SIDE LIGHTS UPON PREHISTORIC MAN AND HIS CIVILIZATION IN NORTH EASTERN AFRICA

FAROUK A. GAWAD M. SHEWIKA (*)

Key Words: Prehistory, Man, NE Africa (**)

Abstract in Arabic

(بعض الأضواء على انسان ما قبل التاريخ وحضارته في شمال شرق افريقيا) فاروق عبد الجواد م. شويقة

الكلمات الدالة: ما قبل التاريخ ، الانسان ، ش.ش. أفريقيا

تقاليم:

كتبت هذه الدراسة على شرف السيد الاستاذ الدكتور محمد السيد غلاب بمناسبة بلوغ سيادته سن الستين (يونيو ١٩٧٩) واعتزاله العمل الاداري الجامعي كعميد لمعهد البحوث والدراسات الافريقية جامعة القاهرة (اكتوبر ١٩٧٩) ، بعد أن ساهم في وضع خطة أحياء المعهد (١٩٧٠) وعمل على تنفيذها كعميدا له (١٩٧١ – ١٩٧٥) ، ثم واصل الكفاح (١٩٧١/١٩٧٨) ايضا أثناء عمادته الاخيرة .

والدراسة المعروضة تدخل في مجال اهتمام المحتبى به ، موضوعاً واقليما ، اذ أن لسيادته الكثير من الدراسات في عصر ما قبل التاريخ في هذا الاقليم وما حوله ، هذا ويسجل المؤلف ، عرفانه الدائم لسيادته ، لا قدمه لتلاميذه وزملائه من الجغرافيين والانثروبولوجيين . أحسس الله اليه ، وأطال بقاءه بصحة وهناء .

مستخلص للدراسة

تعتبر منطقة شمال شرق افريتيا احدى المناطق الأربع الرئيسية في افريقيا التى عمرها انسان ما قبل التاريخ بحضارته ، ولقد شهدت منذ القرن الماضى الكثير من الحفائر والكشوف والبحوث ، ومازالت تشهد

^(*) Assistant Professor of Anthropology and acting head of the Department, Institute of African Research and Studies, University of Cairo.

⁽x) The number of the subject of this paper is, according to: L.C.C. Class G 3rd ed. GN784.7

D.D.C. 19th. ed. 573.361.

B.C. LA: VA: VAS.

وتكثيف عما في داخلها من كنوز (كشوف: برستد ، ساندفورد وآركل ، بوتزر ، . . النخ) ، ولقد أسهمت بالكثير في كشف النقباب عن أسرار وغوامض فترة هامة من تاريخ الانسان البيولوجي والثقافي .

وتتركز مشكلات البحث الثقافي حاليا في شمال افريقيا لفترة ماقبل التاريخ ، في ثلاث نقاط: الاولى أصل نمط الالات الحجرية الاولى وعظم انتشارها ، والثانية اتجاهات انتشارها ، والثالثة تشابهها مع الالات الخاصة بالانسان الحديث وآلابه ، وعند ماكبيرني .McBurney, C.B.M في التشار اقتصاد انتاج الفذاء (بالزراعة والرعى) بدلا من الصيد ، يحدد نهاية العصر الحجرى وبداية عصر استعمال المعدن بصفة عامة .

ولقد بدا الاهتمام بدراسة آثار ما قبل التاريخ في مصر عندما وجه هيوم .Hume, W.F. الانظار اليها ، وبناء على اهتمام كينث ستيوارت على Sandford, K. S. اخذ ساندفورد .Stwart, K يدرس التغيرات التي حدثت وحولت المنطقة من اقليم ممطر الى آخر جاف وصحراء ، ففي خلال اوائل البلايستوسين والفترات الدفيئة من البلايستوسين الاوسط كائت مناطق جنوب وغرب اوربا ذات مناخ مدارى ومرتبطة باراضي الشرق الاوسط بمعابر ارضية ، بحيث كانت الانواع الحيوية الاسيوية كانت سائدة في اوربا اكثر من الانواع الافريقية .

وخلال العصور المطيرة كانت تسقط على الصحراء الافريقية امطارا غزيرة ، حيث كانت بحيرة تشاد الصغيرة الان ؛ بحيرة عظيمة الاتساع والعمق ، بحيث كانت تصل شرقا الى خانق سبلوقة شمال الخرطوم ، وكانت هذه المسطحات المائية التي كانت واسعة الانتشار تحدد حركة الانسان والحيوان في مسالك معينة هي المرتفعات ، ولكن بعد عصر البليستوسين اخذت البحيرات والمستنقعات في الجفاف مما جعل شرق افريقيا تستقبل اكثر من حركة انسانية قادمة من الشمال ،

ولقد كشفت اودية الصحراء الشرقية في مصر على انها كانت تحمل المصدر الاكبر من المياه التي كانت تصل الصحراء خلال البليستوسين ، اتضح ذلك خاصة من دراسة الطمى السبيلى في كوم امبو والنوبة . ويذكر آرامبوج . Aramboug, G آنه يوجد في شمال افريقيا نوعين مختلفين من التكوينات ، الاولى اسماه « تكوينات الاطلس » والاخرى « منطقة الصحراء » ، ويبدو أن أفضل تلخيص للظروف الجفرافية لوادى النيل خلال البليستوسين والحضارات الحجرية المصاحبة لها هو ما قام به بوتزر خلال البليستوسين والحضارات الحجرية المصاحبة لها هو ما قام به بوتزر ارتفاع وانخفاض البحر المتوسط ، وقد امكن الربط بين اكثر من دور ومدرج (حزين - 1981) .

ولقد كان لمصر دور ملموس في الكشوف الانثروبولوجية للانسان الماقديم ، وانسان ما قبل التاريخ من النوع العاقل ، وايضا قدمت مصر

جفريات يقال انها لبعض من اسلاف الانسان القديم (من الفيوم) ، كما عثر أيضا على حفرية أخرى من عصر الميوسين في واحة المفارة في الصحراء الفربية المصرية ، وبذلك : يمكن أن يكون لشسمال أفريقيا ذات الاهمية الكبيرة أنتى تمثلها شرق أفريقيا ، وذلك بفضل الكشوف التي ترجع ألى البلايستوسين الاسفل في كل من الاقليمين .

ومن هذه الدراسات ومن دراسة احوال سهول وهضاب الصحراء الفربية في مصر ، التي كانت صحراء منذ عصور جيولوجية طويلة ، امكن دراسة الاحوال الجفرافية والايكولوجية القديمة خلال عصر ما قبل التاريخ ، ومن الدراسات القيمة ، تلك التي قام بها حزين (١٩٤١) وربط فيها بين الفترات المطيرة وبين الحضارات الجرية والتاريخ الزماني .

ولقد دلت القياسات واللاحظات الانثروبومترية والانثروبوسكوبية (١٩٠٥ Biassutti, R. بياسوتى ١٩٠٣ Kollmann, J.) على وجود بعض صفات الاقزام وصفات الكيبوانيين (البوشمن والهوتنتوت) في الجينبول المصرى ، ولقد لاحظ ذلك كاتب هذا المقال بنفسه ايضا (١٩٧٨) في الواحات البحرية في الصحراء الغربية المصرية (راجع مقال: المجموعة الكيبوانية مجلة الدراسات الافريقية ، ع ٣ ، ١٩٧٧)

ولقد كانت حضارة الفيوم (.٥٠٠) ق.م.) اول حضارة صنعت الفخار ، كما عرفت زراعة الشعير والحنطة emmer في ههذه الفترة المبكرة (.٥٠٠ ق.م) ، كما انتشرت الثقافة (الحضارة _ عدة مظاهر المبكرة (رومكان معينين راجع للباحث كتاب مقدمة في الانتروبولوجيا الطبيعية والسلالات البشرية القاهرة ، دار النهضةالعربية ، ١٩٨٢، ص٢١ المجدلينية السبيلية (عصر البليستوسين المبكر والاوسط) في مصر العليا وفي المبلطقة الممتدة من وادى النيل غربا الى الواحات الخارجة . هذا وكان لنهر النيل دور واضح ، غير مساعدته المباشرة في قيام الزراعة ، اذ عمل منذ وقت مبكر على ربط المراكز الحضرية والحضارية المصرية على طول جانبيه ، بصورة لم تتكرر في الشرق الاوسط (شارد ١٩٧٥) ولا في منذ حوالي ه آلاف سنة قبل الميلاد ، وكانت هذه بداية انتشار الحضارة المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارج البيئة المجلية المضيقة ، الى آفاق بعيدة (قال اليوت سميث المصرية خارب البيئة المجلية المضرية مصر ؟) .

ولقد عثر على حضارات كثيرة (آلات حجرية واوانى فخارية) فى عدة مواضع فى الدلتا وغربها (مرمدة) وعند بدايتها (حلوان والمعادى) يدور تاريخها مع حضارة الفيوم حول ٥٠٠٠ق، ، وهى حضارة تسبق وتمهد لحضارات تاريخية لاحقة ، عثر عليها فى البدارى (حوالى ١ الاف ق.م،) ، وجرزة (٥٠٠٠ بـ ٣٤٠٠ ق.م) وغيرها ، وكلها مهدت لقيام عصر الاسرات والملكة القديمة المصرية .

ومن الكشوف ذات القيمة ، ما عثرت عليه كيتون طومسهون Caton-Thomson, G. (1971 ما 1970) في الواحات الخارجة ، بعد ان كانت قد تابعت مع جاردنار (1974 ، 1974) كشوفه في شمال الفيوم عن حضارات عصر ما قبل التاريخ مبعوثين من الجمعية الملكية الإنثروبولوجية في اندن ، وقد ساهم بعد ذلك المصريين بجهودهم في هذا المجال (العمرى ، عامر ، حزين ، رزقانه ، . . النخ) ومازالوا ، وههم الذين وضعوا الكثير من النظريات التي القت الضوء على كثير من المشكلات كالعلاقة بين مدرجات وادى النيل واطوار تذبذب البحر المتوسط ، وعلاقة حضارات ما قبل التاريخ بالحضارات المجاورة وبالحضارات اللاحقة لها في مصر وغير ذلك .

