical research in the valley as a whole would in future be more balanced. This would mean abandoning traditional historical methods and broadening the field of inquiry to embrace a new methodology. Ms Blanc saw the work which had been going on in Nubia for the last twenty years or so as a first step towards the re-examination of the question which faced the symposium.

In order to escape from the traditional view of the Nile valley which traced its historical development in a north–south direction, from the 'more civilized' to the 'less civilized', Ms Blanc drew attention to the Nile regions situated between the twenty-third parallel and the sources of the river in Uganda. Her analysis took into account the dividing line, which she regarded as being of fundamental ecological importance, along the tenth parallel, where the advance of Islam stopped.

Between the twenty-third and the tenth parallels, the Nile, being a navigable waterway, could apparently have played a role comparable to that which it played further north, in Egypt. This did not occur, and the ecological conditions in this reach of the river no doubt provided the principal explanation.

Ms Blanc went on to make an overall examination, in the light of this fact, of the respective contributions of settled and nomadic populations throughout the area considered. But, after tracing the history of the population changes since the coming of the Muslim Arabs, she concentrated particularly on reviewing hypotheses concerning the peopling of this zone prior to their arrival. The author emphasized that the Nile valley facilitated communication with West Africa and sub-Saharan

Africa and that it was reasonable to put forward the hypothesis that the civilizations which emerged there might be authentically African rather than civilizations intermediate between the Mediterranean world and Black Africa.

Darfur to the west, about the social and political organization of which, prior to the seventeenth century little is known, nevertheless played an important part as a regional centre of economic development.

To the east, the region of Sennar, inhabited by the Funj, was the centre of a 'black sultanate' which was originally neither Arab nor Muslim.

The zone between the Nile and the Red Sea occupied by the Beja was barely able to support settled populations, on account of the harsh ecological conditions.

South of the tenth parallel, the ecological conditions were totally different. In this area, there were isolated populations about which little was known either from archaeological research or from oral traditions. Hypotheses on the peopling and history of this zone today have little evidence to support them, and it is only in more southerly regions, in the interlacustrine zone in East Africa, that fairly thorough historical studies have been carried out.

Finally, Ms Blanc emphasized that the new methodological approach which she advocated highlighted the importance of geographical and ecological factors. While in the north, in the Egyptian sector of the valley, conditions favoured the settlement of populations, in the south, they were conducive to a nomadic way of life between the twenty-third and tenth parallels and to a semi-nomadic way of life south of the tenth parallel. The importance of the nomadic element in the history of the peopling of the Nile valley still had to be studied and assessed.

Oral communications

Professor Säve-Söderbergh gave information about the Scandinavian excavations in the Sudan between 1960 and 1964. These excavations established that there were contacts between the Nile valley and North Africa and the Sahara. The subjects covered by the publications[1] included 7,000 rock drawings and the analysis of the remains of 1,546 human individuals. Van Nielson (Vol. 9) had defined the relations between the A Group, C Group, New Kingdom Group, etc. Comparative studies yielded different results, depending on whether craniometry only was used or anthropological and technological factors as a whole. Iconographical and physical anthropology studies lent support to the idea that there had been a migration of Saharan peoples and of groups coming from the South, and that they also had had considerable contacts with the ancient Egyptians. For the mesolithic period, comparisons had to be made on the basis of fewer than 100 skeletons. Valid conclusions were impossible in the case of Nubia, but more accurate data could be obtained on the neolithic period.

In any event, Professor Säve-Söderbergh thought that it was impossible to base a study of the peopling of Egypt in ancient times, or any other similar study,

1. See *Scandinavian Joint Expedition to Sudanese Nubia. Publications* (especially Vol. 1, *Rock Pictures;* Vol. 2, *Pre-ceramic Sites;* Vol. 3, *Neolithic and A-Group Sites;* and Vol. 9, *Human Remains*).

on racial distinctions. In future, other lines of inquiry should be followed. Different cultures, contemporary with one another but isolated, might nevertheless belong to the same techno-complex. This new method confirmed that Egypt was African. But, if one looked beyond this finding, it was apparent that there were many other problems. Nagada I and II did not belong to the same techno-complex as Nubia or the contemporary Sudan. In the Sudan, the zone extending from Kassala to Chad and from Wadi Halfa to Khartoum was a single, large techno-complex unit. The A Group constituted another and more recent techno-complex between the first and third cataracts and possibly beyond.

The Nubian excavations were the result of an effort to save the largest possible number of remains before the flooding of the area upstream from the dam. In Egypt, less extensive work had been done and many details remained obscure.

T. Säve-Söderbergh did not think the outmoded notion of race was appropriate in seeking to characterize the population of ancient Egypt, and preferred rather to concentrate on the relationship of man to his ecological environment, particularly in the north of the valley. He also had a preference for studies on the relations between civilizations and cultures.

Professor Cheikh Anta Diop maintained that from the anthropological point of view, research carried out since the discoveries of Professor Leakey led to the conclusion that the human race first came into existence in Africa in the region of the sources of the Nile. Gloger's law, which presumably applied just as much to the human race as to the other species, stated that warm-blooded animals which evolved in a warm, humid climate had a dark (eumelanin) pigmentation. The earliest human beings on earth were therefore ethnically homogeneous and Negroid. The population spread out from this original area, reaching other regions of the earth by only two routes: the Nile valley and the Sahara.

In the Nile valley, this spread took place from the south in a northerly direction, in a progressive movement, between the upper palaeolithic and the protohistoric period.

Professor Diop referred to Dr Massoulard's[1] book for its critical examination of the information provided by physical anthropology concerning the peopling of Egypt in ancient times. In passing, Professor Diop pointed out that craniometric criteria were quite inadequate for assigning individuals to racial categories: neither the choice of indicators nor the terminology used was uniform or satisfactory. According to Professor Massoulard the population of ancient Egypt perhaps comprised at least three different racial elements: Negroids, amounting to over one-third of the total, 'Mediterranean' people and people of the Cro-Magnon type. Professor Diop inferred from this that the population of Egypt was basically Negro during the predynastic period, a conclusion contradicting the theory that the Negro element spread to Egypt in later times.

Skeletons with fragments of skin attached, dating from very ancient times, before the practice of mummification was introduced, had been discovered by Elliot Smith. These fragments contain melanin in sufficient quantity to establish them as Negro skin.

1. Emile Massoulard, *Précis de Préhistoire et de Protohistoire de l'Egypte*, Paris, 1949.

In the quest for positive proof, Professor Diop had studied a number of preparations being subjected to laboratory examination in Dakar. These consisted of samples of skin taken from mummies found in Mariette's excavations. They all revealed—and Professor Diop invited the specialists present to examine the samples—the presence of a considerable quantity of melanin between the epidermis and the dermis. Melanin, which was not present in white skin, persisted for millions of years (notwithstanding frequent affirmations to the contrary) as could be seen from an examination of the skins of fossil animals. Professor Diop hoped to be given the opportunity of carrying out similar research on the skins of the Pharaohs whose mummies were in the Cairo Museum collection.

He went on to state that a conclusive anthropological study would also include osteological measurements and the study of blood groups. It was remarkable, for example, that present-day Egyptians, particularly in upper Egypt, belonged to the same blood group B as the population of West Africa, and not to group A2, which was characteristic of the white race.

After discussing a number of publications which he considered to have misrepresented the facts, whether consciously or not, Professor Diop concluded this part of his communication by stating that the population of Egypt in the predynastic period was entirely Negro, with the sole exception of a small admixture of white nomadic elements.

He went on to consider the matter of using iconographic[1] data to corroborate anthropological findings. According to Petrie, the Negroes who comprised the population of ancient Egypt belonged to the Anu people whose name, written with three strokes, was found in southern Egypt and in Nubia and also in Sinai and Libya. The portrait of an Anu chieftain, TeraNeter, from Abydos, showed Negro facial characteristics. Professor Diop provided a list of the names of fortified towns comprising the 'on' which was characteristic of the Anu.

Narmer, in the dynastic period, was considered by Professor Diop to be 'more Negroid than the present-day Senegalese'. Zoser, Cheops, Mentuhotep, Sesostris I, Queen Ahmosis Nefertari and Amenhophis I were Negroes; Rameses II wore a headdress of the 'Tutsi' type. The Sphinx, as drawn by the French expedition in the early nineteenth century, was Negroid.

On the other hand, whenever Indo-Europeans were depicted in ancient times, they were consistently represented as captives, in postures of humiliation.

Professor Diop contended that it was unnecessary to dwell on details which, for example, distinguished Negroes from other personages—the latter being aristocratic—in the same tomb: this difference of representation was of social origin. The common people were iconographically distinguished from members of the ruling class.

He went on to speak of the evidence provided by ancient written sources, pointing out that Greek and Latin authors described the Egyptians as Negroes, and referring to the testimony of Herodotus, Aristotle, Lucian, Apollodorus, Aeschylus, Achilles Tatius, Strabo, Diodorus Siculus, Diogenes Laertius and Ammianus Marcel-

1. Professor Diop made available an extensive file of iconographic data for the participants to examine.

linus. Modern scholars, he said, refused to take account of those texts. By contrast, an eighteenth-century author, Volney, did speak of the inhabitants of ancient Egypt as Negroes. Furthermore, the Biblical tradition considered Egypt as belonging to the descendents of Ham. Professor Diop considered that the science of Egyptology, a product of imperialism, had much to answer for in denying all the facts to which he had just referred.

Professor Diop then turned his attention to the way in which the Egyptians described themselves. They used only one word for this purpose: *KMT*,[1] 'the strongest term existing in the language of the Pharaohs to indicate blackness', which was translated by Professor Diop as 'the Negroes'. Consequently, this hieroglyph was not written with crocodile scales but with a piece of charcoal. Professor Diop went into the question of compound words based on the root *KMT*. The Egyptians distinguished themselves from other peoples by calling themselves *KMTJW (KEMTIOU)*. But they did not draw a distinction on the basis of colour between themselves and the Nubians. Lastly, 'black' was an adjective applied to the principal Egyptian deities: Osiris, Apis, Min, Thoth, Isis. Set, on the other hand, was described as red, as were all other evil beings.

In conclusion, Professor Diop emphasized, with supporting examples, the family resemblance between ancient Egyptian and Wolof.[2]

Professor Shinnie, before leaving to attend the meeting, had asked Canadian specialists in physical anthropology for their reaction to the theories advanced by Professor Vercoutter in his paper. Their opinion was that discussion of these theories, in such a rigid and uncompromising form, was a retrograde step which would put the clock back some thirty years and could serve no useful purpose.

Professor Shinnie greatly regretted the fact that no physical anthropology specialist was present at the meeting who was qualified to state what were the latest methods of work and how they should be used by archaeologists and historians, and to explain the view currently held on questions of race by physical anthropologists. The fact that classical authors referred to the Egyptians as black could not be invoked as an argument. Professor Shinnie regarded the concept of blackness as a very subjective matter and quoted the example of British authors describing Egyptians as black in modern times. Such a description of the population of modern Egypt was no more valid than the description given by Herodotus.

Professor Debono, departing from the discussion of Professor Vercoutter's paper, reported on some discoveries he had made himself. His work in the field of archaeology and physical anthropology had led him to the following conclusions.

In the researches on the lower palaeolithic period which he had been carrying out in the Theban hills, he had discovered proof of the existence of the most primitive form of man. Human remains had not yet been discovered but the use of stone implements (pebble culture) had been authenticated by discoveries in geological strata which could be confidently dated. In the Plain of Abbasieh, a similar stratum had been discovered earlier and had been classified as eolithic. Earlier discoveries

1. This word gave rise to the term 'Hamite' which has been much used subsequently. It is also found in the Bible in the form 'Ham'.
2. A chapter in the *General History of Africa*, Volume II, sets out this argument in detail.

dated from the pre-Acheulean period. The Theban hills contained geological deposits dating from the Acheulean period but no human remains had yet been discovered there.

A skull fragment discovered in 1962 at Jebel Silsila (north of Kom-Ombo) probably dated from the middle palaeolithic period. It was the most ancient of all human remains so far discovered in Egypt and was at present being studied.

Other human remains, dating from the upper palaeolithic and the epipalaeolithic periods, had been found on the same site in the strata of Sebilian II and in the Aurignacian strata of Egypt.

The human remains of the epipalaeolithic period had been studied by Professor Aguiré: in his preliminary report he stated that man of the Cro-Magnon type was present, possibly related to the Mekta el Arbi race in North Africa and the Asselar race, but this specimen showed no sign of dental mutilation.

As for neolithic and predynastic times, numerous human remains in a good state of preservation had been discovered during excavations at El Omari in northern Egypt. Professor Derry's study had provided important information on the racial differences between the north and the south during this period.

The bones found at El Omari, unlike those discovered in the south, were obviously similar to the supposed new race of pyramid builders, which appeared to show Libyco-Asiatic affinities. The Meadian civilization, the cemeteries of which had been discovered, one at Meadi and the other at Heliopolis, had proved by indirect evidence the existence of a race fairly similar to that of El Omari.

With regard to iconography, Professor Debono thought that such records could serve a useful purpose up to a point. The neolithico-predynastic sites of northern Egypt (Fayum, Merimdé, El Oman) had provided no iconographic representation of human form such as figurines or vase paintings. On the other hand—and this was indicative of a cultural and racial difference—a fairly large number of figurines and vase representations had been discovered in upper Egypt dating from the same periods (Tasian, Badarian, Nagadian I and II). This was a field for further study involving comparison between these finds and the Nubian figurines of the C Group found in Nubia. Obviously the large quantity of rock drawings found particularly in upper Egypt and in Nubia in the deserts would enable interesting comparisons to be made with those found in Africa; such comparison would emphasize contacts between peoples and movements of population.

Professor Debono considered that, from the linguistic point of view, it would be useful to reconstitute a prehistoric Egyptian language. It was certain that this language had hardly changed at all with regard to the terms designating everyday objects which continued to be used in much the same form even during the Pharaonic period, for example flint arrowheads, bone and subsequently metal harpoons, personal jewellery, combs and basket-work.

Lastly, Professor Debono turned to the ethnographic study of the objects already discovered, and noted the considerable similarity between pebble cultures in the different regions where they had been discovered (Kenya, Ethiopia, Uganda, Egypt). The same was true of the Acheulean period, during which biface core tools were similar in a number of regions of Africa.

On the other hand, the homogeneity of the Sangoan industry, found in East Africa, progressively diminished as one moved further north. At Khor Abu Anga

(Sai Island in the Sudan), there was a more or less complete range of tools. From Wadi Halfa onwards, a number of elements were apparently lost. In Egypt, only one of the industry's typological characteristics was retained between Thebes and Dachur near Cairo.

In the middle palaeolithic period, the striking of Levallois flakes with Mousterian variants differed greatly as between Egypt and areas situated further south or west.

In the palaeolithic period, for reasons which remain obscure but which were probably due to changed climatic and ecological conditions, Egypt became isolated from the rest of Africa with regard to the stone tool-making industry, and original industries were created (Sebilian, Epi-Levalloisian or Hawarian, Khargian).

Furthermore, at the same period there was an attempt at foreign penetration by the Aterians from north-east Africa. Traces of them were found as far as the southern Sahara. Having reached the Siwa oasis and also, in large numbers, the Kharga oasis, they spread out in the Nile valley and their traces had been found at Thebes. Other evidence dating from the same period had been noted at Wadi Hamamat (Eastern Desert), at Esna (mingled with Khargian remains), at Dara, at Jebel Ahmar near Cairo, and as far as Wadi Tumilat in the Eastern Delta (mingled with Epi-Levalloisian remains). It was probable that at the same time there was a small-scale admixture of other races, rapidly absorbed by the native population.