هذا ولقد ارتبطت حضارة السودان بالحضارة المصرية منذ فجرهما، خلال عصر ما قبل التاريخ ، أكدت ذلك الكشوف التي قام بها فلندرز بترى وبرستد (١٩٠٥ - ١٩٠٧) وآركل (١٩٤٩) ، وأوضحت أن الحضارة التي أفرخت مروى ومملكتها (٧٠٠ ق.م - ٣٥٠) بالقرب من موقع الخرطوم الحالي ، كانت لها جذورا عميقة في التاريخ السوداني والافريقي ، وأنها كانت على صلة بحضارة مصر خاصية نمط الفيوم والثقافة السبيلية .

ولقد كانت لهذه الكشوف السودانية دور بارز في ايضاح ـ نتيجة لناكد انتماء العظام التي عثر عليها أركل بجوار الخط الحديدي الي السلالة الزنجية ـ أن أصل هذه السلالة ونشاتها قديمة وعريقة وفي القارة الافريقية بالتحديد ، هذا ويرجح ما كبيرني ، أن حضارة الخرطوم هذه ترجع الي ٣٢٥٣ ق ، م (+ ٢٩٥) ، وقد تعرضة جمجمة الخرطوم تلك ، لاجتهادات كثير من الباحثين ، فهي عند آركل لسلالة زنجية ، أما تشارلس كون .Coon, C.S (19٦٣) فيعتقد أنها من سلالة حامية مختلطة بأخرى زنجية ، وأنها ليست زنجية صرفة .

وأيا كانت الآراء بخصوص الدماء الزنجية في هذه الجمجمة ، فان الاتفاق تام بين الجميع على ان اصحابها هم الذين انشه أو الحضارة القديمة في السودان ، وأنهم كانوا على صلة قوية بمصر .

ومن الكشوف الاخرى الهامة ، ما عثر عليه بوند .Bond, W. R. الاخرى الهامة ، ما عثر عليه بوند . 19۲٤ (راجع) من جمجمة سنجا ، وهي لانسان من السلالة الكيبوانية (راجع

مقال: « المجموعة الكيبوانية للباحث . مجلة الدراسات الافريقية ، 1974 ») ، وهي التي ارجعها جرابهام .Grabham,G. W (1974) ، وهي التي ارجعها جرابهام . 1974) ، فترة ترجع الى ما بين ٥ ــ ١٠ آلاف سنة مضت .

من كل هذا نخلص الى نتيجتين هامتين هما: ان هذه الحضارات التى شهدها القسم الشمالى الشرقى من افريقيا ، وبتحديد اكثر فى وادى النيل الاوسط والادنى خلال عصر ما قبل التاريخ ، كانت هى الاساس والارهاصات الاولى للحضارة القديمة والحضارات المتتابعة بالقارة الافريقية ، وانها من اقدم — ان لم تكن أقدم — حضارات الانسان .

والنتيجة الثانية هي أن هذه الحضارة وامداداتها المنتشرة والمختلفة والمتعاقبة كانت تمثل نمطا حضاريا واحدا ، اى أن التقسيم الحضارى والثقافي لافريقيا الحديثة والمعاصرة وهو الذي يجعل من معظم وادى النيل اقليما حضاريا واحدا ، له اساس عميق وجذور متينة تمتد الى عصر ما قبل التاريخ ، وان هذه الحضارة تعد _ بالقطع _ أعرق وأطول حضارة انسان شهدتها القارة الافريقية ، بل ربما العالم .

Preface:

This paper is written on the honour of Prof. M.S. Ghallab, Proffessor of Geography and Anthropology and the Dean of the Institute of African Research and Studies, on his retired in Oct. 1979.

Prof. Ghallab, M.S. of the University of Cairo must be both a legend and a myth, with his scholers and fellows Geographiologists and Anthropologists, he has a legend for producing sound and useful translations into Arabic of many useful and good books published in Europe and America. For a large segment of the public he was the Demographian (with his fellow Prof. Hakim, M.S.) of Egypt, because of a high school texbook of great acceptance betwen both fields of Geography and Anthropology in Egypt and the Middle-East. Within academic circles he became a myth of kindness and helpfulness and as a promoter who could raise a high and concentrated studies by rapporting our Institute, and raise financial sapport for studies seeming remote in time and space.

This is Prof. Ghallab, who that I am one of his students and colleagues. He had an extremely courage opened gates of opportunity to many of this colleagues to have work in the Institute of African Research and Studies in University of Cairo. They in fact preserve, for him, a great respect and love, the writer of this paper give his word that he by all means has in his heart a great love to his Professor, whom he writes this paper to honour him in his sixty birthday (June 1979).

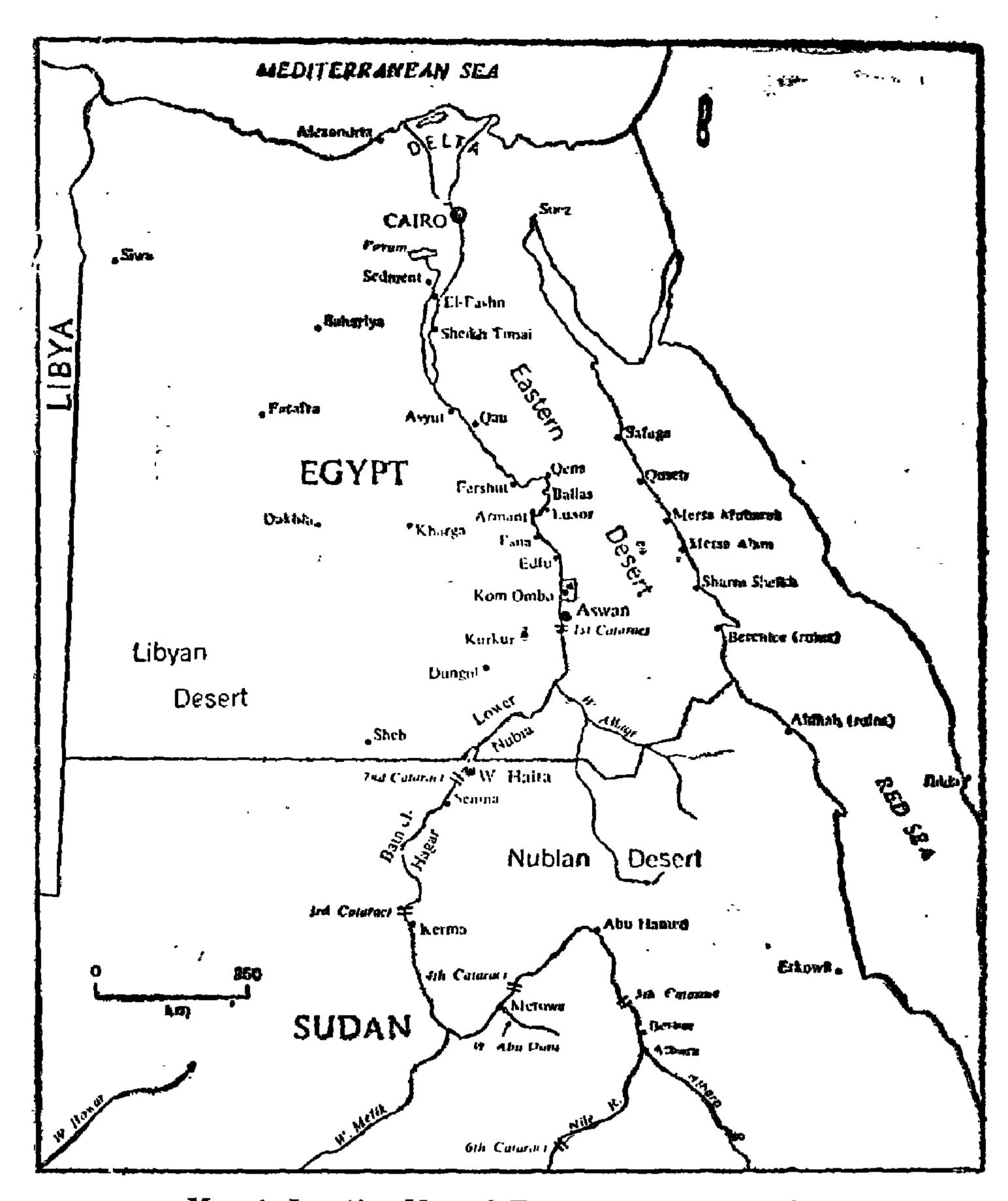
I hope that I was and will be hardly the best sincere man to him. There is no need for me so say much about those of Ghallab, M.E.'s writings in geography and anthropology. I first met Prof. Ghallab, M.S. in January 1966, a few days after he had arrived from Khartoum to occupy the chair of Geography and Anthropology in our Institute in Cairo but that is another story. On the other hand no one could complain about the precision of his exposition when herefound (with the kindness and helpfull aid of Prof. Hassan Ismail) the Institute of African Research and Studies. He is in fact vigorous, ambitious and possessive to write many books, papers and translations into arabic in Physical Geography and Anthropology. He is -in fact- as I have saw, is immersely kind, he undoubtedly helped create the intellectual clinate of his dayboth within and outside his subject-to an extent which I believe no other Egyptian Geographist of this century has done. His own opinions, right or wrong, were usually founded on facts which were open to all, as his heart. In fact he had left his marks on every one in our Institute.

I know, I speak for all who attended the Institute of African Research and Studies in Cairo in the period 1966-1974 and after that 1978-1979, when I express to Professor Ghallab, M.S. the deeply and most wormed thanks for the far-reaching researches he was able to encourage us to make in a rich and full days of life. God safe him and his family.

Introduction

North East Africa is one of the four main areas in africa, which the ancient man of prehistoric period and his civilization was take place, the other areas are: North West Africa, East Africa and South Africa. This paper is a study of the prehistoric man and his civilization in this area. The study will try to make light on the subject from four points: some geographical and ecological features; the evolution of Man in Egypt; human industries and civilization in early Egypt; and ancient Man and his civilization in Northern Sudan, (Map 1).

Since evolutionary theory shows how the hominid line derives from an arboreal ancestor, and the chimpanzee and the gorilla are both forest dwellers, it might be in the forested, or formerly forested regions of Africa that the fossil forms intermediate between ape and man will be mostly found. Very important fossil material is known from Fayum depression in Egypt, showing, the extent to which the forests had been able to spread during the mid-Tertiary in a region that is now desert



Map 1--Location Map of Egypt and Northern Sudan.

in North Africa (1).

The main fossil-bearing regions of the continent of Africa are the Western and Great Rift Valley areas of east Africa, the Maghreb, certain locations in South Africa and a few isolated localities in Egypt. Paleocological studies show that the climate of the Miocene was in general more uniform than that of the Quarternary. These humid equable conditions permitted the spread of extensive forests in Africa

⁽¹⁾ Isa, Glynn LI. et la (ed.): Human origins. Louis Leakey and the East Africa Evidence. London, Benjamin Inc. 1967, p. 4.

and Eurasia and this particularly forwared primate evolution, including that of certain semiaboreal forms of Ape.

K.S. Sandford and W.J. Arkell spent two seasons of field work (1926-27, 1929-30) to investicate and make study about 350 miles of the Nile Valley between Luxor in Upper Egypt south to Serah in Sudanese Nubia (40 miles south of Wadi-Halfa), K.S. Sandford in the third Volume of Prehistoric Survey of Egypt and Western Asia» (1), describes about 400 miles of the Nile Valley and some of its tributaries between Luxor and Beni Suef, with notes on the east bank between Beni Suef and Hilwan. New light was also brought to hear on the relationship of the Fayum to the Nile (2).

Butzer, K.W. spent since 1957 many seasons of research and field work in Nubia in Egypt and Sudan, he tries to complete Sandford's work, in fact he occupy the chair of Geography and anthropology at the University of Chicago. There were many books on the prehistory of Africa; some of it are: The Prehistory of East Africa by Sonia Cole, and «The Prehistory of Southern Africa by J. Desmond Clark» the two are of Pelicans, the last one is of Penguin: «The Stone Age of Northern Africa by C.B. McBurney; «Eary Hydraulic Civilization in Egypt» by karl W. Butzer.

MEETHOD, MATERIAL AND DISCUSSION.

The probleme raised by the present state of investigations in Northern Africa fall naturally into three main classes, the first concerned with the origin and spread of the earliest type of industrial activity expressed in stone-work, and more particularly by hand-axes, involves such questions as a date and place of origin, direction and nature of spread, and its duration, the second and third are concerned in a similar way with the industries associated respectively with Neanderthaloids and modern Homo sapiens. While the final and perhaps most complex problem is that of the origin and spread of foodproducing economies which herald the end of the Stone Age and the beginning of the general use of metal (3).

⁽¹⁾ Sandford, K.S.: Paleolithic Man the Nile Valley in Upper and Middle Egypt. Chicago, The Univ. of Chicago Press, 1934.

⁽²⁾ Ibid, p. 121.

⁽³⁾ McBurney, C.B.M.: The Stone Age of Northern Africa. London, Penguing Books, 1960, p. 61.

Some Geographical and Ecological Features:

The interest in the research fieldwork in prehistory of Egypt was raised by the work of Hume, W.F. and to the importance of Kenneth-Stuart Sandford results by fining precisely for that district the date of the change, widespread in Africa, from moist to a desert climate.

During the Early Pleistocene and the interglacials of the Middle-Pleistocene southern and Western Surope were tropical regions, connected by the Near Eastern land bridge to both the Oriental and the Ethiopian regions. Asiatic species were commoner in Europe at these times than African one, although both were present (1).

Africa and South-Western Asia seem long to have been joined by the Sinai Peninsul and so they provided a constricted gateway between Africa and Asia(2).

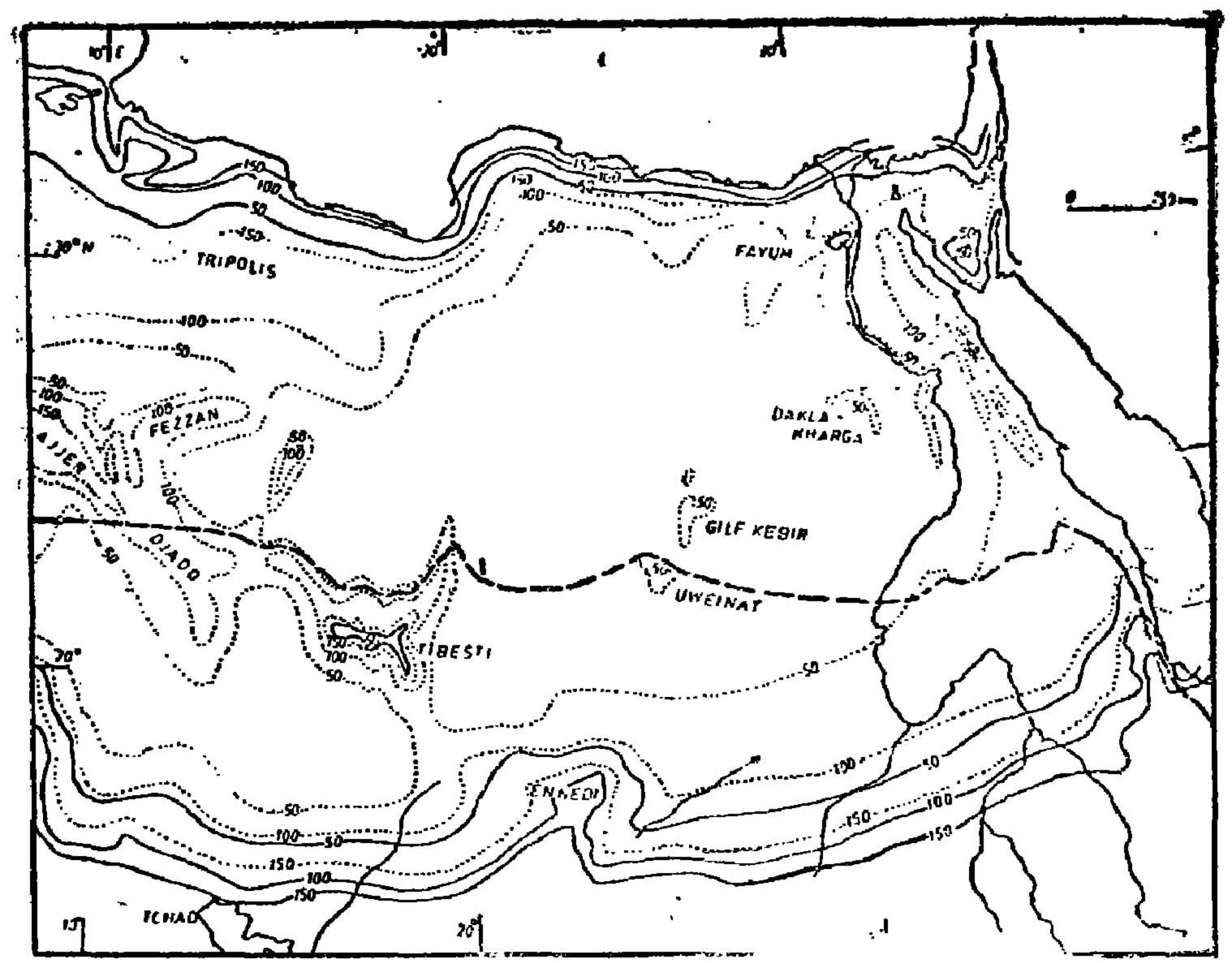
During pluvial periods similar floodings took place in Africa, in what is now the the Sudan and southern Sahara. Lake Tchad, now a shinking body of shallow water, was once a broad and deep lake. To its east extended, at least intermittently during the Pleistocene, an extensive area of swimps and sometimes possibly of lakes. This barrier extended from the Sabaluka Gorge, 50 miles north of Khartum, some 450 miles southward to about 10° North Latitude, (3) (Map 2).

These water barriers, and the existing great of East Africa, which were greatly enlarged during pluvials, must have restricted animal and human traffic in Africa, moving both north and south and east and west, to a few narrow highways, and made Black Africa nearly as inaccessible as western Europe. But after the Pleistocene the lakes and swamps shrank and the East African highlands were invaded at least twice by people from the north (Map 3).

There is every reason to suppose that the part of the Nile basin draining into the Nubian area (Map 4) received a considerable rainfall in Pontic and later Pliocene times. Judged by the Pliocene deposits, it was abnormally heavy. There is no sign within our area of any desert period before Pleistocene times, and the Plio-Pleistocene terraces indicate a liberal water supply from the south, east (especially), and west. The

Coon, C.S.: The Origin of Races. London, Jonathan Cape, 1963, p. 57.
 Birdsell, J.B.: Human Evolution; An Introduction to the New Physical Anthropology. 2nd. ed. Chicago, Ran dMcNally, 1975, p. 167.

⁽³⁾ Andrew, G.: «Geology of the Sudan»: In: Tothill, J.D.; Agriculture in the Sudan. Oxford, Oxford, Univ. Press, 1948, p. 48-128.