An equally interesting intrusion of foreign peoples into Egypt was that of the Natoufians of Palestine, whose presence at Helwan near Cairo had long been an established fact. Recent excavations had shown that these people inhabited a larger area. Stone implements, attributable to these Natoufians, had been found at Fayum and in the Eastern Desert along a belt extending in an east-west direction across the Nile valley at this point.

A technique identical to that used by the Natoufians had been discovered in Somalia (Doian). The Natoufians of the Levant were the only people to have practised the dental mutilations typical of East Africa and used by the men of Mekta El Arbi and by the Negroids of Khartoum. Traces of surviving Natoufian techniques had been discovered at Helwan among typically El Omarian material.

Professor Leclant stressed the African character of Egyptian civilization. But it was necessary to distinguish clearly, as Professor Vercoutter had done, between 'race' and culture.

Physical anthropology in Egypt was in its infancy. Nevertheless, there was no justification for relying on the totally outmoded studies of Chantre, Elliot Smith, Sergi or Derry. Furthermore, there had already been important restatements of current knowledge such as that by Wierczinski.[1] Groups working in Nubia had also shown considerable interest in physical anthropology, with the result that Nubia, reputedly 'poor' in archaeological remains, paradoxically seemed likely to become far better known than Egypt in this respect.[2] Archaeological expeditions now gave

1. *Bulletin of the Egyptian Geographical Society*, Vol. 31, 1958, p. 73–83.
2. Professor Leclant referred to the work of Nielsen, Strouhal, Armelagos, Rogalsky, Prominska, Chemla and Billy.

great prominence to osteological studies, an innovation which was greatly to be welcomed.[1]

In cultural studies, rock engravings, which showed an enormous degree of uniformity from the Red Sea to the Atlantic, were worthy of careful study. These traces had been left by successive cultural groups, hunters, herdsmen or others.

The peopling of ancient Egypt was a considerable problem and it would be very premature, at this stage, to adopt a synoptic approach as a means of solving it. The problem should be approached through separate, precise studies. For this purpose, the collaboration of specialists in disciplines not represented at the symposium was indispensable. All the participants were 'general historians', qualified to compile and synthesize data supplied by specialists; such data were, for the moment, very inadequate.

In any case, it was retrograde to have recourse to authorities who were today completely outdated, such as Lepsius or Petrie. They might be recognized as having 'historical' importance but Egyptology had made great progress since their day.

As for iconographical evidence, the only problem was to know how the Egyptians considered themselves in relation to other men. They called themselves *RMT* (Rame) that is to say 'men'; other people they regarded as an amorphous mass extending in all directions, designated by the cardinal points. For example, the statues of prisoners at Saqqarah (sixth dynasty, −2300) were partly northerners (Asian, Libyans) and partly southerners (Nubians, Negroes). Stereotypes of northerners (whites) and southerners (Negroes) under the sandals of Pharaoh, confirmed that representation.

Professor Ghallab spoke of the successive elements which could be identified in the peopling of Africa between the palaeolithic period and the third millennium of our era.

In north-east Africa, a large quantity of stone objects dating from the second pluvial period, had been found in the Nile valley and the oases. Professor Ghallab distinguished at least six ethnic groups in the Egyptian population during the mesolithic period, which, however, were united by a homogeneous culture. He considered that the human race during the palaeolithic period was more or less homogeneous and 'Caucasian'; the first Negro types in Africa were Asselar man and Omdurman man. In the late palaeolithic period, the black race appeared from the Atlantic to the Red Sea. Among the earliest Egyptians, however, traces had been found of 'Bushmen', some of whose characteristics were modified as a result of their becoming acclimatized to Mediterranean ecological conditions. Even today, there were vestiges of this 'Bushman' type in the population of Egypt. A Negro culture did not really appear prior to the neolithic period.

Professor Abdelgadir M. Abdalla referred to a number of points arising from Professor Vercoutter's paper and Professor Diop's statement. He did not think it important to establish whether the ancient Egyptians were black or Negroid: what was most remarkable was the degree of civilization they had achieved. Physical anthropology had provided important evidence concerning the presence of black

1. cf. an important recent article: D. P. van Gerven, D. S. Carlson and G. J. Armelagos, 'Racial History and Bio-cultural Adaptation of Nubian Archaeological Populations', *Journal of African History*, Vol. XIV, No. 4, 1973, p. 555–64.

men in the ancient population but it was going too far to generalize and to say that this population was entirely black or Negroid. Why should it not be accepted that there were also 'Caucasians' and 'whites'?

An 'Africanist' approach to these problems should be avoided: there was no escaping the fact that the Egyptians detested the Nubians.

Iconographic evidence made it clear that the creators of the Napata culture had nothing in common with the Egyptians: their anatomical characteristics were completely different. If the Egyptians were black, what colour were the men of the Napata culture?

Turning to the subject of linguistics, Professor Abdalla stated that *KM* (Kem) did not mean 'black' and its derivatives did not refer to the colour of individuals. He gave a linguistic demonstration in his turn to illustrate his theory, which differed from that of Professor Diop. He concluded that the Egyptian language was not a purely African language; it belonged to a proto-Semitic group, as could be abundantly demonstrated by supporting examples. Professor Abdalla considered that the linguistic examples given by Professor Diop were neither convincing nor conclusive and that it was hazardous to make too uncompromising a correlation between a language and an ethnic structure or an individual. A comparison drawn between a dead language and living languages was bound to be inconclusive; the similarities which had been pointed out were fortuitous and nothing was so far known of the evolution of ancient African languages. The evidence which had been given to support the theory of kinship was in fact far more consistent with the theory of the spread of ancient Egyptian throughout Africa than of its kinship with present-day African languages. Why should it be assumed that ancient Egyptian and Wolof were related, but not ancient Egyptian and Meroitic, for example? The language of Napata and Meroitic were at opposite poles from one another.

Professor Abdalla hoped that the inquiry would be pursued in the strictest fashion. He considered it impossible to establish any automatic correlation between an ethnic group, a socio-economic system and a language, or to reach scientifically valid conclusions by working 'on a large-scale'. There were almost no unambiguous examples in history of major migrations accompanying major cultural transformations. 'Negro' was not a clearly defined concept today as far as physical anthropologists were concerned. A skeleton did not provide evidence of skin colour. Only the tissues and the skin itself were important in that respect. It was imperative to broach the study of palaeopathology and of funerary practices without delay.

Professor Sauneron, intervening in the course of a lively exchange of views on linguistic matters between Professors Abdalla and Diop stated that in Egyptian *KM* (feminine *KMT*) meant 'black'; the masculine plural was *KMU* (Kemou), and the feminine plural *KMNT*.

The form *KMTYW* could mean only two things: 'those of *Kmt*', 'the inhabitants of *Kmt* ('the black country'). It was a derived adjective *(nisba)* formed from a geographical term which had become a proper name; it was not necessarily 'felt' with its original meaning.

To designate 'black people', the Egyptians would have said *Kmt* or *Kmu*, not *Kmtyw*. In any case, they never used this adjective to indicate the black people of the African hinterland whom they knew about from the time of the New Kingdom

onwards; nor, in general, did they use names of colours to distinguish different peoples.

Professor Obenga[1] in his turn, reverted to the linguistic demonstration which had been begun by Professor Diop.

After criticizing Professor Greenberg's method, on the basis of the recent work by Professor Istvan Fodor[2] and remarking that, since the work of Ferdinand de Saussure, it was an accepted fact that linguistic evidence was the most obvious means of establishing whether two or more peoples were culturally related, Professor Obenga endeavoured to prove that there was a genetic linguistic relationship between Egyptian (ancient Egyptian and Coptic) and modern Negro-African languages.

Before making any comparison, one must be on one's guard against confusing typological linguistic relationship, which gave no clue as to the predialectal ancestor common to the languages being compared, and genetic relationship. For example, modern English, considered from the typological point of view, had affinities with Chinese; but, from the genetic point of view, the two languages belonged to distinct language families. Similarly, Professor Obenga rejected the notion of a mixed language as linguistic nonsense.

Genetic relationship depended on establishing phonetic laws discovered by comparison between morphemes and phonemes of similar languages. On the basis of such morphological, lexicological and phonetic correspondences, one could arrive at common earlier forms. In this way, a theoretical 'Indo-European' language had been reconstructed in the abstract and had been used as an operational model. It was indicative of a common cultural macrostructure shared by languages which subsequently evolved along separate lines.

The same approach could legitimately be applied to African languages, in which case ancient Egyptian would play the same role as Sanscrit did for the Indo-European languages. The hypothesis of borrowings in ancient times could be discounted because of the geographical discontinuity.

Having thus laid the foundations of his demonstration, Professor Obenga gave several sets of examples. First, he examined important typological similarities in grammar: the feminine gender formed by the use of the suffix – *t*, the plural of nouns by the suffix – *w (ou, u)*. He next analysed complete word forms and noted similarities between those of ancient Egyptian and a considerable number of African languages; between Egyptian and Wolof the correspondence was total. This series of demonstrations led Professor Obenga to the conclusion that morphological, lexicological and syntactic similarities amounted to convincing proof of the close relationship between ancient Egyptian and Negro African languages of today. This kind of parallelism was impossible between Semitic, Berber and Egyptian.

A comparison of ways of expressing 'to be' in verb-noun combinations showed that the common archaic form in the Bantu language was the same in this respect as that of the most archaic form of ancient Egyptian. The analysis of negative morphemes, of the emphatic future, and of linking particles led to the same conclusions

1. The full text, as transmitted to the Rapporteur by Professor Obenga, is on p. 67-73.
2. Istvan Fodor, *The Problems in the Classification of the African Languages*, Budapest, Centre for Afro-Asian Research of the Hungarian Academy of Sciences, 1966, 158 p.

as the previous examples. Professor Obenga considered, therefore, that it would prove possible to discover a common genetic structure.

Lastly, Professor Obenga spoke of what he considered to be the most interesting aspect of the comparison.

He drew parallels between the forms taken in different languages by certain words: palm, spirit, tree, place; and also between certain small phonemes: for example, *KM* (Kem), black in ancient Egyptian, becomes *Kame, kemi, kem* in Coptic; *ikama* in Bantu (with the meaning of charred by exposure to excessive heat), *kame* in Azer (cinder). *Romé*, 'man' in ancient Egyptian becomes *lomi* in Bantu. The same phonemes have the same functions in the different languages compared. Professor Obenga concluded his demonstration with an analysis of a verb, 'to come', which is in ancient Egyptian, *iy*; in Coptic: *eyé* or *eya*; in Bini, *ya*; in Bantu *ya*; in the Congo-Niger region, *wa*; in Bahr el Ghazal, *ye*; in Sara, *i*. The 'y', a voiced velar spirant, occurs in every case.

Professor Obenga inferred from these comparisons that it would be possible in the future to identify a 'Negro-Egyptian' language, analogous to 'Indo-European'. In this context, and in view of the undeniable common cultural background of all these languages, there was a sound basis for the development of future studies.

Ms Gordon-Jaquet stated that the study of Egyptian toponomy could perhaps be brought to bear in support of the assertion that no massive immigrations or invasions of foreign populations had arrived in Egypt at least since neolithic times. It was a well-known phenomenon that topographical names were extremely long-lived and that each successive language group inhabiting the same area would leave its mark on that area in the form of place names, more or less numerous, depending on the size of the population and the length of time of its predominance in that area. Any important permanent addition to the Egyptian population from the exterior would certainly have left its mark on the toponomy of the country. This was not the case. The toponomy of Egypt was very homogeneous, displaying names whose etymology could almost without exception be explained by the Egyptian language itself. It was only at the Ptolemaic period and still later, after the Arab conquest, that names of respectively Greek and Arabic origin were added to the basic fund of Egyptian names. It was only in the peripheral regions: Nubia, the Western Oases and the Eastern Delta—regions in immediate contact with neighbouring peoples speaking other languages—where names whose etymology could be traced to these foreign languages were to be found.

Professor Devisse briefly abandoned his role as Rapporteur to inform the symposium of the unexpected results of an iconographic study.[1]

Three manuscripts[2] included representations of black Egyptians which merited detailed consideration. After eliminating what could be attributed to Biblical tradition (the descendants of Ham), and allegorical representations in a consciously

1. This very wide-ranging international study will be the subject of a publication in several volumes. The study has been carried out by the Menil Foundation (Houston, United States of America), a unit of which in Paris has co-ordinated the collection of a vast quantity of iconographic material.
2. Paris, Bibliothèque Nationale, New Acquisitions: Latin 2334 (VI–VIIe?), Vatican Grec 747 (XIe) Vatican Grec 746 (XIIe).

archaic manner (Hades, Night), there remained a variable proportion of Egyptians represented with Negro features and colouring. Admittedly, some of these were servants, but—and on this point the scenes selected were extremely interesting—others were free Egyptians. Some of them—about a third of the participants—were around the table of Joseph, who was giving a banquet for his Israelite brothers seated at another table; others were taking part in the sale of Joseph to Potiphar, who was himself represented as white. Probably the most remarkable aspect of these representations, which were consistently realistic in their details, lay in the characteristic costume worn by these black Egyptians (particularly in the eleventh-century octateuch). The Negroes, who were clearly differentiated from Egyptians wearing beards and turbans, were in many cases carrying spears and wore a 'panther skin' leaving the right shoulder bare. Professor Devisse considered these observations all the more interesting because there were considerable contacts between Byzantium and Egypt during the Fatimid period, and because the representations which dated from this period were far more realistic than in the older manuscript.

General discussion

The general discussion made it clear that a number of participants, in varying degrees, thought it desirable, in the present state of knowledge, to undertake macro-analyses embracing the history of ancient Egypt as a whole or, in some cases, the entire continent of Africa; certain other participants, on the other hand, thought that it would be wiser to take geographical micro-analyses very much further on a disciplinary or interdisciplinary basis.

Chronological analysis of the results achieved

The discussion on this point was opened by Professor Cheikh Anta Diop. Since the upper palaeolothic period, the initial homogeneity of the human race had gradually declined; the population of Egypt was neither more nor less homogeneous than the population of other parts of the world.

Professor Cheikh Anta Diop recalled that, according to the Congrès Pan-Africain de Préhistoire in 1971, the first appearance of the human race was currently believed to have occurred in Africa 5,300,000 years ago. He considered that the discoveries which Professor Debono had mentioned might be related to the earlier, non-differentiated, monogenistic group distinguishing the Oldowan culture.

Homo sapiens appeared about −150,000 and progressively spread to all the then habitable parts of the Nile basin. Professor Diop's theory was that the men living in Egypt at that time were, in accordance with Gloger's law, black in colour like Oldowan man himself.

Rejecting the opposing theory, referred to by Professor Vercoutter in his paper concerning the peopling of Egypt during the predynastic period, Professor Diop stated that the 33 per cent of 'white' Egyptians with a fairly dark, or even black, pigmentation were in fact, black, as were the 33 per cent of half-castes; adding the last 33 per cent of the population mentioned by Dr Massoulard and admitted to be

black, Professor Diop expressed the opinion that the population of Egypt as a whole was black throughout the protodynastic period.

Similarly, he rejected the idea that Negroids might have come to Egypt via the Arabian Peninsula, and reasserted his theory concerning the black population of Egypt which gradually became hybridized.

At another point in the discussion, Professor Diop explicitly stated that the black population of upper Egypt began to retreat only at the time of the Persian occupation.

He ended by making two general observations: one concerned the use of the word 'Negroid', a term which he considered unnecessary and pejorative; the other concerned the arguments which were being put forward to contest his ideas, and which he considered to be negative, lacking in critical rigour and not based on the facts.

Professor Diop's theory was rejected in its entirety by one participant.