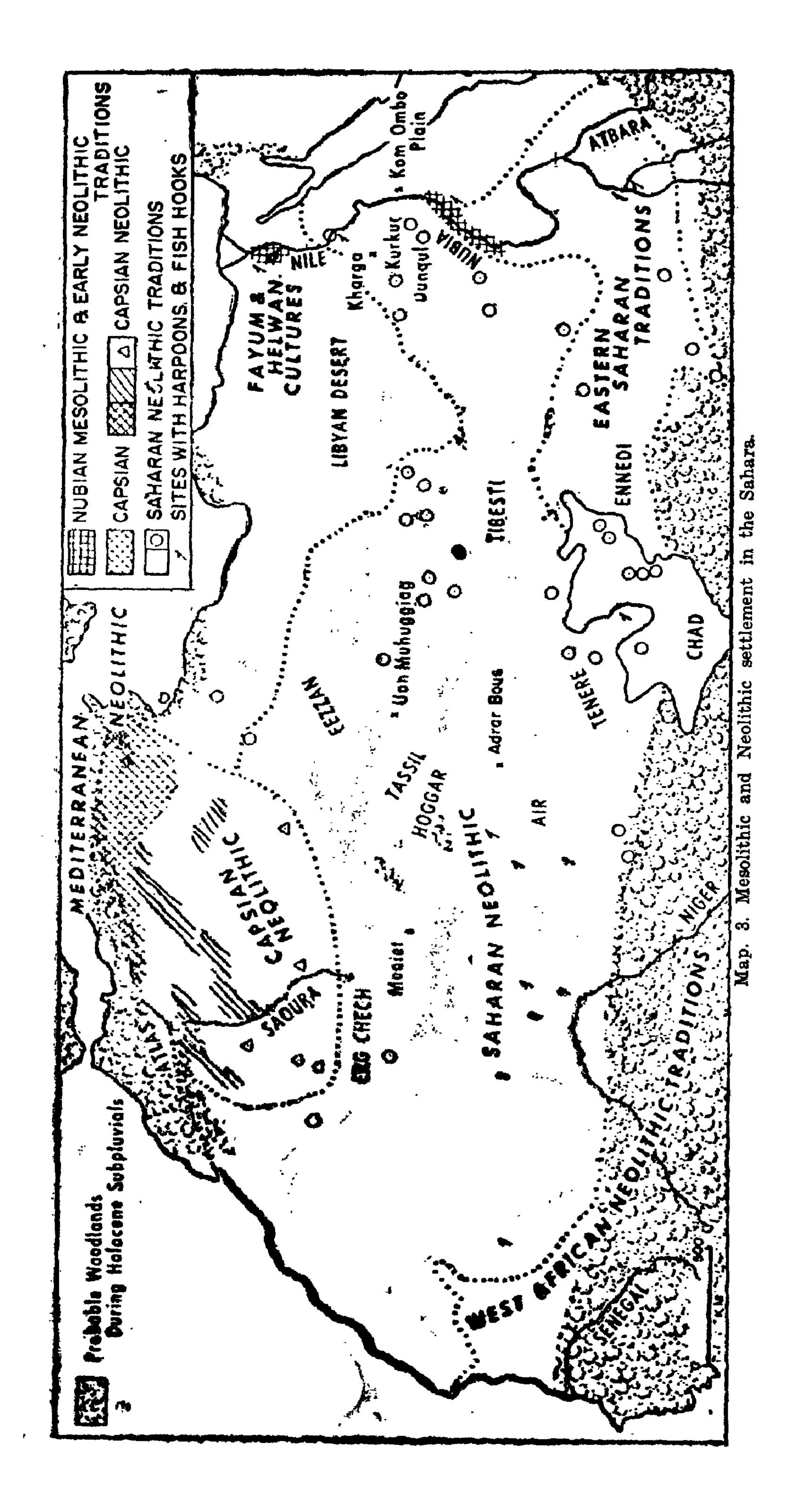
Map .2. Present-day and Neolithic isohytes in eastern Sahara (From Howell, F. et. al. African Ecology).

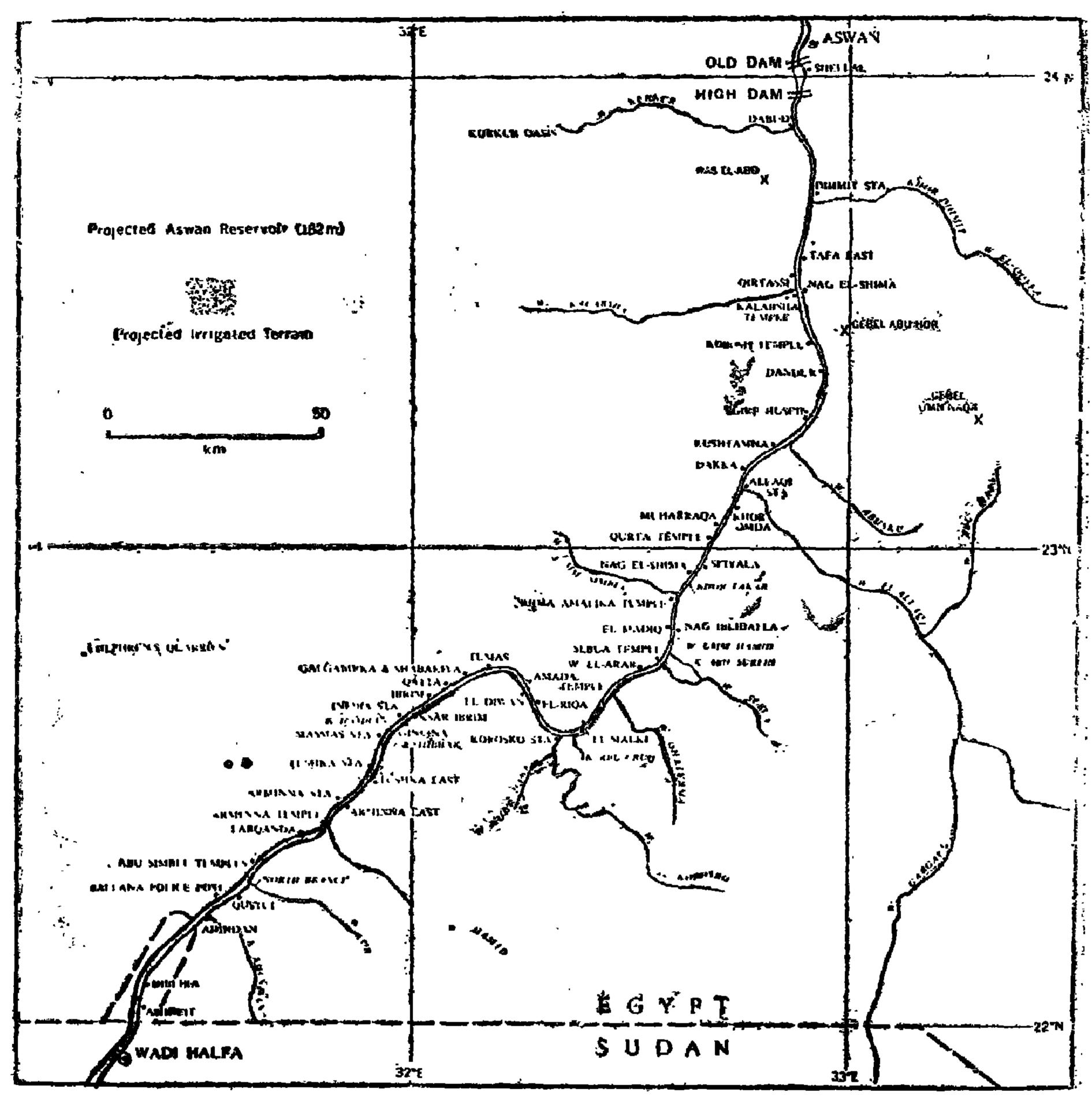
eastern hills throughout were the main source of surface water. (1) (Map 5, p. 29 in this paper).

In upper Egypt the features of silt accumulation are similar to those in Nubia, but the local rainfall survived in some small measure. The vast mass of silt in the Kom Ombo plain was left virtually intact, however, and the wadi valleys from the eastern hills have been established across it to the Nile. In view of the large areas of silt surviving in exposed places, it must be assumed that the rainfall had virtually ceased in Upper Egypt by Upper Sebilian times. (2)

C. Arambourg said that there were in North African two kinds of areas under very different conditions. The first, which he call it the «Atlas Zones», corresponds to the broad zone of Pyrenean-Alpine folds, which make up the largest part of Maghreb, extending from the north of Mauritania to the Tunisian edge of the Gulf of Syrte. The second, which named by him also as «The Nilotic-Saharian Zone», corresponds

⁽¹⁾ Sandford, K.S. and Arkell, W.J.: Paleolithic Man and the Nile Valley in Nubia and Upper Egypt, p. 85.
(2) Loc. cit.





Map. 4. Lower Nubia

to the flat region extending from the south end of the Atlas Mountains to the Red Sea and includes all of Libya, Cyrenaica, and the northern Nile Valley (1).

I shall confire myself to an account of the recent reports of K.W. Butzer, which seem to offer the best resumé of the geological story and prehistoric culture of the Nile Valley. The following table (No. 1) show a mately picture.

The complex problem of the Nile and wadi terraces in Egypt(2) is directly or indirectly associated with the Mediterranean chonology of sea level fluctuations. Hence the Pleistocene terraces of many smaller rivers draining to the sea may be of great stoatigraphic importance(3).

The relations of the Lower and Middle Paleolithic levels in Egypt to the Mediterranean beashes may be summarized as follows(4). The 300 foot Nile terrace = 100-90 meter or Sicilian beach. The 200-foot Nile terrace = 60-55 meter or Milazzian beach. The 150-foot Nile terrace falls 9 meters below, but may also be tentatively correlated with, the Milazzian. Before the building of the High-Dam at Aswan; these terraces had been traced from Wadi Halfa in the Northern Sudan to Cairo-

W.J. Arkell had accompanied K.S. Sandford in three seasons of extension of work from the first cataract to the Mediterranean. The presence of large vertebrates in the early Miocene fluvial beds of northern Egypt is directly linked to the presence of a major(5), allochthonous river(6).

⁽¹⁾ Arambourg, C.: «Continental vertebrate founs of the tertiary of north Africa». In Howell, F. Clark and Bourlière, F. (eds): African Ecology and Human Evolution. London, Metheuen & Co., 1964, p.55-64.

⁽²⁾ Butzer, K. W.: Contributions to the Pleistocene Geology of the Nile Valley. *Erdkunde*, Vol. 13, 1959, p. 46-67.

⁽³⁾ Butzer, K W.: Climatic-Geomorphologic interpretation of Pleistocene sediments in the Eura-frican subtropics». In: Howell, F. Clark and Bourlère, F. (eds.): African Ecology and Human Evolution. London Methien & Co., 1964, p. 1-27.

⁽⁴⁾ Sandford, K.S.: «Paleolithic Man and the Nile Valley in Upper and Middle Egypt». Chicago, Univ. of Chicago Oriental Inst. Publications, Vol. XVIII, 1934, p. 124.

⁽⁵⁾ Jolly, Clifford J. (ed.): Early Hominids of Africa. London, Duckworth, 1978, p. 21.

⁽⁶⁾ Said, R.: The Geology of Egypt. Amsterdam, Elsavier, 1962, (allochthonous. A term applied to the material forming rocks which have been transported to the site of deposition) (Whitten, D.G.A. and Brooks, J.R.V.; The Penguin Dictionary of Geology. London, Penguin Books, 1972, p. 22).

TABLE 1-Pre Neolthic equence in Egypt. (2)

	Wadis	Climate	Vegetation
5000 B.C.			
Helwan Culture	No wadi activity, renewed aggadation.	Dry, warmer	Deseirt
Epi Levallois III	No wadi activity, Nile deen cutting	Dry, cool	Desert
Epi Levallois II	Wadi activity, Nile aggradation	Damper, cooler	Dry steppe
Epi Levallois I	First silt aggradation by	Dry	emi desert
Upper Levallios	£Doon		
30.000 B.C.			
Levallois	Torrential aggradation	Damp, cooler	Dry teppe
•••	Little wadi activity,	Damper, warm	Thom avanna
	No wadi activity	Dry, warm	Desert
A. h.ulio	Renwed aggradation	Damp, cooler	Etesian steppe
LevaHois	Little wadi activity	Dry	emi desert
Acheul	Torrential aggradation	Damp, cooler	Etesian steppe
	No wadi activity	Damp, warm	Thoin or
•			grass savenna
Acheul	No wadi activity	D:y, warm	Desert
Eower Acheul	Torrential wadi and		Etesian stappe.
Abbevillian	Nile aggradation	Damy cooler	

The western plains and plateaus of Nubia and Upper Egypt probably remained in a semi-desert state for a very long time, and to the end of the geologically dated record there is only one known occurrence of an incorporated sand dune-in the silt on the west bank between Gebelein and Armant. It suggests, however, at least a semi-desert climate at the time of silt accumulation. On a hard limestons plateau the border between semi-desert and desert is a narrow one (1).

On the whole, then, it appears that run-off began to fail in Nubia at the close of Acheulean in Upper Egypt during Mousterian, times; that it failed entirely in Nubia by the close of the Sebilian aggradation, and in Upper Egypt but little later; and that sand accumulated locally near the river in small dunes in the north before it did so in the south. The sand was derived, however, from the western plains, and it is possible that from an early date their climate differed from that of the Nile(2).

The great work of S.A. Huzayyin (1941)(3) deals with the climatic and archeological evolution of the entire Sahara-Arabian belt and gives for the Sahara some sequences, we can introduced it here after transcribed it with several additions from a more recent version by himself (4), as the following sequences:-

- 1. Two sort pluvials dating both to about 666.000 years ago. (Pebble culture to Acheulian).
- 2. Along dry period (with short wet interruptions from 430.000 to 230.000 years ago (Acheulian).
- 3. A very long Saharian pluvial from 230.00 0to 70.000 years ago, with 2-3 submaxima (Acheulian, Levalloisium, Upper paleolithic).
- 4. Postpluvial, arid. with maximum in Upper Paleolithic (to Mesolithic).
- 5. Neolithic «Fairly wet phase» (5500 to 2500 B.C.).*)

⁽¹⁾ Sandford, K.S. and Arkell, W.J. Poleolithic Man and the Nile Valley in Nubia and Upper Egypt, P. 86.

⁽²⁾ Loc. cit.

⁽³⁾ Huzayyin, S.A.: The Place of Egypt in Prehistory; a correlated study of climates and cultures in the Old World. Mem. Inst., d'Egypte, Cairo, Vol. 43, 1941, p.

⁽⁴⁾ Huzayyin, S.A.: «Changes in Climate, Vegetation and Human Adjustment in the Sahara Arabian Belt with Special Reference To Africa». In: Thomas, W.L. (ed.): Man's Role in Changing the Face of the Earth, Chicago, Univ. of Chicago Press, 1956, p. 313.

^(*) This figures very similar to those of Butzer, K.W. (5000 - 2400 B.C.) (Butzer, K.W.: Late glacial and Postglacial Climatic Variation in the Near East. Erdkunde, Vol. 2, 1957, p. 21-35).

Wadi Qena is a broad and deep valley which joins the Nile from the north at Qena twon, about 40 miles north of Luxor. The history of the two valley is closely associated, and the former explains some of the problems of the latter. Like all the tributaries of the Nile (north of the Atbara), Wadi Qena is now a dry valley and a desert. The oldest beds visible within the walls of the valley-system are of Pleocene age, deposited in a gulf of the Mediterranean. This had been cut by reveresion during the elvation of the Egyptian plateaux in Miocene and (in the south) northy in Oligocene times, and it was then flooded to a height of at least 550 feet above present sea-level. A non-fossiliferous series of strata was deposited in it: breccia and conglomerate at the valley-sides interdigitating with limestones, which, towards the centre, give place to clays and marks and, rarely, to sandy beds of quartz derived from the south. Great thicknesses of travertine are locally present in the series.

Re-elevation carried the flooded valley-system back to fluviatile conditions in Plio-Pleistocen times, accompanied by the irruption of enormous quantities of detritus from the Red Sea Hills. Some interesting relics of this early invasion are to be found throughout the area.

In Pleistocene times an ordered succession of river-terraces was laid down in the Nile Valley and in all the major wadis, and by countless short tributaries rising in the Pliocene deposits which lined the sides of those valleys. A complicated series of local and non-local stages results, in which the meanders of the Nile (in particular) and their effects on the local stages may be traced. The gravels of each stage contain Paleolithic instruments, and on the surface of each may be found the working-floors of the next succeeding industry. The sequence is:

100 - foot terrace : Chellean

50 - foot terrace : Acheulean

30 - foot terrace: Early Mousterian

15 - foot terrace: Mousterian

Thereafter (in Upper Paleolithic times) desert conditions began to assert themselves, and the Nile alone survived, supplied from more favoured regions fasther south (1)

⁽¹⁾ Sandford, K.S.: «The Pliocene and Pleistocene Deposits of Wadi Qena and of the Nile Valley between Luxor and Assiut». London, (Read May 29th, 1929) Quart. Journ. Soc., Vol. XXXV, Pt. 4, 1924, p. 493-548.

The Evolution of Man in Egypt:.

What do we mean by term «Man»?. Can we define man in terms of the size of his brain? It may be usefull in the first forms of man, but among modern men the dimensions of ones brain do not correlate very well with genius. And it is in fact-dealing with the brain-not what one has but what one does with it, that counts.

In recent years students of prehistoric man have often defined man as a creature who manufactures tools in a constant, repeated pattern. This test has considerable usefulness but also serious limitations. Tools made of wood, bone, and similar materials do not survive well in most conditions (1); and there is evidence that chimpanzees, for example, can fashion useful objects for their needs. If we do take stone tools as a rough indicator, then mankind has existed certainly for one million years and quite probably for $2\frac{1}{2}$ million years. There are other aspects of «Man» which one most not overlook. For some of us and I am one of them «Man» is distinguished from all other creatures by the possession of the soil. (2)

Man is distinguished from other primates by his upright posture, bipedal locomotion; peculiarly prehenile forelimbs, his large brain, and the ability to make and use many kinds of tools. Man's humanity shows itself in the may complicated social and cultural patterns that are unique to his kind. Some of the stages whereby this transformation from a quadrupedal ancestor was effected can be adduced from a study of the fossil record as it is known from the discoveries in east Africa and Egypt. (Fig. 1).

As far as we know at present, tool-making began in Africa in the second half of the Lower Pleistocene, with split pebbles, choppers, and chopping tools. This simple technology spread as far as Southeast Asia and Indonesia. At this point the hominid would knew but a single way of making tools. The toolmakers of Africa and Palestine had added coarsely chipped, ball-like implements to their repertoire, and these new items were appearently not diffused to the East (2).

Until a few years ago two small and ancient fossil mandibles were believed to provide a common catarrhine link between the Old World

(3) Coon. C.S.: The Origin of Races. London, Jonathan Cape, 1968, p. 333.

⁽¹⁾ Starr, Chester G.: Early Man. New York, Oxford Univ. Press, 1973,

p. 19.

(2) Shewika, F. A. Gawad: The Humane Man (in Arabic). Bulletin of the Faculty of Arts, Univ. of Cairo, Vol. 34,35, Part 1-2, 1971, p. 1-81.

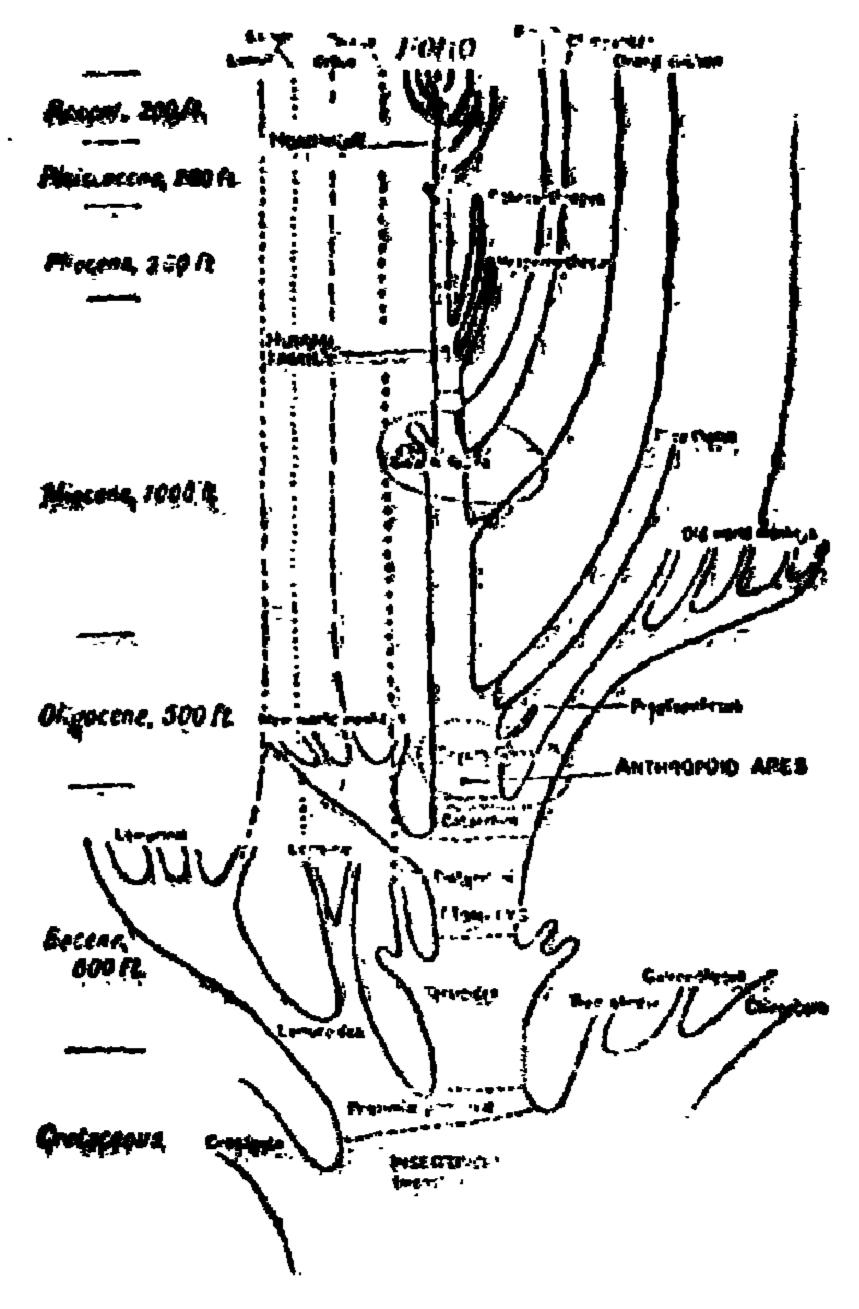


Fig. 1. Phylogenetic tree of the Primates (From Elliot - Smith, 1927) Note the suggestion of an ancestral relationship between tarsiers and similars and the departure from the usual anthropocentric representation of Man as the most advanced form, on the fare right of the tree.

monkeys and the Hominoids. One was «Amphipithecus», found in an Upper Eocene deposit in Burma, (2) the other was «Parapithecus» (3), from the Lower Oligocene beds of the Fayum in Egypt. Now both of these have been discredited.