In the course of the discussion, Professor Obenga added some important points and emphasized the interest of ancient written sources concerning the population of Egypt. Herodotus, in a passage concerning the Colchians which was neither disputed by modern scholarship nor invalidated by the comparative critical study of manuscripts, endeavoured to show, through a series of critical arguments, that the Colchians were similar to the Egyptians: 'They speak in the same way as they do, they and the Egyptians are the only peoples to practise circumcision, they weave linen like the Egyptians'; these similarities were in addition to two other features which they had in common, their black pigmentation and their crinkly hair.

Professor Leclant maintained that ancient writers used the expression 'burnt face' (Ethiopians) to refer to Nubians and Negroes but not to Egyptians.

Professor Obenga replied that the Greeks applied the word 'black' *(melas)* to the Egyptians. None of the participants explicitly voiced support for the earlier theory, referred to by Professor Vercoutter in his paper concerning a population which was 'white' with a dark, even black, pigmentation. There was no more than tacit agreement to abandon this old theory.

Two categories of objection were made to the ideas propounded by Professor Diop. These objections revealed the extent of a disagreement which remained profound even though it was not voiced explicitly.

Most of the objections raised were of a methodological nature. Although he hoped that the notion of race would be abandoned and that reference would be made rather to the 'people' of ancient Egypt, Professor Vercoutter agreed that no attempt should be made to estimate percentages, which meant nothing, as it was impossible to establish them without reliable statistical data. He hoped that, before final conclusions were drawn, a series of research projects would be carried out to study the human remains in museums throughout the world and those found in recent excavations. He also suggested that the connection between the rock engravings and those who made them should be established chronologically and anthropologically, thus providing accurate chronological reference points for the history of the peopling. He considered that it would be hazardous to draw conclusions concerning the peopling of Egypt in very ancient times while so much information was still lacking.

Professor Ghallab totally rejected the idea of establishing percentages within

the population of ancient Egypt. He considered that it was more important to study hair types than to study skin.

Professor Säve-Söderbergh also stated that it was impossible for anthropologists to establish percentages in terms of 'race', a concept which was now increasingly being abandoned by anthropologists. Furthermore, what was meant by the homogeneity or heterogeneity of a given population was a matter which required to be defined. Modern physical anthropology was based on research using the statistical method and was therefore a very demanding science which did not lightly come to conclusions.

Professor Sauneron considered that, in view of the existence of chipped pebbles in the old Pleistocene strata of the Theban hills, it could be inferred that human beings had inhabited the Nile valley since very ancient times.

Professor El Nadury thought that the problem could be more readily approached if the neolithic period were taken as the starting point, since the information relating to earlier periods was extremely scanty. In —5,000 there were sedentary populations in the north-western part of the Delta. Migrants were believed to have come from all parts of the Sahara in neolithic times, resulting in an intermingling of ethnic groups. Discussion of this point was resumed later during the discussions on the problem of migrations. Professor El Nadury used the adjectives 'Hamitic' and 'Negro' to denote this two-fold admixture from the Sahara. This mixed component was the basis of the population of Egypt from the neolithic period onwards and without break in continuity until dynastic times. Nagada II had dealings with the west. During the dynastic period, a further element, coming from the north-east and described as Semitic, was added to the population. Professor El Nadury thought it a striking fact that, during the first dynasty, fortifications had been built at Abydos, in all probability for the purpose of preventing immigration from the south towards the north.

Professor Debono added further information: to the east of the Delta, in a region which was then more fertile than it is today, epipalaeolithic material had been found; the users of these artefacts were undeniably in contact with the east. To the west of the Delta, the vast neolithic complex of Merimde was an example of a highly developed, large-scale settlement. Lastly, the El Omari site was situated at the southern tip of the Delta. In the course of subsequent discussion of these points, Professor El Nadury noted that the abundant archaeological material discovered at Merimde was clearly stratified, and showed that the site had been settled gradually by the population.

Professor Shinnie was in agreement regarding the settlement of homo sapiens, but without mentioning the colour of his skin, and dated the first settled population of the Nile valley at about 20,000 years ago. Subsequently, various human groups came from different regions, increasing this population and altering its composition.

Professor Ghallab, who was sharply criticized by Professor Cheikh Anta Diop and Professor Obenga, stated that the inhabitants of Egypt in palaeolithic times were Caucasoids. He went on to say that recent excavations had provided evidence of the existence of men of the 'Bushman' type in the population during the predynastic period. Professor Abu Bakr emphasized that the Egyptians had never been isolated from other peoples. They had never constituted a pure race and it was

impossible to accept the idea that in the neolithic period the population of Egypt was entirely black. The population of Egypt in neolithic times was a mingling of men from the west and east, who had been incorrectly called Hamitic. Professor Abu Bakr referred to the case of the yellow-haired, blue-eyed wife of Cheops, as an example of the existence of 'non-black' people in Egypt. Professor Diop regarded this isolated instance as an exception which proved the rule. Professor Abu Bakr considered it possible that black people might have come to Egypt from the Arabian peninsula.

Professor Vercoutter remarked that, in his view, Egypt was African in its way of writing, in its culture and in its way of thinking.

Professor Leclant, for his part, recognized the same African character in the Egyptian temperament and way of thinking. In his opinion, however, the unity of the Egyptian people was not racial but cultural. Egyptian civilization had remained stable for three millenniums; the Egyptians described themselves as *REMET* (*Romé* in Coptic) and, particularly in their iconographic representations, drew a distinction between themselves and the peoples of the north and those of the south who differed from them. Professor Obenga denied that Egyptians, in using the word *REMET*, drew a racial distinction between themselves and their neighbours; he considered the distinction made to be similar to that which led the Greeks to differentiate between themselves and other peoples, whom they termed Barbarians.

Professor Leclant noted that important palaeo-African features in the cultural life of Egypt were worthy of study. As an example, he mentioned the baboon, which was an attribute of the God Thoth, and the frequent appearance in iconography of 'panther' skins as a ritual garment during the worship of Osiris by Horus. In his opinion, however, the Egyptians, whose civilization was culturally stable for three millenniums, were neither white nor Negro.

Professor Vercoutter stated his conviction that the inhabitants of the Nile valley had always been mixed; outside elements coming from west and east had been numerous, particularly in predynastic times.

On the question of ancient sources, particularly Herodotus, which spoke of the Egyptians as black, the only reservations expressed related to the method of reading and interpreting these texts. Professor Vercoutter, in particular, asked in what precise context Herodotus had defined the Egyptians as Negroes. Professor Diop replied that Herodotus referred to them on three occasions: in speaking of the origin of the Colchians, in speaking of the origin of the Nile floods, and in discussing the oracle of Zeus Amon.

Professor Diop felt that the objections which had been advanced against his ideas did not amount to positive and soundly argued criticisms.

It was not possible to take the discussion further in this field and the symposium was unable to make any clear recommendation on the question at this point in the debate.

The problem of migrations at different periods

This question, which arose directly from what preceded, was discussed at length.

Professors Shinnie, Säve-Söderbergh and Sauneron considered that it was unlikely that major migrations in Africa or elsewhere played the decisive role which

was somewhat lightly attributed to them a few decades ago. Their opinion was that, in historical times, there had probably not been any major migrations which had decisively influenced the physical characteristics of the population.

Ms Gordon-Jaquet, who recommended linking the study of population movements with that of place-names, also considered that there had probably not been large-scale migrations, at least since dynastic times. The possibility of migrations of large groups of people between the Nile valley and Mesopotamia in the predynastic and early dynastic periods was contradicted by the complete lack of the exchange of loan words between the ancient Egyptian and the Sumerian languages, which such migrations would certainly encompass.

On the other hand, a later Egyptian historical source of the fifth dynasty (the text of Herkhuf at Aswan) bore witness to a Libyan migration from the south towards the north, i.e. the later habitat of the Libyans.

Professor Holthoer agreed, there could not have been large-scale migrations between Sumer and Egypt. This statement was based on the fact that the Egyptian language lacked any loan words or other elements from the Sumerian, whereas, in later times, during the Hyksos period and subsequently, larger movements of peoples took place and did in fact leave Semitic loan words in Egypt, such as *ssmt* (horse), and Egyptian loan words, such as *sabe pittâti* (< *ẓry pà/m/Z*) = archers and *hartibi* (< *hryhlet*?) = Egyptian fortune-teller.

If there had been more direct contact between the Sumerian and Egyptian peoples in the predynastic period, this would have resulted in more linguistic exchange than in fact occurred.

On the other hand, the evidence of migrations from regions directly bordering on Egypt was based on Egyptian sources themselves. Professor Holthoer re-iterated the arguments based on the text of the tomb of Herkhuf at Aswan.

He was broadly in agreement with the theory, advanced by Professor Leclant, that the Egyptians had a clear idea of what was typically Egyptian and of the characteristics of southerners and northerners, and that this was reflected in a stereotyped manner of representation. However, the representation on the Punt reliefs (Deir el Bahri) would in this case constitute an exception as regards the representation of the ruler of Punt and his courtiers.

Ms Blanc thought that great weight should be given to geographical factors and to the considerable extent of the African territory over which the supposed migrations took place. Professor Grottanelli, a member of the International Scientific Committee, was invited by the chairman of the symposium to express his opinion as an observer; he gave a number of examples of major migrations over great distances.

Professor Abdelgadir M. Abdalla considered it desirable, in discussing the question of migrations from the Sudan into Egypt, to take account of the geographical obstacles (Arḍ al-Ḥajar and cataracts) which perhaps exercised some kind of control over these migrations.

These geographical considerations gave rise to three observations. First, Professor Sauneron emphasized that the present political frontiers of Egypt by no means corresponded to the situation in ancient times, on which arguments ought to be based: the habitable parts of the black land (*kemet*), deposited by the Nile,

were formerly the only densely populated areas. Professor Obenga considered that it was artificial to make a division of the Nile valley along the parallels: this amounted to perpetuating one of the factors responsible for the errors of historical approach to the unity of the Nile valley population. Professor Diop expressed the opinion that, for peoples who were obliged to migrate, geographical obstacles were much less substantial than had been asserted.

Professors Säve-Söderbergh and Ghallab repeated that ecological changes were probably in many cases the decisive factor in explaining the various types of migration in question. Professor Ghallab specified that the ecology of northern Africa and of the Sahara had varied greatly and that this undoubtedly lay behind the migrations involving the Nile valley.

These theoretical discussions were more or less explicitly connected with two ideas: migrations might have affected the life of the Nile valley inhabitants up to dynastic times; migrants of various ethnic origins were absorbed in Egypt and merged with the existing population.

These facts and opinions led to the conclusion that the substratum of the Nile valley population remained generally stable and that, over a period of three millenniums, it was affected only to a limited extent by any migrations which took place.

The discussion of known facts on individual periods revealed a wide divergence of opinion.

As regards the palaeolithic period, Professor Cheikh Anta Diop put forward the hypothesis that *homo sapiens* settled progressively in the valley as far as the latitude of Memphis. Professor Abu Bakr said that too little information was available concerning this period and that the northern part of the Nile valley might not have been inhabited at all. Professor Obenga, on the other hand, considered that between the upper palaeolithic and the neolithic periods there had been continuous settlement by a uniform population; the Egyptians themselves had laid emphasis on this in their oral traditions, mentioning the Great Lakes as their original homeland and Nubia as a country identical with theirs.

Where the mesolithic merged with the neolithic (Professor Vercoutter) or during the neolithic period (Professors Habashi and Ghallab) it seemed likely that fairly large movements of population took place from the Sahara towards the Nile valley. Professor Vercoutter hoped that these movements, about which very little was at present known, would be dated accurately and that the relevant archaeological material would be collected and studied. Professor Cheikh Anta Diop submitted certain details by way of reply.

Radiocarbon dating for the western Sahara showed that a period of damp climate had extended from about 30,000 B.P. to 8,000 B.P., with intermittent periods of drought; similarly, the dating of the ensuing dry period was becoming clearer. Similar datings should be obtained for the eastern Sahara; by combining the results obtained with palaeo-climatic research and with studies of tombs and carvings, the information which Professor Vercoutter wanted would be obtained.

As an alternative to the hypothesis postulating a migration from the Sahara largely during neolithic times, Professor Diop put forward the hypothesis that the population had spread northwards from the south. He restated the idea, to which

reference had been made several times during the discussion, that, during the Capsian period, this culture covered a vast area extending from Kenya to Palestine.

Professor Habashi unreservedly supported the theory of migrations from the Sahara on the basis of known studies. Professor Säve-Söderbergh considered that the majority of neolithic cultures in the Nile valley belonged to a techno-complex of Saharan and Sudanese cultures; nevertheless, migratory movements were probably intense, especially prior to and at the end of the neolithic subpluvial period.

Professor El Nadury also considered that the largest influx of people to the Nile valley had occurred in neolithic times, and stated that these people were partly 'Hamitic' and partly 'Negro'; a comparison of archaeological material from the oases with other material belonging to the A Group seemed to indicate that these peoples were identical. On a much smaller scale, there had been successive gradual infiltrations as far as Helwan of groups of people coming from the Syrio-Palestine belt or from the Arabian Peninsula.

The conclusion of the experts who did not accept the theory, put forward by Professors Cheikh Anta Diop and Obenga, that the Nile valley population had been homogeneous from the earliest times until the Persian invasion, was that the basic population of Egypt settled there in neolithic times, that it originated largely in the Sahara and that it comprised people from the north and from the south of the Sahara who were differentiated by their colour. In opposition to this other theory, Professors Diop and Obenga submitted their own theory to the effect that the valley was peopled uniformly by black people and that the movement had been from south to north.

Professor Abdelgadir Abdalla drew attention to the possibility that, as dessication progressed, two kinds of migrations might be expected to have taken place in the Sudan. One, in the region to the north of Meroe, would have been from the east and west into the Nile valley. The other, in the region between Meroe and the latitude of Khartoum, would be expected to have been southwards.

On the subject of the protodynastic and predynastic periods, Professors Diop and Vercoutter agreed that the population of the Egyptian reaches of the Nile valley was homogeneous as far as the southern extremity of the Delta. These two experts were in partial agreement on the hypothesis of migration southwards from the north, Professor Vercoutter finding this theory difficult to accept and Professor Diop rejecting it. Disagreement emerged on the subject of defining the nature of these people more precisely. Professor Diop regarded them as being the Anu and identified them in the picture published by Petrie; the names of all the towns inhabited by these people, the northernmost being Heliopolis, included the syllable 'on'.

Professor Vercoutter mentioned that the picture shown by Petrie was only one isolated piece of evidence on the population and that it was important to collect other iconographical data. A great abundance of such data was available, in particular on the stelae of the first two dynasties, found by Dr Zaki Y. Saad at Helwan.

Professor Diop maintained that the picture discovered by Petrie, even if it were a unique example, was representative of the homogeneous population of Egypt at this period, irrespective of the racial characteristics detectable in this picture.

Professor Sauneron observed that, nowadays, people no longer believed in the existence of the Anu.

The discussion on this point was inconclusive.

Professor Sauneron then questioned the very idea of a homogeneous population, particularly if it was alleged to have existed from the earliest appearance of man in Egypt up to the predynastic period. Professor Sauneron considered that none of the evidence currently available gave grounds for doubting that the population of Egypt was mixed.

Professor Diop, although willing to admit that the picture he had submitted could not be classified in terms of race, maintained that it was the only available illustration of the population at this period. This picture came from the Temple of Abydos, where it had been noted by Petrie, and it could not therefore be merely ignored.

On this point also, the discussion led to no conclusion.

During the dynastic period, the stability of the population of the Egyptian reaches of the Nile valley was attested by the stability of its culture: Professor Diop showed that the Egyptian calendar had been in use as early as −4236 and, from the beginning, had a cyclic pattern of 1461 years. He considered that, until the Persian invasion, that stability had been threatened only by a very powerful earthquake which occurred about −1450. This had given rise to a series of migrations which affected the equilibrium of all countries bordering the eastern Mediterranean basin. Seafaring peoples then attacked the Egyptian Delta at a period contemporaneous with the disappearance of the Hittites and the appearance of the Proto-Berbers in North Africa. Apart from this major upheaval, the only important episode in the life of the Egyptian people, even if it were not associated with a migration, was the conquest of Egypt in a south-north direction by the unifying Pharaoh Narmer in about −3300.

There was no discussion of this analysis, but other analyses were put forward: Professor Säve-Söderbergh sought to establish, on the basis of the Nubian excavations, at what periods and in what conditions the Egypt of the Pharaohs had become cut off from the south. In Nubia, the most ancient culture gradually disappeared at the end of the first dynasty or perhaps at the beginning of the second. The C Group which succeeded it did not appear before the sixth dynasty. This meant that there was a 'chronological gap' of about 500 years, between 2800 and 2300, on which no information was available today. It was clear that, as a result of this situation, active contacts between Pharaonic Egypt and the south were destroyed or discontinued.

There was another instance of the same situation: no archaeological remains dating from the period between −1000 and the beginning of the Christian era were to be found in lower Nubia. The earliest Meroitic remains which had been discovered there dated from the first century of our era; exchanges between Egypt and the south had therefore varied considerably between 2800 and the Meroitic period.

Professors Vercoutter and Leclant noted the appearance, from the eighteenth dynasty onwards, of a type of Negro representation which was totally different from anything that had existed earlier (the tomb of Houy or the tomb of Rekhmire, for example). How did these new populations make their appearance in Egyptian iconography? Was it the result of contacts between Egyptians and the south or because of migrations northwards into Nubia of populations living further south? Professor Shinnie objected that this information gave no grounds for inferring that there had been a northward migration from the south which had affected the population of Egypt.

Professor Sauneron showed, with a number of supporting examples, how infiltrations of ethnic groups occur and give rise to local changes in the appearance of the population, and how the terminal points in Egypt of the caravan routes from Arabia or the west were gradually settled by foreigners. Professor Diop replied that these were matters of detail which in no way invalidated the overall account which had been given of the population of the valley.

Professor Sauneron cited a number of specific examples of ethnic groups which settled voluntarily in Egypt for agricultural purposes, in Fayum, particularly during the Middle Kingdom and in Ptolemaic times. The foreign population of the villages which were established was in some cases so homogeneous that the villages came to be known by such names as 'Village of the Nubians' or 'People of Syria'. But in every case these foreigners were quickly and totally assimilated. Professor Sauneron analysed, by means of specific examples, the process whereby such foreigners were absorbed by the Egyptian population.

Professor Leclant considered that, with the exception of the eighteenth dynasty example already mentioned, no important change had occurred prior to the twenty-fifth dynasty, when the Kushites from the Dongola region appeared in Egypt. He was inclined to regard this as attributable rather to the transitory increase of a particular influence in the life of the Egyptian population than to migrations of peoples.

No consensus emerged from the general discussion on migrations with regard to Professor Diop's contention that the population of the Nile valley was homogeneous and essentially black.

Two main facts became very plain during the discussion and were not seriously contested.

First, there is a twofold problem in connection with the Nile Delta[1] in prehistoric times.

As Professor Debono pointed out, this region, unlike upper Egypt, is very little known, as the excavations being carried out at Merimde, El Omari and Meadi-Heliopolis have not yet been completed.

The human remains so far discovered dating from prehistoric times and from the archaic period are different from those found in upper Egypt.

Also, it appears certain that human factors which affected life in lower Egypt or the Delta, in so far as they can be discerned prior to the dynastic period, differ from those which were operative in the valley south of this region.

Second, the study of the ancient substratum of the population has been made possible in northern Nubia by the intensive archaeological research organized under Unesco's auspices. For a great variety of reasons, this has not been the case in the remainder of the Egyptian part of the Nile valley, where research concerning predynastic times and ancient material cultures had produced far fewer results than in northern Nubia. The reservations and the unwillingness of some of the experts to draw final conclusions were probably due in part to this fact.

1. Professor Holthoer drew attention to the following work: D. G. Réder: 'The Economic Development of Lower Egypt (Delta) during the Archaic Period (V–IV B.C.)', a collection of articles which appeared in the *Journal of Ancient Egypt* (Moscow), 1960 (translation of the Russian title).

There is no doubt that one other factor at least added to the complexity of a discussion which often took the form of successive and mutually contradictory monologues. This factor emerged clearly from a phrase uttered by Professor Obenga but which was not commented upon. Professor Obenga considered it self-evident that a homogeneous cultural substratum necessarily implied a homogeneous ethnic substratum.

Whether or not these two ideas lend themselves to simultaneous consideration, it seems likely that they were not kept sufficiently apart during the discussions and, that, as a result, the conclusions reached were less clear-out than they might otherwise have been. The possibility of finding points of agreement was probably affected by this fact.

Nevertheless, if they are considered without reference to racial issues, two major themes did ultimately meet with almost unanimous agreement, at least as working hypotheses.

First, it was probably in neolithic times that the population of the Egyptian Nile valley was most affected by large-scale migrations. Two theories are current in this connection: according to one, the migrants came, in the main, in a north–south direction from the entire area of the eastern Sahara; according to the other, these movements of population came along the Nile from the south.

Second, from protodynastic times onwards, the population of Egypt was very stable. The nature of the peopling was not radically altered by the various population movements which affected the political life and the military situation of Egypt, by the consequences of Egypt's commercial relations, by the internal efforts towards agricultural settlement or by infiltrations from nearby regions. This ethnic stability was accompanied by a high degree of cultural stability.

However, during the discussion of the hypothesis of a homogeneous population, which was favoured by Professor Diop, and the hypothesis of a mixed population, which was supported by several other experts, it became clear that there was total disagreement.

Results of the physical anthropology inquiry

At various points in the discussion, it became apparent that the terms used hitherto for the purposes of racial description required to be more clearly defined. Indeed, the necessity of this had been emphasized by Professor Vercoutter. Professor Devisse drew the attention of participants to the moral weight of the longstanding cultural tradition brought down to the present day by such terms as 'Negro', or even by the cultural connotations of the word 'black'.

Mr Glélé, the representative of the Director-General of Unesco, intervened to reassure those experts who advocated outlawing the terms 'Negro', 'black' and 'Negroid' on the grounds that the concept of race was outmoded and efforts should be made to bring men closer together by repudiating any reference to race. He reminded the participants that Unesco was committed to the cause of promoting international understanding and co-operation in the cultural sphere and that it had not been the intention of the Organization, when deciding to hold the symposium, to give rise to tensions between peoples or races but rather, as far as the present

state of knowledge permitted, to elucidate and clarify one of several subjects which were matters of doubt, namely the question of the peopling of ancient Egypt from the point of view of its ethnic origin and of its anthropological relationships. What was needed, therefore, was to compare the alternative theories, to assess the scientific arguments on which they were based, and to take stock of the situation, drawing attention, where appropriate, to any gaps. He emphasized that the terms 'Negro', 'Negroid', 'black', had, in any case, been used hitherto; that they appeared in all scientific studies, as also did the word 'Hamitic' or 'Chamitic', even though doubts had been expressed on their validity in the course of the current symposium; he also stated that the authors of the *General History of Africa* would make use of those words, to which readers were already accustomed. Whatever general opinion one might have, it remained true that these words, as used in both scholarly and popular works, were not devoid of meaning and were inseparable from value judgements, whether implicit or otherwise. He corroborated a statement made by one expert with reference to Unesco's publications on racial problems. Unesco had not repudiated the idea of race; the Organization had drawn up a special programme to study race relations and had stepped up its efforts to combat racial discrimination. There had been several publications on this important problem. It was therefore out of the question for the symposium, in studying problems bearing on the peopling of ancient Egypt, to reject out of hand, and without proposing any new system, the generally accepted classification of peoples as white, yellow and black—a typology which had traditionally been used by Egyptologists to classify the people of Egypt. Furthermore, if the traditional vocabulary currently used by historians needed revision, it should not be revised merely for the history of Africa but for the entire world; if the symposium considered the matter important, it could be submitted for consideration at the international level to the historians' association. Pending the introduction of new terms, the terms 'black', 'Negro', 'Negroid' and 'Hamitic', which were currently used, should be more clearly defined.

Opening the debate on this point, Professor Vercoutter recalled that the problem had been raised by the work of Junker, when he used the word 'Negro' to denote the type of representations which appeared under the eighteenth dynasty and was subsequently caricatured by the Egyptians. Junker used the word Negro primarily in reference to West Africa, emphasizing both the pigmentation and certain facial characteristics.

Professor Vercoutter was inclined to think that, in place of this old point of view, more specific criteria were essential in order to provide a scientific definition of the black race; in particular, he mentioned a blood criteria, the question of the precise significance of the degree of skin pigmentation and whether, for example, the Nubians should be considered as Negroes.

Various attitudes emerged with regard to these questions. Several participants hoped that the word 'race', which on a number of recent occasions had aroused strong feelings, would be used with circumspection. Professor Obenga replied that the notion of race was recognized as valid by scientific research and that the study of races did not necessarily involve racialism.

Professor Leclant regarded the use of the terms 'Negro', 'Negroid' and 'Ethiopian' as a linguistic convention; the term 'Hamitic' required to be used with

even greater caution than the other three. Professor Sauneron stated that various African peoples, which were morphologically very different, were not traditionally classified together as Negroes: Bushmen and Pigmies were excluded, as were other groups with a far lighter pigmentation.

Professors Säve-Söderbergh, Kaiser, Holthoer, Shinnie and Grottanelli pointed out that archaeologists were not specialists in the human body or in the criteria on which distinctions between races were based. Professor Kaiser did not know whether it was possible, on racial grounds, to classify the Egyptians as Negroes. Professor Holthoer showed that these terms were used because no more satisfactory indicators existed; and that 'Negroid' was not necessarily pejorative, since the word 'Caucasoid' had been coined in a similar manner. Professor Grottanelli hoped that the use of the terms 'Hamitic' and 'Semitic' would, in any case, be repudiated as they properly belonged to the linguistic field; on the other hand, the use of 'Negroid' was legitimate because anthropologists had coined other comparable adjectives such as 'Caucasoid' and 'Europoid'. Professor Säve-Söderbergh was supported by a considerable number of the participants when he expressed the hope that racial terminology would be studied by specialists on modern physical anthropology. A strict scientific definition would be of use with regard not only to Africa but also, and perhaps more so, to Asia; similarly, the concepts of mixed population, composite population and groups of populations needed sharper definition. Unesco already had before it a request to this effect in connection with research being carried out in Nubia.

Ms Gordon-Jaquet considered that the mere fact that the words 'black' and 'white' were used tended to encourage thinking in terms of extremes and might distract attention from the importance of intermediate elements. Professor Abdel Kadir did not use the terms which were being discussed. When he came across them he endeavoured, judging each case on its merits, to decide in what sense each term was being used and to find a more apt and accurate substitute: for example, whenever in history books there was a reference to the kings of the twenty-fifth dynasty or people of the Kerma culture as 'Negroes', he substituted 'Sudanese kings of the twenty-fifth dynasty' or 'Kushites'.

Professor Diop referred to the series of criteria established by anthropologists to characterize the Negro: black skin, facial prognathism, crinkly hair, flat nose (the facial and nasal indicators being very arbitrarily selected by different anthropologists) negritic bone structure (ratio between upper and lower limbs). According to Montel, the Negro had a flat and 'horizontal' face. Professor Abu Bakr observed that, if that were the case, the Egyptians could certainly not be considered as Negroes.

Professor Diop went on to specify that cranial measurements had never provided any statistical basis for specifying that a particular brain size was characteristic of one race or another.

He considered that the term 'Hamitic' could not be defined by physical characteristics. On this point, Professor Grottanelli had previously declared that this term should be rejected and Professor Obenga confirmed that anthropologists had totally abandoned it as having no relevance to racial questions; Professor Obenga thought that it should also be abandoned as a linguistic term.

Professor Diop expressed the opinion that the word 'Negroid' had been coined in order to cover instances in which there was hesitation about classifying a person

unequivocally as Negro or to emphasize that such a person had only some of the distinctive characteristics of Negroes; he regarded this word as having acquired a pejorative meaning. He considered that there were two black races: one with smooth hair and the other with crinkly hair and, if the skin colour was black, it was unlikely that the other fundamental characteristics which he had previously enumerated would not be found. Lastly, whereas the blood group A2 was characteristic of white people, black people tended to have group B or, in a more limited number of cases, group O.

Professor Obenga also considered that there were two groups within a single black race, one with smooth hair and the other crinkly hair. He reverted to the general question which was before the symposium: if the notion of race was accepted as valid and if the notion of a black race was not rejected, what was to be said of the relationship between this race and the ancient Egyptians? Professor Mokhtar thought that this problem was unimportant and that the point at issue was the extent of Egyptian contacts with Asia and Africa, and the extent to which the regions bordering on the Nile valley had contributed to its peopling.

It was evident from this exchange of views that the experts present undoubtedly had misgivings about employing certain words which, although in frequent use, were always likely to be regarded, at least by readers, as implying value judgements, and also certain words the scientific definition of which seemed nowadays particularly inadequate and vague.

Professor Shinnie asked what proportion of melanin was sufficient for a man to be classified as belonging to the black race. Professor Diop himself had pointed out that anthropologists arbitrarily laid down the craniometric indications which they considered characteristic of the Negro. Even though he had accepted the idea that the term 'black race' could be applied only to cases in which the characteristics which had been enumerated were present, it was difficult, with the knowledge at present available to the participants in the symposium, to specify, in qualitative and quantitative terms, at what point this combination of features was or was not indicative of belonging to the black race. These factors were obviously highly relevant to the physical anthropology inquiry.

Mr Glélé said that, if the criteria for classifying a person as black, white or yellow were so debatable, and if the concepts which had been discussed were so ill-defined and perhaps so subjective or inseparable from habitual patterns of thought, this should be frankly stated and a revision should be made of the entire terminology of world history in the light of new scientific criteria, so that the vocabulary would be the same for every one and that words would have the same connotations, thus avoiding misconceptions and conducing to understanding and agreement.

Professor Diop considered that the findings of the anthropological inquiry already provided an adequate basis on which to draw conclusions. Negroid Grimaldian man appeared about −32,000, Cro-Magnon man, the prototype of the white race, about −20,000, Chancelade man, the prototype of the yellow race, in the Magdalenian period, about −15,000. The Semitic races were a social phenomenon characteristic of an urban environment and were a cross between black and white races.

He was, therefore, in no doubt: the first inhabitants of the Nile valley belonged to the black race, as defined by the research findings currently accepted by specialists in anthropology and prehistory. Professor Diop considered that only

psychological and educational factors prevented the truth of this from being accepted.

As the assumption behind the research being carried out in Nubia was favourable to a universalistic view, the research findings were of little use in the current discussion. Professor Diop was not in favour of setting up commissions to verify patent facts which, at the present time, simply needed formal recognition: in his view, all the information currently available, even that which derived from the superficial studies made in the nineteenth century, supported the theory that, in the most ancient times, the Egyptians were black-skinned and that they remained so until Egypt ultimately lost its independence. In response to the various questions put to him, Professor Diop stated that the samples already provided by archaeology were adequate to support his argument. He was unable to accept Professor Vercoutter's proposal that anthropological documentation antedating about 1939 should be regarded as of dubious reliability owing to its lack of scientific rigour.