Not only do we lack a comon ancestral catarrhine, but we have no fossil cercopithecidae older than the Lower Miocene, at which time genuine Old World monkeys appear in East Africa. A small frontal bone from the Lower Oligocene beds of the Fayum has recently been identified as that of a primate, probably a catarrhine (4), but this does not solve the problem because we do not

MATERIAL MENT TARREST

⁽²⁾ Colbert, E.H.: A New Primate from the Upper Eccene Pondaung Formation in Burma. : American Museum Novitates, New York, No. 951, 1937.

⁽³⁾ LeG. Clark, W.E.: New Paleontological Evidence Bearing on the Evolution of the Hominoidea. Quarterly Jour. of Geolog. Sciences, London, Vol. 105, Part 2, 1949, p. 38.

⁽⁴ Simons, E.L.: An Anthropoid Frontal Bone from the Fayum Oligocene of Egypt: the Oldest Skull Fragment of Higher Primate. American Museum Nanitates, New York, No. 1976, 1959.

know that kind of a caterrhine it was. In its general configuration it resembles an ape rather than a monkey, but that is inconclusive.

The earliest remains in Egypt are found in Fayum region, where a series of Oligocen deposits were laid down when the area was covered with swampy rain forest: A large number of primate remains have now been recovered from these deposits representing a number of genera including the early «monkeys» Apidium and Parapithecus, and the primitive «apes» Oligothecus, Aeolopithecus, Propliopithecus, and Aegyptopithecus. For many years the amount of fossil material from the Fayum region was small and fragmontary and there was much speculation concerning its phylogenetic status.

However, as a result of present excavations some of the above genera are now known from extensive material. Apidium and Parapithecus are remarkable among Old World anthropoids in having three premolars in both the upper and lower jaws, but the cranial remains of Apidium and the molar tooth morphology in both show them to be quite definitely Anthropoidea. Further the incipient bilophodontz (tendency for the anterior cusps to be joined transversely to form a bar, and the posterior cusps likewise) of the molars, so characteristic of cercopithecoidea identifias them with this group. (1) The upper canines are large but the lower ones small; the molar tooth morphology is essentially of apelike form. So far as can be judged from the postcranial material, Aegyptopithecus was probably an active runner and perhaps leoper in the canony of the forests which covered the Fayuum in Oligocene times (2).

The first elements of Miocene fauna of North Africa were discovered in Egypt, (3) in the Moghara Oesis 150 kilometers southwest Alexandria,

Lower Pleistocene archaeological sites are as old in North as in East Africa. Moreover, what may be the oldest Austrolopithecine yet found comes from the heart of the Sahara from Tchad, halfway between these two most ancint archient archeological regions. Thus, North, Africa has as good a claim to the title of Cradle of Mankind as Tanganika (4).

(4) Coon, C.S.: The Origin of Races, p. 590.

⁽¹⁾ Herrison, G.A. et al: Human biology; An introduction to Human evolution, variation, growth and ecology, 2nd. ed. Oxford, Oxford Univ. Press, 1977, p. 37.

⁽²⁾ Ibid, p. 38.
(3) Fourtau, R.: «Contribution à l'étude des Vertébrés miocenes de l'Egypte.
2nd. ed., Cairo, Geol. Surv. of Egypt. 1920.

When we discuss the origin of the Negroes in Africa, we can notice that they are a distinctive people, anatomicall yand phyniologically, and must have arisen in another part of Africa, probably north and west of the Congo Basin. There evidence is scarce and of late date(1).

The oldest skeleton that all writers agree was that of a Negro in the so-called Asselar Men, found in 1927 by M.V. Bernard and T. Monod, in a dry bed of a wide and permially flowing river near Tilemsi depression in the Sahara, 400Kilometers north of Timbuktu, (2) No implements were associated with this skeleton, with it, however, were found the remains of fresh-water molluses, fish, crocodiles and various gazelles and antelopes, all of which still exist, but not in the Sahara. It was that of an adult male at least five feet seven inches tall (170 cm.), whose long bones were slender, whose forearms were long in relation to his upper arms, and whose lower legs were long in relation to his thighs. His pelvis, vertebrae, and hand and foot bones were all Negoid-In Fact, from the neck down he was altogether a Negro.

Kollmann, J. (1903) cites a pygmy skull from Abydos, upper Egypt, probably 4.000 years old(3).

In 1905 Biassutti, R.,(*) first noticed Bushman-like traits some of the oldest ancient Egyptian skulls, and since then the theory has been proposed and rejected several times. The writer himself noticed on his fieldwork study in December 1978, in Baharia Oasis in western desers of Egypt, that there are many Bushmenoid traits among some people there (Fig. 2).

The characters NH(R), NB, NB/NH(R), PL, NL and BL clearly distinguish the Egyptian from all Negroid types; they seem to be very constant for the latter. At the same time G.M. Morant found(5) that for each one of those measurements the Upper Egyptian types are nearer to Negro values than are Lower Egyptian, and the Early-Pre-dynastic is very slightly nearer to the Negroes than is the Nagada type(6) (Fig. 3).

(6) Loc. cit.

⁽¹⁾ Ibid, p. 649.

⁽²⁾ Boule & Vallois: L'Homme Fossile d'Asselar, Sahara. Archives de l'Institut de Paléontologie Humaine, Paris, No. 9, 1932.

⁽³⁾ Gates, R. Ruggles: Human Ancestry, p. 207.

⁽⁴⁾ Biasutti, R.: Crania Aegyptica. Archivio per l'Antropologia et la Etnologia, Florence, Vol. 35, 1905, p. 322-362.

⁽⁵⁾ Morant, G.M.: A Study of Egyptian Crainology from Prehistoric to Roman Times. Biometrika, Vol.XVII, Nos. 1 and 2, June 1925, p. 8.

Sexing	Sex	· · · · · · · · · · · · · · · · · · ·		Ή
Stoesseger		.183.4 (27)	131.2 (27)	134.0 (26)
Derry	" O	183.5 (23)	131.9 (23)	134.5 (22)
Archaeological Report		182.2 (24)	131.6 (24)	133.6 (23)
Stoessiger		177.2 (15)	131.1 (15)	128.9 (15)
Derry	O+	178.3 (19)	130.1 (19)	129.4 (19)
Archaeologieal Report		179.7 (18)	130 6 (18)	130.3 (18)

Professor Derrys (D.) TABLE 3: Data relating to the Difference between Miss Stossigezs (S.) and Measurements of the 1924—1924 Badarie skulls (1) (*)

Character	Z	Maximum	Mean	Standard	Mole O's of	Presumed
		difference	difference	deviation	Egyptian E	probabte
		(D.—S.)	(D.—S.)	differences	series	upper of mean for
						35 skalles
IJ	53	-2.0	— .22±060	0.65±.043	5.72±.09	· (9 .
В	25	. —3.5	+ .02±.068	0.73 ±.0 4 8	4 .76±.08	. 54
3,	\$3	+2.5	+ .40±.067	$0.72 \pm .047$	4.05±.06	.46
H,	25	+3.0	$0.34 \pm .065$	0.70±.046	5.03 ±.08	. 57
<u>د</u>	53	+6.5	$+1.29 \pm .200$	$2.16 \pm .142$	$13.77 \pm .22$	1.57
SI	0	1.0	90.1	1	j	1
S2	∞	+&-2.0	+.13	ļ	ļ	
S3	∞	2.0	37	1	ļ	•
sv.	œ	-2.5	31	!	1	1
J -J	33	+2.5	—.03 ±.087	0.74 ±.061	4.57 ±.08	. 52
GB	45	-5.4	一.43土.145	$1.44 \pm .102$	4.67 ±.08	.53
LB	5 3	+&-1.0	—.15 ±.036	Ø.39±.026	3.97 ± .0₺	.45
G'H'	47	-2.5	—. 79±.064	$0.65 \pm .045$	$4.15\pm .07$.47
NH,L	47	-2.3	0.64±.064	$0.65 \pm .045$	2.92 ± 05	.33
ZB	47	-2.1	$+.07\pm.053$	$0.54 \pm .038$	I.77±03	. 23
O1 .R	4	2.9	76±.075	0.75±.053	1.67±.03	. 19
O'2,R	45	+3.2	—. 23 ± . 071	$0.71 \pm .050$	1.91±.03	.22
02,L	4	4.1-	49士.050	0.49±.35	1.88±.03	.21

on measuremests taken by Miss B.N. Stoessiger and Biometrika, Vol. XXVII, parts 3,4, Oct. 1935, p. 293-309. (1) Morant, G.M.; A Study of Predynastic Egyptian Skulls from Badari Based profenssor D.E. Derry.

ate tertiary Theodore: *The Late were around 3600 B.C. (Monod, T, F. Clerk and Bourlière, F. (eds.) Egypt w Howell, p. 162), Nagada II culture in Egin the Sahara». In: Hi, Methuen & Co., 1964, p. (*) Nagada I and I and Evolution. London,

TABLE 4: Some anthropometric measuments from different areas in Africa (t)

											25.5
	No. of	NH'R	NB	100NB	<u>A</u>	Z	æ	GL	H,D	100GR/	100H
	kulis			NE.R						Ğ B Ğ	Γ'
Early Predynastic Egyptian	4	50.1	25.2	56.3	.	670.0	4.00	98.8	69.2	i	73.3
Zulu (Negroes)	2	47.2	27.3	58.1	1	70°. E	39.00	101.0	69:5	72. F	75.0
Congo (,)	20	47.2	26.0	24. 2	820.8	690.3	370.9	96.5	63.4	6.99	75.4
Dchagga (,,)	12	4.3	27.8	67.2	1	73°.0	38°.6	105.0	68.2	70.5	73 2
									1	-	

TABLE 5. Some Anthropometric measurements from Egypt (2)

				æ	100B	100B	H.		100NB NL GL L	Z G	I I	LB AL	AL		
		Ľ	H	HN								•			
Early M	Measured			-											
Pre	by						•						•		
dynastic Thomson & MacIver	homson.	& Mac	ver	-	131.4 71.7 > 98.1	7.88.1	134.0	124.3	50.3	67	67.0	98.8	183.5	102.	072.0 ^c
Naga 3a () A	_	Fawcett		132.7	71.8	88.2	133.8	125.9	.0:05		65.5	7.96	184.7	Pp01	Pp01.7 73.3
& Q Groyps	DS.														