Professor Diop's forceful affirmation was criticized by many participants and gave rise to a number of questions and proposals.

Professor Abu Bakr considered that, from the beginning, Egyptian culture had embraced North African and Central African populations: how could these originally distinct populations be identified?

Professor El Nadury insisted that the population of ancient Egypt could only be regarded as mixed and did not belong to a pure race of any kind; archaeological discoveries supported this conclusion. Professor Grottanelli emphasized that it was because Egypt had a mixed population that it had created such a distinctive and powerful civilization: if there was a tendency in ethnology which almost amounted to a law, it was that important civilizations appeared in areas where races, cultures and languages mingled.

Professor Sauneron observed that the total number of people who had occupied the Nile valley between the beginning of historical times and the present day could reasonably be estimated at several hundred million individuals. A few hundred sites had been excavated and some 2,000 bodies studied; in view of the sparseness of the data thus obtained, it was totally unrealistic to infer from them such ambitious general conclusions. As the available samples gave nothing like a complete picture, it was advisable to wait until a rigorous and sufficiently comprehensive inquiry into general features had provided universally acceptable evidence.

Finally, Professor Diop mentioned that racial type could not at present be established on the basis of craniometric evidence alone but that conclusions could be arrived at if this evidence were combined with osteological data. Modern molecular biology provided an even better method. Professor Shinnie replied that the American specialists whom he had consulted while preparing for the symposium had told him that skeletal studies had some importance but that they did not in themselves provide a basis for determining race, and that the criteria regarded as adequate by Professor Diop were, rightly or wrongly, no longer considered to be so by American specialists.

The validity of the iconographic inquiry

In this field also there were two opposing theories. Professor Diop considered that, as the Egyptians were black, their painted iconography, which, incidentally, he had

not cited in support of his argument, could represent only black people. Professor Vercoutter, who was supported by Professors Ghallab and Leclant, considered that Egyptian iconography, from the eighteenth dynasty onwards, showed characteristic representation of black people who had not previously been depicted; these representations meant, therefore, that at least from that dynasty onwards the Egyptians had been in contact with peoples who were considered as ethnically distinct from them.

Professor Diop remarked that, in the course of his introductory statement, he had submitted a series of representations drawn exclusively from sculpture. He regarded all these as representing black people or as showing features characteristic of black societies. He asked for specific criticisms of these records and invited participants to produce comparable representations of whites in dignified or commanding postures dating from early Pharaonic times. Various participants replied that there had never been any question of discovering in Egypt representations comparable to those of Greek statuary, for example. Professor Vercoutter said that numerous representations could be produced in which human beings were painted red rather than black, but that Professor Diop would refuse to recognize these as non-black. Professor El Nadury did not deny that there were black elements in the population of Egypt during the Old Kingdom but said that it seemed hardly likely that the entire population was black.

A lengthy debate ensued, principally between Professors Vercoutter and Diop. Professor Shinnie and Professor Grottanelli pointed out that data inferred from iconography were inconclusive.

Professor Vercoutter stated that the photographic reproduction of Pharaoh Narmer was considerably enlarged, that the features were probably distorted, and that to regard the person represented as black involved a subjective assessment. This was also the opinion of Professor Säve-Söderbergh, who said that the photograph could just as well be interpreted as a picture of a Laplander.

Professor Vercoutter did not dispute that there might have been black elements in Egypt throughout history, and he himself adduced a number of further examples of their being represented graphically. He took issue with the facts as presented, however, on two counts: they had been drawn indiscriminately from the whole Pharaonic period, without clear references; and the selection had been made to support a theory. On this score, Professor Diop replied that he had made a point of submitting only carved objects or scenes in order to avoid the likelihood of discussion on the significance of colours, but that he had been obliged to use the material available to him at Dakar. The list was comprehensive; it extended from the Old Kingdom to the end of the Pharaonic period. The evidence did, indeed, support a theory and any contrary theory must of necessity be supported by iconographic representations of 'non-black' Egyptians.

During the lengthy discussion on colours, Professors Vercoutter, Sauneron, and Säve-Söderbergh, on the one hand, and Professor Diop on the other, were again in disagreement. During the discussion, nothing was conceded by either side. The only apparent point of agreement was that the matter warranted further study, in particular with the help of specialized laboratories. Professor Diop had been loath to enter on such a discussion because it concerned many debatable issues. He hoped

that future discussion would bear more directly on anthropological studies and, in particular, on the study of the skin preparations which he had made in connection with this question of painted representations.

Agreement between Professors Diop and Vercoutter on the subject of iconography was reached only on a very few points. Professor Vercoutter conceded that there were representations of black people in Egyptian sculpture during the Old Kingdom, and he gave supporting examples. But he did not consider that they were representative of the Egyptian population as a whole, which was, in any case, also represented by contemporary sculptures showing quite different features.

Professor Vercoutter wondered why the Egyptians, if they did regard themselves as black, rarely, if ever, used carbon black in their representations of themselves but used a red colour instead. Professor Diop considered that this red colour was indicative of the black Egyptian race and that the yellow colouring of the womenfolk illustrated the fact, to which attention had been drawn by American anthropologists, that women, in a number of racial groups studied, were, as a rule, of a paler hue than the men.

Linguistic analyses

This item, in contrast to those previously discussed, revealed a large measure of agreement among the participants. Discussion took place on two levels.

In response to Professor Diop's statement that Egyptian was not a Semitic language, Professor Abdalla observed that the opposite opinion had often been expressed.

A grammatical and Semantic debate took place between Professor Diop on the radical which he reads *KMT*, derives from *KM* 'black' and considers to be a collective noun meaning 'blacks, i.e. Negroes' and Professor Abdelgadir M. Abdallah who adopts the accepted reading of it as *KMTYW* and translation with 'Egyptians', the plural of *KMTY* 'Egyptian', the *nisba*-form from *KMT* 'black land, i.e. Egypt'. The latter reading and translation were affirmed by Professor Sauneron.

Professor Abu Bakr asked how frequently the form *KEMTI* occurred. Professor Obenga emphasized that the Egyptians did not apply the name Egypt to their country during Pharaonic times.

Turning to wider issues, Professor Sauneron drew attention to the interest of the method suggested by Professor Diop and Professor Obenga. Egyptian remained a stable language for a period of at least 4,500 years. Egypt was situated at the point of convergence of outside influence and it was to be expected that borrowings had been made from foreign languages; but the Semitic roots numbered only a few hundred as compared with a total of several thousand words. The Egyptian language could not be isolated from its African context and its origin could not be fully explained in terms of Semitic; it was thus quite normal to expect to find related languages in Africa.

However, a rigorous methodical approach required the difficult problem of the 5,000-year gap to be faced: this was the period separating ancient Egyptian from present-day African languages.

Professor Obenga drew attention to the fact that a language which was not

fixed by a written form and which developed normally might retain certain ancient forms; he had cited examples of this in the communication he had given on the first day of the symposium.

Professor Sauneron noted that the method which had been used was of considerable interest, since it could not be purely fortuitous that there was a similarity between the third person singular suffixed pronouns in ancient Egyptian and in Wolof; he hoped that an attempt would be made to reconstitute a palaeo-African language, using present-day languages as a starting point. This would facilitate comparison with ancient Egyptian. Professor Obenga considered this method to be acceptable. Professor Diop thought it essential to derive a research method from linguistic comparisons, and he provided a specific example of what he had in mind. He regarded the Dinka, Nuer and Shilluk groups and their respective languages, on the one hand, and Wolof, on the other, as being ethnically and, to a lesser extent, linguistically related. Senegalese proper names occurred in the groups in question at clan level. More specifically, Professor Diop believed that he had found among the Kaw-Kaw, in the Nubian hills, the clearest link between ancient Egyptian and Wolof.

Professor Vercoutter pointed out, as a matter of interest, that in the tomb of Sebek-Hotep there were representations of three Nilotes who were indubitably ancestors of the Dinka or the Nuer.

Development of an interdisciplinary and pluridisciplinary methodology

There was complete agreement on this point as to the necessity of studying in as much detail as possible all the zones bordering on the Nile valley which were likely to provide fresh information on the question submitted to the symposium.

Professor Vercoutter considered it necessary to give due weight to the palaeoecology of the Delta and to the vast region which Professor Balout had termed the 'African Fertile Crescent'.

Professor Cheikh Anta Diop advocated tracing the paths taken by peoples who migrated westwards from Darfur, reaching the Atlantic seaboard by separate routes, to the south along the Zaire valley and to the north towards Senegal, on either side of the Yoruba. He also pointed out how worth while it might be to study Egypt's relations with the rest of Africa in greater detail than hitherto, and he mentioned the discovery, in the province of Shaba, of a statuette of Osiris dating from the seventh century before our era.

Similarly, a general study might be made of the working hypothesis that the major events which affected the Nile valley, such as the sacking of Thebes by the Syrians or the Persian invasion of −525, had far-reaching and fairly long-term repercussions on the African continent as a whole.

After further discussion on methodology, Professor Obenga stated that, in human palaeontology, one well authenticated piece of evidence was sometimes sufficient to enable conclusions to be drawn; Professor Vercoutter pointed out that archaeologists did not share this view and regarded coherent statistical series as indispensable. Lastly, Professor Mokhtar announced that there were plans for a programme of major projects to be carried out in the Delta.

General conclusion

Although the preparatory working paper (see Appendix 3, p. 135) sent out by Unesco gave particulars of what was desired, not all participants had prepared communications comparable with the painstakingly researched contributions of Professors Cheikh Anta Diop and Obenga. There was consequently a real lack of balance in the discussions.

Nevertheless, for a number of reasons, the discussions were very constructive: in many cases, they clearly showed the importance of exchanging new scientific information; they brought home to almost all the participants the shortcomings of the methodological criteria which had hitherto been used in research; they drew attention to examples of new methodological approaches on the basis of which the question before the symposium could be studied in a more scientific manner. This first meeting should, in any case, be regarded as providing a basis for further international and interdisciplinary discussions, and as a starting point for further researches which were clearly shown to be necessary. The large number of recommendations is a reflection of the desire of the symposium to suggest a future programme of research. The symposium also enabled specialists who had never previously had the opportunity of comparing and contrasting their points of view to discover other approaches to problems, other sources of information and other lines of research than those to which they were accustomed. From this point of view, the symposium undeniably proved constructive.

Recommendations

The symposium drew the attention of Unesco and of other competent bodies to the following recommendations.

Physical anthropology

It is desirable:

That an international inquiry be organized by Unesco, either by consulting universities in a sufficient number of countries, or by consulting individual experts of international repute, or alternatively by convening a symposium, with a view to establishing very precise standards on the strictest possible scientific principles for defining races and for identifying the racial type of exhumed skeletons.

That the collaboration of the medical services of several Unesco Member States be sought for the purpose of carrying out statistical observations during post-mortem examinations on the osteological characteristics of skeletons.

That a re-examination be made of human remains which are already in the possession of museums throughout the world, and that a rapid study be made of remains discovered during recent excavations in Egypt, in particular in the Delta, with a view to adding to the available information.

That the Egyptian authorities do everything in their power to facilitate the necessary study of examinable vestiges of skin, and that these authorities agree to set up a department specializing in physical anthropology.

Study of migrations

It is desirable that the following studies be undertaken:

A systematic archaeological study of the earliest periods during which the Delta was inhabited. This operation might be preceded by the analysis of a core sample taken from the soil of the Delta. The study and the dating of this geological core sample could be carried out simultaneously in Cairo and in Dakar.

A comparable inquiry in the regions of the Sahara near to Egypt and in the oases. This inquiry should comprise the simultaneous study of rock drawings and paintings and of all available archaeological material. Here again, geological samples might be analysed and dated at the same time.

A survey in the valley itself, comparable to that which has been carried out in northern Nubia, which would be concerned with non-Pharaonic tombs, with the study of ancient material cultures and, in general, with the prehistory of the valley as a whole.

An inquiry on palaeo-African vestiges in Egyptian iconography and their historical significance: the cases of the baboon and of the leopard ('panther') skin have already been cited at the symposium. It would undoubtedly be possible to discover others.

Linguistics

The symposium recommends that a linguistic study be made without delay on the African languages which are in imminent danger of disappearing: Kaw-Kaw has been suggested as a very significant case in point.

At the same time, the co-operation of specialists in comparative linguistics should be enlisted at international level in order to establish all possible correlations between African languages and ancient Egyptian.

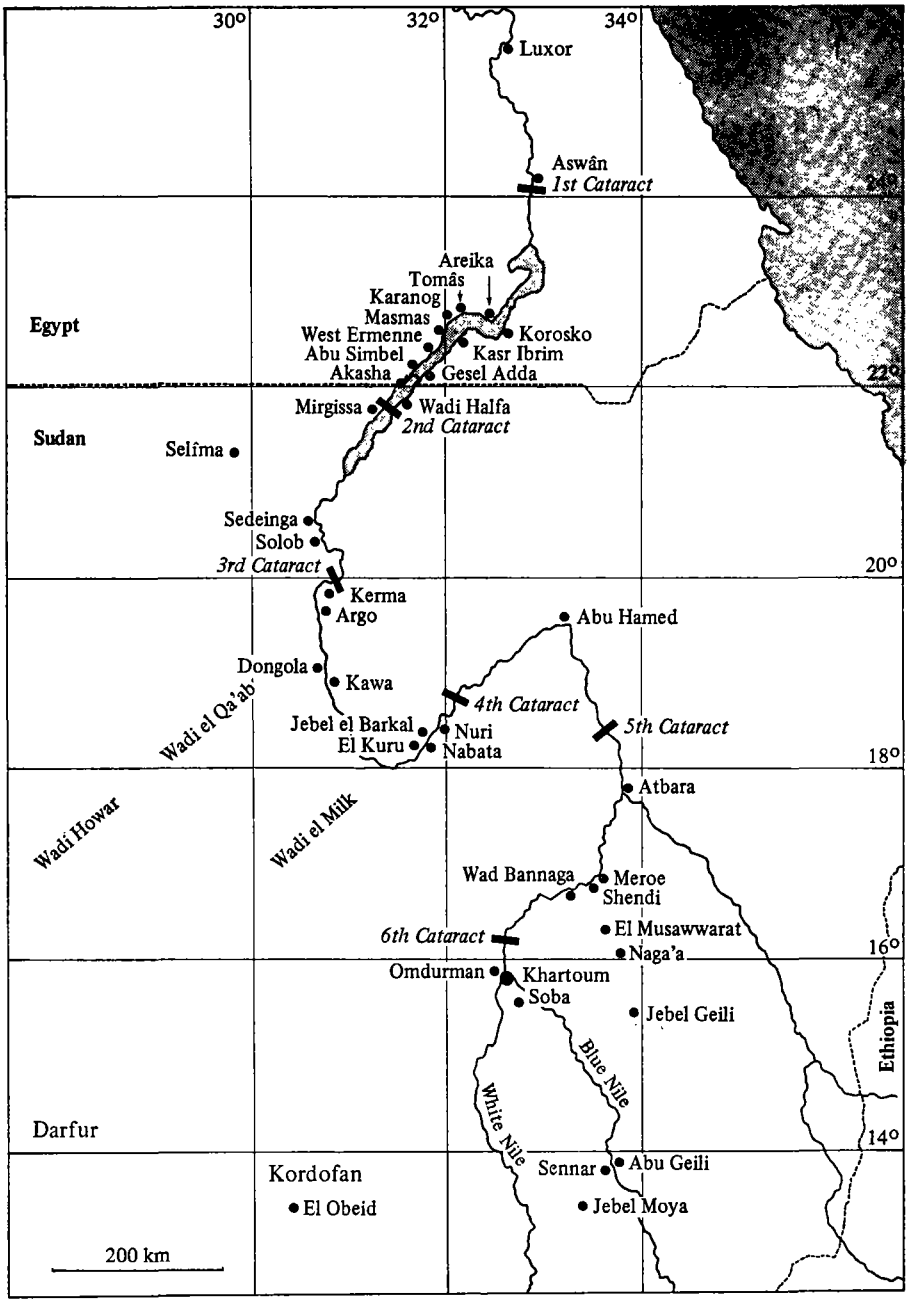
Interdisciplinary and pluridisciplinary methodology

The symposium earnestly hopes that:

Interdisciplinary regional studies may be undertaken in several regions, with the following as priorities: (a) Darfur; (b) the region between the Nile and the Red Sea; (c) the eastern fringe of the Sahara; (d) the Nile region south of the tenth parallel; (e) the Nile valley between the second and sixth cataracts.