Times. Biometrika, Vot. XVII, Nee. 1 Roman Prehestoric to Egyption Craniology from Study of . 5. Morant, G.M.: A and 2, June 1925, £

(2) Ibid, p. 6.

A detailed comparison of all the ancient Egyption anthoropological material leads to the following main conslusion (2):

- a) In Pre-dynastic times there was a primitive, dolichocephalic race living in Upper Egypt which may have been directly desended from the people whose paleolithic are found on the high desert floor on either side of the Nile Valley. Though quite distinct from the main population, it bears certain relations to that more advanced type which suggests that the two had a common origin. This so-colled Aeneolihic race as Flinders Petrie named it.
- b) In Early Pre-dynastic times there were two distinct races man living in Egypt; one is the Theboid and the other, it is a supposed in the Fayuom These may be colled the Upper and Lower Egyptian races. They were as closely related to one another as two adjacent peoples are generally found to be, and there can be no doubt that they diverged from the same branch of the human tree at no very early date. (2)

The series represent various stages in transformation of one type into the other. The types shown in the following table (5), were relected because each represents an adequate number of crania and shows no signs of intermixture with any race foreign to Egypt. The order in which they are arranged is that deduced from a comparison of the coefficients of Racial likeness between them (8)

⁽¹⁾ Ibid, p. 4.

⁽²⁾ Loc. cit.

⁽³⁾ Morant, G.M.: A Study of Egyptian Craniology from Prehistoric to Roman Times. Biometrika, Vol. XVII, Nos. 1 and 2, June 1925, p. 5.

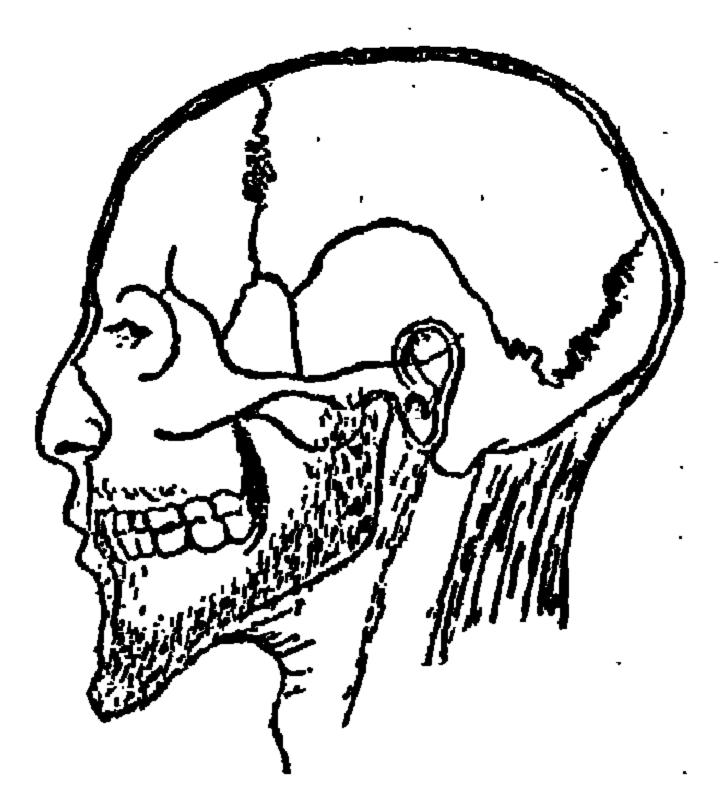


Fig. 2. Profile view an Early Predynastic shull from Naga-ed-der (Heart Expedition). Beard and soft parts drown from other specimens from the same site.

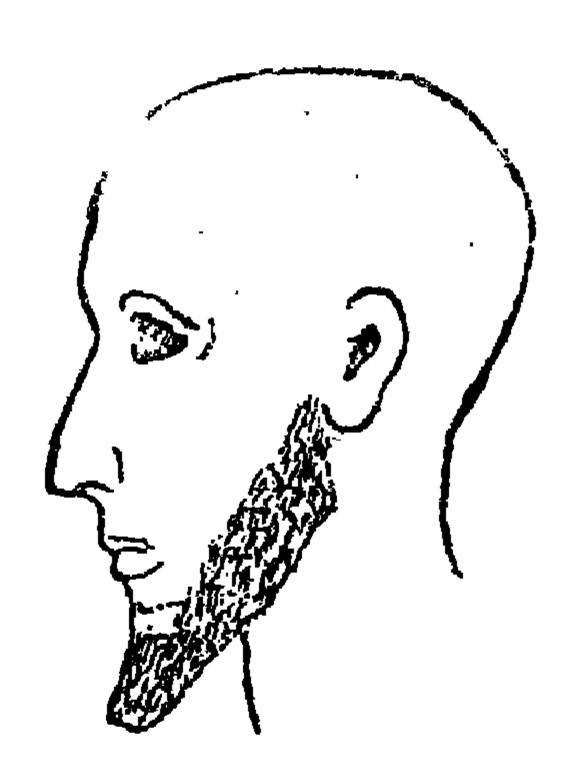


Fig. 3 Proto - Egyptian as represented in a pontait statutte by a contemporary artist (Circa 3400 B.C.) From Hterakonpolis After Qutbell.

The requirements of hunting and collecting (as were the people in the period of prehistory), keep the number of people who live near enough to one another to breed as a unit within about 500 or 600 inviduals. We may agree with C.S. Goon, (1) but cannot prove as he said, that the most of the fossil men was lived in population of this size or even smaller. There is no logical reason why their populations should have been larger, at least in the earlier periods. (2) (Fig. 4).

We all already know how is the importance of fire is to the physical and culture evolution of man, this fact is need not be repeated here again. But if it can be shown that some geographical races got fire before others did, the implication will be that those who had it first were also the first to receive its evolutionary benefits, and that those who obtained it last must have been correspondingly retarded.

Unfortunately, the absence of fire can be indicated only by negative evidence. We cannot expect to find charred wood and bone in disturbed sites such as gravel beds, and if we find such evidence, as found it was at Swanscombe on the Thames in England, we are extremely lucky. In Africa there is evidence that fire arrived late, as late as 40 thousand years ago. In the earlier habitation sites such as Olorgesailie in Kenya, where layer after successive layer of hand axes, cleavers, and meat bones have excavated with the most meticulours care, not a trace of charcool of charced bone has been found(8).

Both Louis Leakey and Demond Clark, who are among the most painstaking and observant excavators in the world, have stated their conviction that in East Africa the entire hand-axe period was fireless almos to the end. If future excavations confirm this erudite opinion, we shall have one explanation of the extraordinarily slow pace that human evolution followed, in the Middle and Late Pleistocene, in Africa south of the equator, and perhaps also south of the Sakara(4).

This idea means that the pace of the evolution of man (may be physically and culturally) in Africa North the Sakara and within, was more rapidly than it was South the Sahara.

Human Industries and Civilization in Early Egypt:

Toynbee, A.S. in his «study of history» (1962), lists twenty-one human societies or civilizations in al history. These include two in

⁽¹⁾ The Origin of Races, p. 101.

⁽²⁾ Loc. cit.

⁽⁸⁾ Coon, C.S.: The Origin of Races, p. 332.

⁽⁴⁾ Loc. cit.

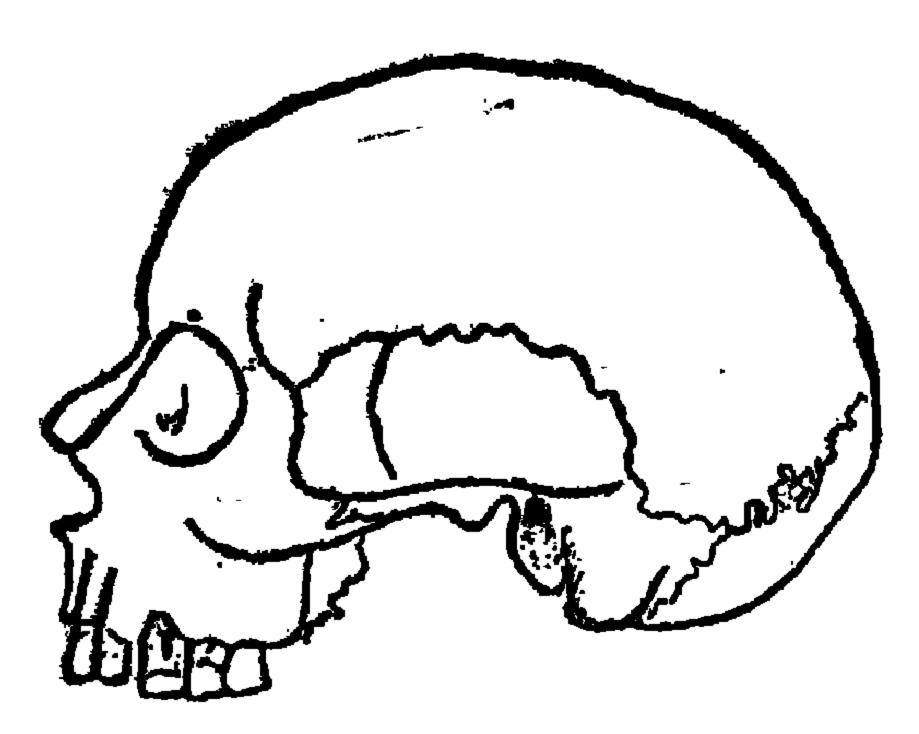


Fig. 4. Predynastic Egyptian Skull from Naga-ed-der (Heart Expedition)-Namow, high-bridged prominent nose.