An interdisciplinary inquiry may be made as a matter of urgency on the Kaw-Kaw, who are in imminent danger of extinction.

Part II
The deciphering of Meroitic script



Map of Meroitic sites

The present position in the deciphering of Meroitic script

Jean Leclant

The Meroitic civilization

The civilization of the Meroitic Empire flourished in the south of Egypt, on the middle Nile, between the eighth century before our era and the fourth century of our era. It is called *Kush* in the Egyptian and Biblical texts, Ethiopia by the classical writers and is in fact Nubia together with the north of present-day Sudan. Its two capitals were, in succession, Napata, a little way down stream from the fourth cataract, and Meroe among the steppeland near the sixth cataract. The influences of Egypt of the Pharaohs, and, beyond it, those of the Mediterranean and in particular of Alexandria, were brought to bear on a genuinely African context.

From this original civilization a number of inscriptions have come down to us, whose meaning has not yet been discovered.

In fact, scarcely any systematic research was done in this area until very recently. Isolated and shut in by the cataracts, it has a climate of extremes. Excavations were restricted to a few large sites. Relatively few objects have reached Khartoum and the museums of Europe and North America. Meroitic archaeology is still in its infancy.

Discovery of the Meroitic texts

In 1819 the architect F.-C. Gau, reproducing four short lines of a text he had copied at Dakka, in lower Nubia, in fact published the first Meroitic inscription, though not in full. Soon, in 1820, the campaign conducted by Ismaïl Pasha, the third son of Mehemet Ali, as far as the neighbourhood of the upper Nile, the Fazoql, was to open up the way far to the south. Then came the famous explorations of Cailliaud and Linant de Bellefonds. To these celebrated names must be added those of other intrepid men who, braving the obstacles of climate and loneliness, followed the course of the river and crossed the deserts, taking notes and making sketches as they went: Waddington and Hanbury, Lord Prudhoe, J. G. Wilkinson, G. A. Hoskins, the Frenchmen

Cadalvène and Breuvery, Combes, the naturalist Rüppell, Prince Pückler-Muskau and the Austrian geologist Russegger. Nor must we forget the adventurers of all kinds who had joined the Egyptian teams, often pretending to be doctors or chemists; one was the famous Ferlini, who, on an exploratory raid in 1834, discovered the renowned hoard of jewels at Meroe (the Pyramid of Queen Amanishakhete).

In 1844, Ethiopia as it then was, i.e. the former Meroitic realm together with Nubia, was methodically investigated by the Prussian expedition under Lepsius, who was the true founder of Meroitic archaeology. Even today, the achievements of this scientist, who at the time was scarcely 30, seem enormous; they are to be found in the huge engravings of his *Denkmäler* and in the closely written, scrupulously accurate pages of the corresponding *Texte*.

After the long interruption caused by the Mahdiya (1885–98), the construction of the Aswan Dam at the beginning of this century led to the systematic exploration of lower Nubia: a survey by Reisner, exploratory expeditions by Breasted and excavations by the University of Pennsylvania (Karanog, Areika). The epigraphic discoveries of the last-mentioned expedition were important; from a group of offering tables and steles that had been collected, Griffith immediately discovered how to decipher Meroitic script (1909–11), a philological discovery of exceptional merit. Even the excavations carried out at Meroe by Garstang (from 1909 onwards) were very limited, and only a single volume and some brief reports were published.

Just before the First World War, work was begun much further to the south, on the Blue Nile at Jebel Moya and at Abu Geili, by Sir Henry Wellcome's expedition, under somewhat singular and relatively unscientific conditions owing to the circumstances; but it was long afterwards (in 1949 and subsequent years) that the results were published, and they were sometimes tricky to interpret.

The second real founder of Meroitic archaeology in the field was G. A. Reisner. At the head of a large expedition subsidized by the University of Harvard and the Boston Museum, from 1916 to 1923, he tackled the huge necropolises of the Meroitic Empire around Napata (the former capital which was still a religious centre), those of Kurru, Nuri and Jebel Barkal; and, further south, the numerous pyramids scattered throughout the three great cemeteries of Meroe. Reisner was able to make immediate use of some of his results to formulate tentatively a chronological table of the Kushite monarchs, which is, however, subject to revision; but it was a considerable time before a detailed account of the archaeological results was available.[1]

Apart from Reisner's notable excavations the Sudan received relatively little attention between 1918 and 1945. Exploratory expeditions were under-

1. Publication by D. Dunham, since 1950, of the *Royal Cemeteries of Kush* series.

taken by archaeological authorities and a few amateurs. In lower Nubia the survey of 1929–1931 carried out as a result of the raising in height of the Aswan Dam, contributed little or nothing to Meroitic archaeology. However, Griffith, working on behalf of Oxford University, persevered with his invaluable investigations along the course of the Nile, an account of which was published in the *Annals of the University of Liverpool;* but he was concerned with epigraphic rather than strictly archaeological questions; in the Napata area he excavated the Sanam site; downstream from the second cataract, he found important epigraphic material in Faras; lastly, in the Dongola Basin, the Temple of Kawa yielded more than a hundred graffiti and a few objects (an account of which was published by M. F. L. Macadam and L. P. Kirwan).

After the Second World War, the development of the Sudanese Department of Antiquities (headed successively by A. J. Arkell, L. P. Shinnie, J. Vercoutter, Thabit Hassan Thabit and Negm ed Din Mohammed Sharif) produced substantial results. A list of sites was drawn up, exploratory expeditions were organized and excavations undertaken, though these were restricted by lack of funds. Important articles which have appeared in the review *Kush*, first published in 1953, bear striking witness to the progress made.

The years 1958–59 were an important stage in the active development of research into Meroitic archaeology. The Sudanese Department of Antiquities undertook the excavation of Wad ben Naga. The mission of the Humboldt University, directed by Professor F. Hintze, explored the Butana area, east of the Nile, in detail, giving particular attention to the two extensive sites of Musawwarat es-Sufra and Naga. Since then, the German expedition has regularly and systematically studied the vast ruins of Musawwarat: the uncovering of the Temple of the Lion has produced remarkable results; and the study of the 'great complex' of monuments is now complete.

Many missions investigated Nubia as far as the Dal Cataract (to the south of the second cataract) before the area vanished beneath the waters of the Aswan High Dam (Sadd el-Ali). There is evidence that Meroitic occupation was never very dense in Nubia. However, one must take into account the discoveries made as a result of the Spanish missions (on the one hand at Masmas in Egyptian Nubia, and on the other at Argin in Sudanese Nubia), the French excavations (Meroitic cemeteries of Aksha and Mirgissa discovered by the Vercoutter-Vila mission, stele and offering table of Berteye, discovered by the Leclant-Lauer mission at Tomas), and finally the American excavations of west Ermenne (W. K. Simpson) and of Jebel Adda (N. Millet). These last revealed several pyramids built over tombs which were not strictly royal. It was precisely the use of pyramids rather than mastabas which was brought to light by the exploration and excavation of the necropolis of Sedeinga, situated about 15 kilometres north of the Great Temple of Soleb, by the Michela S. Giorgini mission.

At the present time (1972), a number of missions which may make further discoveries are working in the Meroitic field. At Qasr Ibrim, in Egyptian Nubia, the remains of the fortress and of the city and necropolises which surround it, encircled by the waters of the High Dam, are again being studied by the British mission of the Egypt Exploration Society, directed by Professor M. J. Plumley. In Sudan, to the south of the Dal Cataract, a survey mission of the Sudanese Department of Antiquities, directed by A. Vila, is progressing downstream. The French mission led by Professor J. Vercoutter has taken up its position on the Island of Sai. A few Meroitic remains recently discovered on the island have given rise to the hope that a site of this era will be found there. The Sedeinga mission (M. S. Giorgini, C. Robichon and J. Leclant) intends to continue excavation of the great necropolis: the presence of more than 200 tombs (pyramids of sun-dried bricks) laid out in parallel rows shows that this was the site of the principal town of a State situated between the great historic city of Napata and the buffer State of lower Nubia; already many remains of glassware have been found in the necropolis known as the West Necropolis. An American-Swiss mission, led by Professor C. Maystre, is working at Tabo on the Island of Argo, where it has uncovered the remains of several temples and collected a great many fragments of texts. L. P. Shinnie has resumed his study of Meroe, which is clearly a very large site. Meanwhile, the German Democratic Republic's mission (F. Hintze) has finished its work at Musawwarat es-Sufra.[1]

Future investigation of the Meroitic field

For the future, arrangements should first be made to explore upper Nubia in depth; lower Nubia is now under water, but, on the other hand, the areas situated between the second and the fourth cataracts—and especially between the second and the third cataracts—require special attention; for it was for a long time so difficult to reach them that we still know nothing of them from an archaeological point of view. From the north, starting from lower Nubia, it was comparatively easy to reach the second cataract and go as far as the famous rock of Abusir; but, further on, the Batn el-Hagar was a redoubtable barrier to anyone attempting to get through; consequently, the caravan routes coming from the north via the chain of oases (Khargeh, Selimah) did not rejoin the Nile until a point up stream from the third cataract (the Dongola Basin)

1. See Fritz Hintze, *Musawwarat es Sufra*, Vol. I, 2, *Der Löwentempel*, Berlin, Akademie-Verlag, 1971, 109 plates; Fritz Hintze, 'Musawwarat es Sufra, Vorbericht über die Ausgrabungen des Instituts für Ägyptologie der Humboldt-Universität zu Berlin, 1968, (Siebente Kampagne)', *Berliner Beiträge zur Ägyptologie und Sudanarchaologie*, p. 227–45, 1971, illus.

was reached. The study of the Jebel Barkal sector must be begun again in its entirety; its complex of temples dating from various periods warrants the carrying out of large-scale and careful excavations; the removal of the huge mounds of excavated earth which are heaped around the foot of the holy mountain may result in further surprises of considerable importance. At Meroe itself the whole area occupied by the town and the temples needs to be methodically investigated—particularly the oldest parts. Further to the south a detailed survey should be made of the course of the Nile and of its chief tributaries. South of Khartoum, almost no investigations have been made hitherto; we have only a little information, most of it concerning Jebel Moya, and a few chance discoveries have been made at the Sennar Dam. The internal caravan routes of the Meroitic realm, which cut across the loops of the Nile between lower Nubia and Atbara and between the two capitals of Napata and Meroe, require systematic investigation. The outskirts of the Empire must be explored in all directions towards the Red Sea, the savannahs of the south, and in the direction of Chad; sites must be located, the size of the Empire must be determined, and evidence must be gathered concerning its trade, which was undoubtedly brisk, and the extent of its influence. In the desert stretching to the west of the Nile a detailed investigation should be made of the Darb el Arbain, the Wadi el-Gaab and the Wadi Howar, and also the Wadi el-Milk. The savannah between the Nile and Lake Chad must also be studied, and large-scale investigations must be carried out in Kordofan and Darfur.

Inventory of Meroitic texts

As a result of the research whose chief stages have just been described, a total of about 900 texts are at present being assembled and published in the form of a Repertory of Meroitic Epigraphy (REM) by the Meroitic Studies Group (GEM) in Paris.

In classifying this material, we have avoided making a complete change from accepted practice. So as to preserve the coherence of sets of documents already grouped together, we decided not to adhere strictly to a policy of continuous numbering, following, for example, the chronological order of discovery or publication—a policy which we had thought of adopting at the beginning.

In fact the first statement of the situation—that given in 1911 by F. L. Griffith, who, in his *Meroitic Inscriptions*, reproduced all the Meroitic texts then known—is still of fundamental importance. In addition, he published separate groups of documents—material from the necropolises of Karanog and Shablul and texts recently discovered at Meroe.

We have also given prominence to the substantial collections of docu-

ments from Faras (funerary texts and ostraca), Kawa (graffiti for the most part) and the *Royal Cemeteries of Kush.*

On the other hand, we have not treated the two groups reproduced by U. Monneret de Villard in *Kush*, Vols. VII and VIII, as coherent wholes; most of these texts are known from other publications. In order to facilitate identification of these documents, we have in every case included in the bibliographical information we have supplied, their respective numbers in the two tentative collections 'Iscr. Regione Meroe' and 'Testi Nubia Sett'.

The Meroitic texts, therefore, are listed in the following way:

REM 0001 to REM 0143	Meroitic Inscriptions
REM 0201 to REM 0387	Inscriptions from Karanog, followed by ostraca and various fragments from Karanog and inscriptions from Shablul
REM 0401 to REM 0451	Meroe
REM 0501 to REM 0546	Faras
REM 0551 to REM	Ostraca from various sites
REM 0601 to REM 0707	Kawa
REM 0801 to REM 0859	*Royal Cemeteries of Kush*

From REM 1001 onwards texts have been published singly in the intervals between these major series, or subsequently to them. The last number is REM 1137.

Interpretation and analysis of the Meroitic texts

Although we still do not understand the meaning of the Meroitic texts, Griffith took an important step in this direction at the beginning of this century (1909–11); by making comparisons with proper names known to us from Egyptian hieroglyphics, he succeeded in finding the approximate value of the Meroitic signs both from the hieroglyphics borrowed from the Egyptian (but turned round the other way, which constituted a fundamental difficulty in deciphering) and from the cursive script derived mainly from the Egyptian demotic script.

There are twenty-three signs: it is, however, an alphabet which has a few biliterals, or to be more precise four vowel signs (a, e, i, o), fifteen consonant signs and four syllabic signs (ne, se, te, to); it also has a 'separator' (two dots one above the other or sometimes three), which, as a general rule, is inserted between several words. In the particular case of funerary inscriptions it became possible to identify those parts of the text where the divinities Isis and Osiris were invoked, those where the deceased person and his relatives were named, and those where the formal words of 'blessing' were pronounced.

If in this way we collect names of peoples, places, divinities and titles, the semantic value of the inscriptions escapes us as soon as we turn to longer texts, those known as 'historical'. The only thing we can do is recognize the different words thanks to the 'separator', and calculate that the text is here segmented into groups of words. These segments of texts have been named 'stichs', a somewhat conventional name which does not imply anything about the nature of the grammatical structure thus deduced.

Thus Meroitic bears witness, though unfortunately its witness is silent as yet, to the history of Nubia and of the southern Sudan: of this language, the first written language of inland Africa, we know only the approximate value of the signs, a few grammatical forms and some proper names; for the time being, we are ignorant of its real nature; its general meaning escapes us.

For the moment, to discover the structure of the language, the basic tool we use is comparison: when we realize that a series of characters are always found together, whatever the text, we can formulate hypotheses about its structure.

To start with, cards were made for each word; but it was very soon realized that an isolated word was not nearly so useful as a word in its context. We found it advisable to consider each word within its 'stich'; a segment of the text defined by structural considerations.

If a stich comprised five words, therefore, five identical cards had to be made, one for each word; in addition to the text itself, information regarding the place of discovery, the material support of the text, bibliographical references, etc., was entered on the card—a long task and a tedious one, since it was repetitive.

Then, as the process of photocopying was developed, its use was adopted for the reliable, rapid duplication of the cards; this made it possible to begin the compilation of an index in which each entry corresponded to a word, and there were as many cards as there were occurrences of the word in the whole of the Meroitic texts.

As the problem was clearly defined and repetitive—tedious, too, to deal with by hand (which carried the risk of letting errors of substance creep in)—it was natural to turn to computer science in order to solve it even more rapidly and reliably.

Recording Meroitic by computer processes

Planned at the outset to supple a tool to work with—a 'concordance' of the Meroitic texts—the recording of Meroitic by computer methods also opened up other possibilities:

Once the text had been recorded, it was possible to produce an edition which

could be easily updated by the addition of new texts available as a result of recent discoveries.

In the same way, updating the concordance would be done automatically when new texts had been committed to memory in the machine.

Statistical questions may be asked concerning Meroitic texts with a view to using methods evolved by linguistic research (counting series of letters, for example),

As various kinds of information are recorded for each text, it is possible to produce rapidly, at the request of any research worker, an edition of the text which has certain specific characteristics. The whole of the Meroitic texts may thus be likened to a 'data bank' to which one may put all sorts of questions.

However, while recording by computer methods opened up possibilities it also had its limitations:

The Meroitic signs had to be represented by the letters of our own alphabet, which alone can be understood by the machine. The correspondence between the two alphabets, in most cases arbitrary as regards pronunciation, was determined as follows: an attempt was made to use the transcription already used by earlier Meroitic specialists for the 'classical' editions; where possible, advantage was taken of similarities of form between the Latin character and the Meroitic sign; each Meroitic sign was represented by a single Latin character, even when it was known that the Meroitic character has the value of two distinct signs.

As the aim was to establish a concordance in which each word would be given with its context, it was necessary that the computer should be able to recognize the segmentation of words and be able to make the division into stichs (context).

To define the context, the concept of a 'stich' as already defined is used: a word in the index must be accompanied by the whole of the stich in which it occurs, whatever the length of the latter (from a few words to several lines).

To define words it was, in most cases, necessary to analyse the text: it was therefore decided to add, under every line of the text (which makes up an aggregate of epigraphic data that varies very little) a line called the 'analysis line', which would give interpretations subject to revision if necessary: regarding the segmentation by words and their presumed meaning (defined according to categories); regarding the possible division of each word into prefixes and suffixes.

Lastly, since we were dealing with an undeciphered language, read from documents which were often corrupt, it was advisable to note the cases in which a sign was really unclear or had even been restored by the research worker; one could also try to note possible uncertainties as to the reading (when the research worker was undecided between one letter and another).

It was hoped that the machine would give as many words in the index as there were possible interpretations; however, by comparison with other cases, where a given word occurred it was possible to eliminate many ambiguities and arrive at a more reliable edition of the text. This remains one of the aims of the 'Repertory of Meroitic Epigraphy'.

The 'Repertory of Meroitic Epigraphy' takes the form of a collection of texts accompanied by various items of information concerning their segmentation into parts, or stichs, the nature of the original characters and the spatial arrangement of the text on its support and, finally, the content of the inscription, when this can be ascertained. Besides punctuation, information about difficulties or ambiguities of reading must also be incorporated in the body of the text.

Hence it was necessary to build up a system of notation that would make it possible to record all such information accurately and legibly. By extending this system, it was also possible to take account of the grammatical value and, in some cases, the meaning of each word, and also the division of the words into prefix, suffix and root.

By storing these descriptions on a support which could be used by a computer, it became feasible to build up a concordance automatically, i.e. a dictionary in which all the occurrences of every root or infix in the texts contained in the repertory are given. In this way, these texts became available in a form suited to any other kind of automated processing: grammatical recurrences or compilation of a dictionary of sentence patterns, for example.

International agreement on the principles of recording Meroitic by computer

Before the Meroitic Studies Group in Paris moved on to an operational phase in the recording of Meroitic texts by computer methods, they took the precaution of consulting the main European centres: Liège, Gallarate, Milan, Pisa, Nancy, Marseilles, Darmstadt.

Papers were read by A. Heyler and J. Leclant at meetings in Marseilles (April 1969) and Darmstadt (July 1969)[1], and were followed by discussions.

It was in Khartoum in December 1970, at the Second International Conference on Language and Literature in the Sudan, 7–12 December 1970, that the first tangible results were announced—110 texts, each with an index, had been recorded, both in an elaborate form (with complete quotations of the stichs referred to) and in a simplified form which was easier to use. Computer processes necessitated the substitution of a transcription in block letters

1. See Bibliography, p. 117.

for the old system formerly proposed by Griffith. The latter required diacritical marks, which are always a source of error. Above all, to apply the signs which Griffith used, most of which were borrowed from Egyptology, to a language of a basically different type produced unsatisfactory results. The meeting expressed general approval of the scheme.

This was confirmed at the time of the Berlin meeting in September 1971 of the 'Internationale Tagung für meroitistiche Forschungen'. Several working sessions were devoted to studying the first achievements of the Meroitic Studies Group in Paris. A fruitful discussion revealed that we were in agreement with the great international specialists: Professor F. Hintze and Dr K. H. Priese (Berlin), Professor Abdalla (Khartoum), Professor B. G. Trigger (Montreal) and Professor N. B. Millet (Toronto). Agreement was reached on the System of Analytic Transcription of Meroitic Texts'.[1]

While recording was in progress, another discussion took place in June 1972 in Paris at a round table meeting organized under the auspices of the National Centre for Scientific Research by Jean Leclant. New records were presented and discussed.[2]

A second session of International Days for Meroitic Studies, following those held in September 1971, was held in Paris in July 1973, immediately before the big International Congress of Orientalists.

Present tasks

Since the *Meroitic Newsletter* has proved to be a particularly efficient tool, it has been decided to continue publishing it regularly every two years. In view of the provisional nature of several hypotheses and the very rapid development of research in our field of study, the very flexible form of *Meroitic Newsletter*[3] is no doubt the best one—definitely preferable to printed works or articles.

Recording is proceeding, series by series. The corresponding indexes and tables of concordance are issued as work proceeds.

The records are immediately distributed from Paris to the main centres of Meroitic studies: Khartoum, Berlin, Moscow, Montreal, Toronto, Calgary, Cambridge, Göttingen.

1. See Appendix 1, p. 129.
2. The following took part in the work: Professor Fr. Hintze, Dr K. H. Priese, Dr St Wenig, Professor Abdalla, Professor N. B. Millet, Professor M. J. Plumley, Dr W. Schaenkel, Professor W. Vycichl, Professor J. Desanges, Ms H. Gordon-Jacquet, Dr G. P. Zarri, Professor J. Leclant, Professor J. Vercoutter, Professor J. Yoyotte, Dr D. Meeks, Mr G. Roquet, Ms J. Duda, Mr Ph. Cibois, Ms C. Berger.
3. Obtainable from Jean Leclant, 77 Rue Georges Lardennois, 75019 Paris (France).

Any improvements in readings or any new interpretations for classifying the Meroitic words can be discussed immediately and added at once to the record.

We are planning to draw up: a list of Meroitic proper names (beginning of an onomastic compilation on which A. Heyler had been working); a list of Meroitic titles (at present under discussion at the École Pratique des Hautes Études, Ve Section); a list of Meroitic words for which a meaning has already been suggested, with the degree of probability that can be assigned to each.

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RECORDING OF MEROITIC TEXTS BY COMPUTER

HEYLER, A.; LECLANT, J.; MARETTI, E.; ZARRI, G. P. Problèmes Relatifs à l'Enregistrement et au Traitement des Documents Epigraphiques Rédigés dans une Langue Très Imparfaitement Connue, le Méroïtique. *Archéologie et calculateurs, Problèmes Sémiologiques et Mathématiques, Marseille 7–12 Avril 1969*, p. 123–43. Paris, CNRS, 1970.

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Symposium on the Deciphering of Meroitic script

A report on the discussions

This topic, which had been suggested by the International Scientific Committee for the Drafting of a General History of Africa, featured in the project for a General History of Africa and in the policy, which Unesco had been following for a number of years, of giving support to the teams which had begun work on deciphering the Meroitic script, and subsequently the Meroitic language, and, in a more general way, to research teams working on African languages.

The symposium discussion began with a presentation of his paper by Professor Leclant.

The Meroitic language, which was used by the cultures of Napata and Meroe, was still not understood, although the script had already been deciphered.

The historical account of the studies made on Meroitic showed how systematic research on the inscriptions, which had gradually been collected in a haphazard way in the course of excavations, had been started only in recent years. Archaeological research was likely to bring to light more inscriptions in the future; none had so far been discovered in the region between the second and fourth cataracts: the same was true of the travel routes in the direction of the Red Sea, the great valleys of the west, Kordofan and Darfur.

It was particularly important to persevere with archaeological work as it could reasonably be hoped that a bilingual inscription might one day be discovered.

Professor Leclant summarized the present results of the inquiry with regard to the inscriptions themselves and to the methods of work and recent findings.

The results were published in full in *Meroitic Newsletter*, thirteen issues of which had so far appeared, which made it possible rapidly to publicize findings when they were sometimes still only tentative. Regular meetings of specialists had taken place—at Khartoum in December 1970, in Berlin in September 1971, and in Paris in June 1972 and again in July 1973; the results of the last-mentioned meeting were set out in 'Information Note' No. 34 issued by the International Scientific Committee for the Drafting of a General History of Africa.[1]

Computer processes had also been used for analysing the Meroitic language for a number of years. As a result, there had been considerable and rapid progress in this field.

1. The Information Notes are obtainable from the International Scientific Committee for the Drafting of a General History of Africa, Unesco, 7 Place de Fontenoy, 75700 Paris (France).

By compiling lists of stichs, it had been possible to make a start on analysing the structure of the language. The index of words recorded now comprised 13,405 units and a means had been found of putting questions to the machine.

On this basis, an effort had been made, by using words of which the meaning was known or could be inferred, to compare the language with Egyptian or Nubian.

Professor Leclant ended his presentation with an account of the lines of research now being followed: Professor Hintze was working on structures; Professor Schaenkel was working on improving the data to be recorded by the computer; Professor Abdelgadir M. Abdalla was going ahead with an inquiry (see below) that had achieved results which corroborated the findings of the international team.

Future efforts would include making a comparison between Meroitic and other African languages and discovering its place among a group of African languages, in particular in relation to Nubian; other comparisons would be made with the languages spoken in areas bordering on the Ethiopian region. Lastly, it would be desirable to compare Meroitic with African languages as a whole.

General discussion

Professor Abdalla confirmed that he endorsed the system adopted for transcribing Meroitic and the method which had been devised for recording the texts. He drew attention to the gaps in our knowledge: almost complete ignorance of the system of pronouns, of the use of demonstrative pronouns, of the nature of prefixes and suffixes. It was essential to know with what other languages Meroitic was linked.

Professor Abdalla was in favour of carrying out a kind of dissection of the language, so as to study its components. He drew attention to the mobility of the elements forming personal names in which these elements had social implications: the same mobile elements recurred in the names of several members of a given family; the names of certain children comprised elements taken from the names of their mother and father; certain names were titles; others contained place-names.

Professor Shinnie expressed his satisfaction at the results which had been achieved; the work should go on and the necessary resources for it should be made available. There were three possible methods of approach: the discovery of a bilingual text; the internal analysis of the structure of the language; and comparison with other African languages.

Direct comparison between the two principal non-Arabic languages of Northern Sudan and of the M Group had proved fruitless: Meroitic might prove to be a help in making this comparison.

Professor Kakosy, who was present as an observer, laid stress on the necessity of studying documentary sources. He stated that there were in Budapest fragments of offering tables which came from a site close to Abu Simbel; he proposed to include these fragments forthwith in the 'Repertory of Meroitic Epigraphy'.

Professor Cheikh Anta Diop suggested that, pending the possible future discovery of a bilingual text, use should be made of the computer-based methods which had made possible the partial deciphering of the Maya hieroglyphs by the Leningrad team headed by Professor Knorossov. Most scripts had been deciphered with the help of bilingual or multilingual texts. The correct procedure in the case of

Meroitic would be to combine multilingualism and the potentialities of the computer in the following manner:

Purely as a methodological procedure, a relationship should be postulated between Meroitic and Negro-African languages, thus creating a multilingual situation.

As, at the present time, 22,000 Meroitic words could be read with some degree of certainty, a 500-word basic vocabulary should be drawn up on punched cards for each of 100 African languages carefully selected by a suitable group of linguists. The words selected might be those indicating, for example, the parts of the body, terms of kingship, religious terminology, terms relating to material culture, etc.

The computer should be programmed to recognize, for example, three identical consonants, two identical consonants, etc.

On the basis of the results obtained, a comparison should be made of the structures of the languages thus juxtaposed. This method was more rational than the haphazard comparison of linguistic structures, because too little was as yet known about the grammar of Meroitic. The method was more efficient than awaiting the result of a non-comparative study of the internal structure of Meroitic. In this way it was likely that the uncertainties which persisted in the interpretation of certain Meroitic words would be dispelled more rapidly.

The cost of the operation was very reasonable. For example, in 1973, it cost in the region of 0.33 French francs to record one word on a card; the total cost of the operation for 500 words would be approximately 165 French francs.

Professor Leclant endorsed this investigatory and operational procedure as being likely to provide very valuable information. He thought that it would be useful not only to make a concordance of features actually present but also of features not present (the absence of certain structures or certain sequences).

Professor Abdalla considered that, before any comparisons were made, the Meroitic language should be understood in isolation. In any case, the comparisons would be between a dead language and living languages. Professor Obenga replied that several comparative methods could be used simultaneously; in particular, typological comparisions should be used.

Professor Diop reverted to the idea that African languages were relatively stable and included ancient forms which had been preserved. Ms Gordon-Jacquet described studies she had made of the monumental inscriptions of Tabo (Island of Argo in Sudan), and of the ostraca of Abdallah Nirki (near Abu Simbel).

Professor Leclant suggested that the ostraca inscriptions might be immediately readable by means of the computer on the basis of the 'Repertory of Meroitic Epigraphy'.

Replying to Mr Glélé's question concerning the extent to which the methods used for deciphering other languages could also serve to clear up the mystery surrounding the Meroitic language, Professor Leclant said that a very wide ranging study of this matter had been made at meetings held in Paris and London during the summer of 1973. The work both on the Mohenjodaro script and on Maya had not yet got beyond the stage of working hypotheses.

Professor Diop hoped, however, that the idea of using comparative methods side by side with the study of structures would not be abandoned. His proposal was

approved by Professor Sauneron, who took the opportunity of emphasizing the importance of the work which had already been done by the Meroitic Studies Group.

Subsequent discussion bore more especially on the languages of the Sudan; Professor Säve-Söderbergh emphasized that, in any case, it was important that they be studied, since quite apart from the comparison with Meroitic, a knowledge of these languages would assist in advancing African linguistics. He also emphasized that it was possible, even with quite small funds, to set up an efficient secretariat and to accelerate the collection of material, its processing by computer, and the redistribution of information.

Lastly, there was discussion of the content of the recommendation proposed by Professor Säve-Söderbergh. Professor Diop hoped that the excellent work done by the Meroitic Studies Group would be continued with full international collaboration, that a systematic compilation of the vocabulary would be made in the Sudan, and that an identical compilation would be carried out in other regions of Africa with the collaboration of Professor Obenga. Professor Sauneron accepted these proposals in their entirety. As it was uncertain what bearing this work would ultimately prove to have on the deciphering of Meroitic, he hoped that the study of African languages would be developed independently, for its own sake, even if it were partly incorporated in the overall project. It was likely to be very protracted and it was essential that a thoroughly sound method should be established from the outset, after strict critical appraisal. Professor Obenga endorsed this idea and suggested that an inventory should be made of the grammatical features of Meroitic which were currently known. Professor Leclant considered that this proposal could be put into effect immediately. Professor Habachi hoped that the need for an archaeological inquiry would not be neglected.

In response to a methodological proposal made by Professor Obenga, Mr Glélé stated that the methods to be adopted would be decided when the membership of the responsible international team was finalized. He explained that Unesco was supporting the studies being carried out in Khartoum with regard to Sudanese languages and was in a position to provide study grants in accordance with its normal procedures. Unesco was financing and directing a programme on African linguistics and had just adopted a ten-year plan for this purpose.

Recommendation

The meeting expresses its satisfaction for the work accomplished by the Meroitic Study Group in Paris in collaboration with scholars of many other countries, and wishes to express its opinion that the work is well grounded and promises good results.

The meeting has decided unanimously to suggest the following measures to further the project:

To speed up the computer processes by making available additional funds, and to circulate the information, in revised and improved form, to the main centres of Meroitic studies.

To produce lists of Meroitic personal names, and where possible, of place names and titles, to classify linguistic structures, and to pursue collaboration with specialists in African linguistics.

To establish and publish a complete corpus of all Meroitic texts with bibliography, photographs, facsimiles and transcriptions on the basis of the existing files ('Repertory of Meroitic Epigraphy').

To produce a complete critical Meroitic vocabulary.

since the results of the project so far obtained are scientifically sound and promise a successful development and since the greater expense of the project as a whole has already been met with funds from various sources, this meeting now considers it imperative to assure the continuation and completion of the project by providing funds for the following purposes: (a) costs of secretariat and personnel for the documentation and scientific publication of the material; (b) costs of making searches in collections and museums; (c) travel expenses of specialists; (d) costs of card punching and computer time. These costs can be estimated at U.S.$15,000 annually for three years.[1]

The next step should be comparative structural and lexicographical studies of African languages, in the first place the languages of the Sudan and the border regions of Ethiopia, some of which are now dying out. This would best be done by giving linguistic training to Sudanese students at the University of Khartoum, preferably those who have these languages as their mother tongue.

This training would also be of value for many other purposes. Such a project which would complement the valuable work already under way in the Sudan, would require to be negotiated with the University of Khartoum, and funds would be required for the necessary scholarships.

In addition a wider linguistic survey of all African languages with the purpose of collecting key words should be undertaken. The survey should be made in collaboration with the Meroitic Study Group and be directed by specialists chosen by Unesco in collaboration with the International Scientific Committee for the General History of Africa. The choice should be limited to about 500 words of selected categories from some 100 languages.

This collection when computerized would be a valuable tool not only for the deciphering of Meroitic language but for many other linguistic problems of modern Africa.

1. The project is being carried out by the Institute of African and Asian Studies in Khartoum and the Centre de Recherches Egyptologiques of the Sorbonne in Paris with financial assistance from Unesco.

Appendixes

1. System of analytical transcription of Meroitic texts

The lines of our analytical transcription are paired: the odd line gives the transliteration proper of the text while the even line provides a summary analysis of it.

The margin

The margin consists of the first 16 columns.
Columns 1 to 4 (on two lines), REM number.
Column 5 (on two lines), letter indicating, where appropriate, the various parts of the text.
Columns 6 to 8 (on two lines), stich number. When the same number is repeated on two or more pairs of lines, the stich continues on the following line, or else the passage has been analysed in several ways.
Column 9 (odd line), H: text or fragment of text in Meroitic hieroglyphics.
(even line), C: column text.
Column 10 (odd line), C: text inscribed in a cartouche.
D: dextrogyrous altar text.
(even line), D: text reading from left to right.
Column 11 (odd line), Figure 1.
(even line), Figure 2.
Column 12 (odd line), Figure indicating, if possible, the part of the text, generally funerary, to which the stich belongs (1 = invocation; 2 = nomination; 3 = description; 4 = benediction).
Column 13 (odd line), Letter indicating, where appropriate, the semantic content of the text:
A: presentation of a personage.
B: presentation of a maternal ascendant.
C: presentation of a paternal ascendant.
D: presentation of other first-degree relationship—children, brothers, sisters or wives.
E: presentation of related male personalities *(yetmde)*.
F: other stich of a markedly regressive structure.
G: titles and miscellaneous qualifications of the personage presented in A.
H: passage of as yet undetermined meaning and structure.
Figure 4 (cf. column 12, odd) will be followed in the same manner, by the letters A,

B, C, D, E, F, G, H, I, J, K or L in reference to the types of benediction formulae as catalogued by Griffith, *Karanog* (1911).

Column 15 (odd line), where appropriate, stich interpretation number, when the text lends itself to several interpretations.

Column 16 (on both lines), C: the stich continues in the following pair of lines.

Columns 12 to 15 (even line), example, type or group number according to F. Hintze, *Struktur* (1963). The figure of the example number units appears in column 14. The type or group number is, on the other hand, aligned on number 15, to the right. The example number of F. Hintze is reproduced, since his structure has been used, even if our reading differs from that adopted by that author.

The body of the text

In columns 17 to 80, we find the text proper with its transcription in the odd lines and its analysis in the even lines.

The text

We transliterate sign for sign. Each sign of the original text, whether alphabetical, consonantal or syllabic, is matched in the transcription by a single symbol. Our transcription thus remains purely graphic and independent of any phonetic interpretation of the text. The terminal keyboard is limited, which has obliged us to go against the habits of Meroitic scholars and we apologize to them for this.

ẖ is rendered by G, ḫ by X, š by Z, the syllabic signs ñ by J, te by V, tê (to) by U. F is the unknown-value sign found in REM 1044.

The symbols 𐦟 and 𐦠 essentially known from ostraca are rendered by ! and ? respectively. They are regarded as independent words and analysed as M (see conventional signs below).

A number represented by a series of vertical strokes is rendered by a sequence of 1's (ones), and a number represented by a series of dots is rendered by a sequence of 0's (zeros). The numbers derived, on the other hand, from Egyptian demotic have the form 5, 50, 500, etc. The fraction ½ is rendered by %.

The two or three dots one above the other acting as 'word' separators are rendered by commas.

When a Pharaonic hieroglyphic sign appears in a text written in Meroitic hieroghyphs, it is preceded by the sign &. A visible but unrecognizable sign is rendered by a dot. A doubtful reading sign is always preceded by an asterisk; it is the equivalent of the dot placed under a letter, as used by papyrologists.

(G/W), means 'I hesitate between G and W'.

(G = W), means 'the scribe writes G instead of W'.

(()), indicates a gap of unspecified length. Dots or letters inserted may specify the length or the resored content of this gap.

((.)) (()), placed at the beginning or end of a word indicates that an undetermined number of signs is lacking at the beginning or end of that word. This is an artificial

but necessary notation, for computer analysis removes all the brackets used in the transcription. When the word has been incorporated in the lexicographic index, the dot, which is all that remains at the beginning or end of the word, will provide a means of recognizing that it is not a complete but a partly deficient term.

((((G)))), means 'I restore a G not written on the stone'.

((())), is equivalent to chevrons.

K'G', points out that the letter K appearing in the text stems from the older or more usual G.

V'TE' or V'SLE', indicates that, for analytical purposes, this syllabic V must be dissociated into two or three components, as the case may be.

Analysis of the text

The lines, columns and cartouches of the original text are numbered on even lines. The analysis letters are placed under the initial letter of the word or sequence transcribed. The sign, =, is placed under the first letter following an apparently proclitic term, and that the sign, —, under the first letter of an enclitic term. Except in texts of very familiar structure, these albeit necessary segmentations are arbitrary. We have nevertheless made them as consistent and uniform as possible.

In addition to indicating the beginnings of words or sequences treated as such, the letters below indicate their meaning and sometimes their grammatical value:

A = adjective in an epithetic position, e.g. LX, 'great'.
C = name of thing, e.g. AU, 'water'.
D = name of divinity, e.g. AMNI, 'Amon'.
E = name of human being, e.g. ABR, 'man'.
G = grammatical term, apparently non-enclitic.
I = abstract noun, e.g. VWISTI, 'proscynema'.
L = place name, e.g. ATIYE, 'Sedeinga'.
M = measure sign (under a ! or a ? in odd lines).
N = name not definable by A, C, D, E, G, I, etc.
P = proper name of person.
R = name of royal personage, king, queen or prince.
T = title, which is sometimes an adjective used as such.
V = verb, that is, a generally enclitic, proclitic or end-of-clause term.
W = term of A, E, N nature situated at the end of a regressive stich and preceded by its complements.
X = term fitting none of the foregoing categories, or whose precise nature cannot be determined.
$ = number.

This system of transcribing and analysing Meroitic texts was worked out on the basis of discussions held in Darmstadt, Liège, Milan, Nancy, Paris and Strasbourg with teachers and colleagues whom we cannot thank individually in this publication but to whom we are most grateful.

Alphabet		Transcription	
Hieroglyphic	Cursive	Traditional	Computer
		a	A
		e	E
		ê = o	O
		i	I
		y	Y
		w	W
		b	B
		d	D
		ḫ	G
		h	X
		k	K
		l	L
		m	M
		n	N
		p	P
		q	Q
		r	R
		š	Z
		t	T
		ñ (= n + e)	J (= N + E)
		s (= š + e)	S (= Z + E)
		te	V (= T + E)
		tê = to	U (= T + O)
		·or·	„or„

2. List of participants in the symposium

Professor Abdelgadir M. Abdalla (Sudan), Lecturer, Department of History, University of Khartoum.

Professor A. Abu Bakr (Egypt), Professor, Cairo University, Street 16, House 40, Maadi, Cairo.

Ms N. Blanc (France), Ecole Pratique des Hautes Etudes, 50 Boulevard Arago, Paris 75013.

Professor F. Debono (Malta), Unesco Expert, Dcoumentation Centre on Ancient Egypt, 18 Avenue Baron Empain, Héliopolis, Cairo.

Professor J. Devisse (France), Université Paris VIII, 14 Avenue de la Porte de Vincennes, 75012 Paris.

Professor Cheikh Anta Diop (Senegal), Directeur du Laboratoire de Radiocarbone, Université de Dakar, IFAN, Boite Postale 206, Dakar.

Professor G. Ghallab (Egypt), Institute of African Research and Studies, Cairo University.

Professor L. Habachi (Egypt), Oriental Institute, University of Chicago, Luxor.

Professor R. Holthoer (Finland), Assistant Lecturer in Egyptology, University of Helsinki, Section of Egyptology, Helsinki.

Professor S. Husain (Egypt), c/o Egyptian Organization of Antiquities, 4 Ramses Street, Cairo.

Ms J. Gordon-Jaquet (United States of America), c/o Institut Français d'Archéologie Orientale, 37 Rue Mounira, Cairo.

Professor W. Kaiser (Federal Republic of Germany), Director, German Institute of Archaeology, 22 Gezira el Wusta, Cairo.

Professor J. Leclant (France), Professeur à l'Université Paris-Sorbonne, Directeur d'Etudes à l'Ecole Pratique des Hautes Etudes, 77 Rue Georges Lardennois, 75019 Paris.

Professor G. Mokhtar (Egypt), 22 Murad Street, Giza.

Professor R. El Nadury (Egypt), Dean, Faculty of Arts, University of Alexandria, Alexandria.

Professor T. Obenga (Congo), Ministry of Foreign Affairs, Brazzaville.

Professor S. Sauneron (France), Directeur de l'Institut Français d'Archéologie Orientale, 37 Rue Mounira, Cairo.

Professor T. Säve-Söderbergh (Sweden), Professor of Egyptology, University of Uppsala, Gustavianum, 75220 Uppsala.

Professor P. L. Shinnie (Canada), University of Calgary, Department of Archaeology, Calgary, Alberta.
Professor J. Vercoutter (France), 25 Rue de Trévise, 75009 Paris.

Observers

Professor V. L. Grottanelli (Italy), Director, Institute of Ethnology, Faculty of Letters, University of Rome, 00185 Rome.
Professor S. Hable Selassie (Ethiopia), Department of History, Haile Selassie I University, P.O. Box 1176, Addis Ababa.
Professor Fawzia Helmy Hussein (Egypt), National Research Centre, Department of Physical Anthropology, Cairo.
Professor L. Kakosy (Hungary), Department of Ancient Oriental History, University of Budapest, 1052 Budapest V, Pesti Barnabàas U 1.
Papa Amet Diop (Senegal), Journalist on the newspaper *Le Soleil*, Dakar.

Unesco representatives

Mr Maurice Glélé, Programme Specialist, Division of Cultural Studies.
Ms Monique Melcer, Division of Cultural Studies.

3. Working paper for the symposium

In accordance with the recommendations of the International Scientific Committee for the Drafting of a General History of Africa, the symposium will be concerned both with 'the peopling of ancient Egypt' and 'the deciphering of the Meroitic script'.

This document constitutes an annotated agenda, since the working paper proper will comprise the following three documents prepared at the request of Unesco by three specialists: (a) 'The Peopling of Ancient Egypt', by Professor J. Vercoutter; (b) 'The Peopling of the Nile Valley South of the Twenty-third Parallel', by Ms N. Blanc; (c) 'The Deciphering of the Meroitic Script', by Professor J. Leclant.

On the basis of these three papers, experts participating in the symposium will prepare brief written communications in order to facilitate the discussions.

The peopling of ancient Egypt

Documents (a) and (b) mentioned above form a framework which, without being rigid, may serve as a basis for discussion and facilitate a broad exchange of views, making it possible on the one hand to draft certain chapters of Volumes I and II of *The General History of Africa*, and on the other hand to draw up a programme of medium- and long-term research.

State of current knowledge

The experts are invited to put forward their views on, and amendments to, the papers submitted as a basis for general discussion. At the conclusion of their deliberations, they should, as scientifically as possible, take stock of current (1973) knowledge concerning the peopling of Egypt and its historical relations with the rest of Africa.

Theories advanced

Here again, the two papers will provide a framework within which the experts invited will be able to set out clearly, with all relevant argumentation, their theories. One of the chief aims of this symposium is to provide an opportunity for a constructive comparison of all the theories advanced concerning not only the peoples of ancient Egypt in Egypt itself, but also their relations with the rest of Africa. This task should

be facilitated by the fact that the symposium will bring together specialists in archaeology, anthropology, linguistics and other fields which can help to throw light on the problem of the peopling of ancient Egypt.

The above-mentioned International Scientific Committee sets great store by this symposium, the holding of which it strongly recommended, not only with a view to the drafting of certain chapters of Volumes I and II of *The General History of Africa*, but also with a view to drawing up a programme of future research.

Lines of research

Papers (a) and (b) suggest certain possible lines of research. It will, however, be for the experts attending the symposium to examine those proposals and, in the light of the conclusions reached during the discussions, to identify the topics for a medium- and long-term research programme. The aim is to pursue the dialogue begun at Cairo, and to throw further light both on ancient Egypt itself and on its relations with the outside world, and with Africa in particular.

The deciphering of the Meroitic script

Since it is no longer necessary to demonstrate the need for or the possibility of deciphering the Meroitic script, the main task of the experts will be to examine the different methods devised, and ways and means of carrying out this undertaking. More specifically, they should make suggestions to those bodies likely to provide financial assistance concerning: (a) the teams which, at the present time, are best prepared, intellectually and technically, to carry out the project; (b) the length of time required; and (c) estimated cost of financing the project.