America, the Mayan and Andean, but not one in Africa except the Egyptian, which was of Mediterranean origin, yet Central Africa was in touch with Egypt from very early times(1).

The most important intellectual achievement was undoubtedly the invention of systems of writing in all but one of the early centers of urbanism-although again it had little effect on contemporary life and its real impact was yet to come(2).

For the very recent periods of prehistory in the old world there was some hope of being able to do this because these recent periods - the late Neolithic, Bronze, and Iron Ages - over most of Europe and Asia were contemporary with the literate civilizations in Egypt and the Near East. In other words, history was being recorded and calendars were being kept in Egypt and Mesopotamia while many peoples of Europe were still in the Neolithic stage(3).

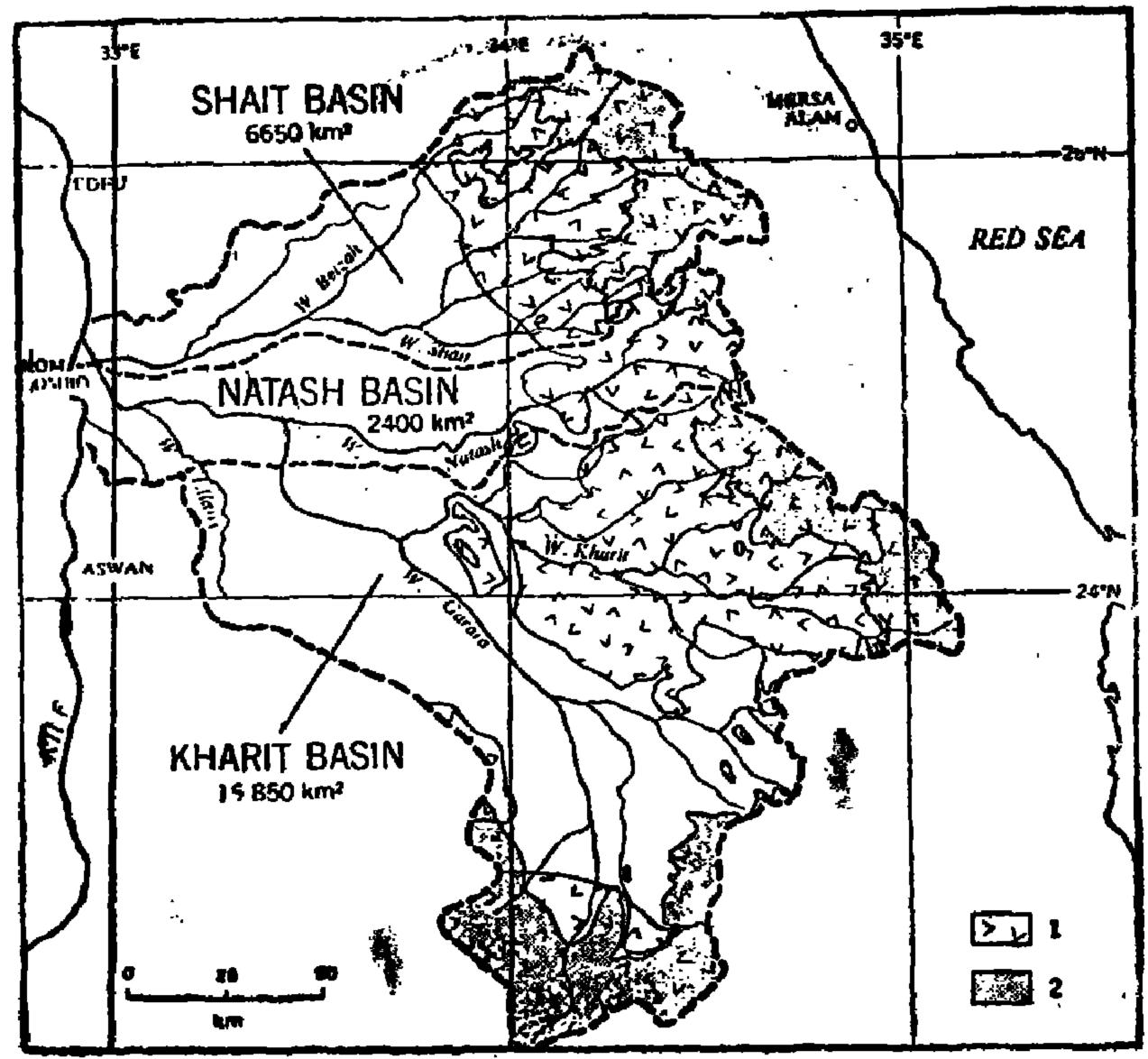
There are six areas of the world where urbanism and civilization developed apparently independently: Egypt, Mosopotamia, Índia, China, Mesoamerica, and Peru. All these hearths gave rise to great traditions and civilizations, and all seem to have developed more or less on their own. In other areas of the Old World, civilization and urbanism came later and largely as a result of diffusion from the primary hearths (4).

⁽¹⁾ Gates, R. Ruggles: Human Ancestry. Cambridge, Macc., Harvard Univ. Press, 1948, p. 199.

⁽²⁾ Chard, Chester S.: Man in Prehistory, 2nd. ed. New York, McGrow-Hill, 1975, p. 61.

⁽³⁾ Lot. Ett.

⁽⁴⁾ Ibid, p. 262.



Map. 5. The drainage basins of Wadis Shait, Natash, and Khepit. 1: Basement Complex, after Atlas of Egypt (1928), Sanedford and Arkelf (1933), and Gemini IV phlotography; 2: elevation above 500 meters. Demarcation of the Kharit-Natash divide near Kom Ombo is arbitrary to permit comparison of the formerly independent Natash and Kharit basins.

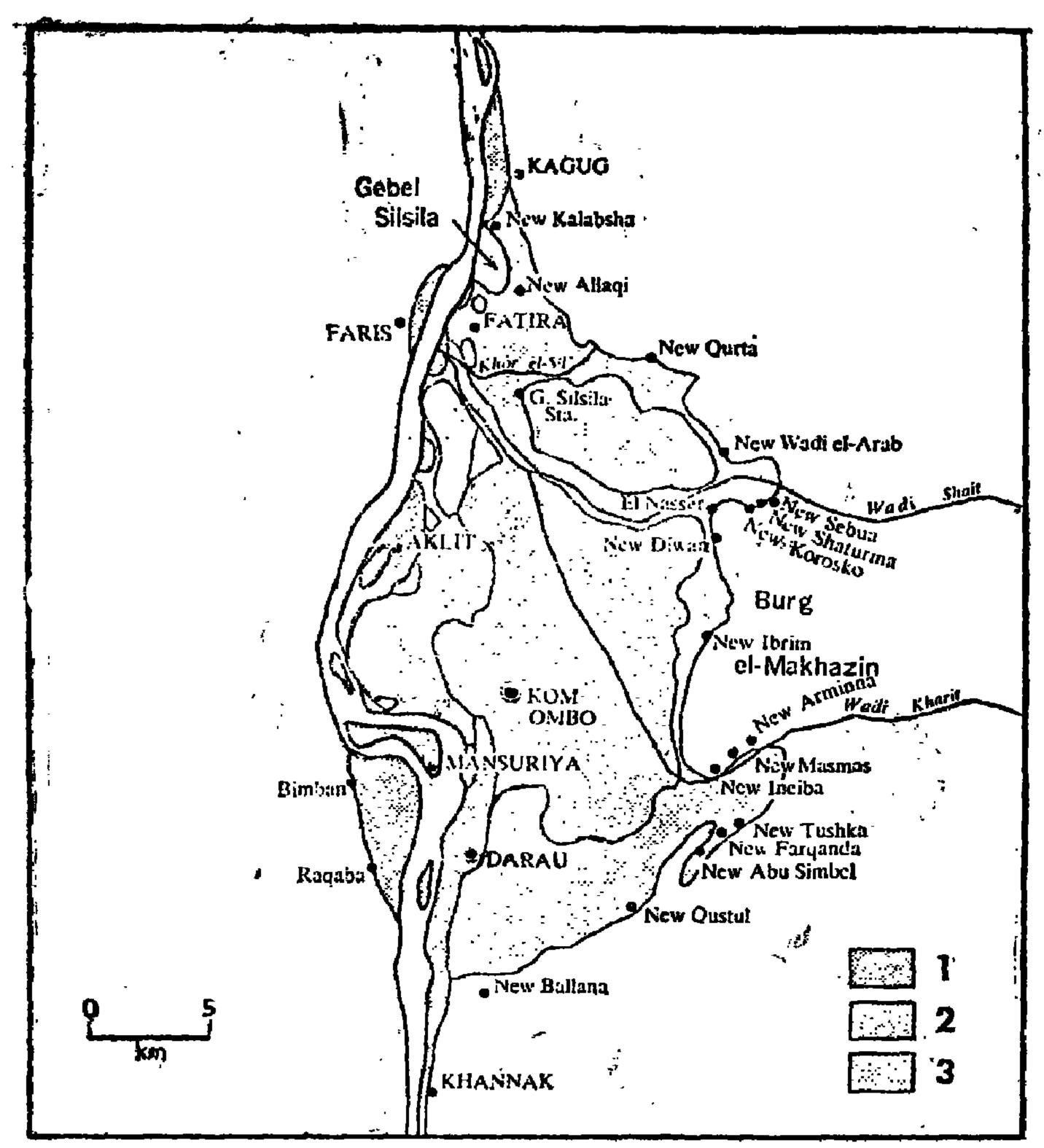
In Egypt, the earliest settlement in which pottery was used, that of Fayum «A», is dated about 4500 B.C. (1)

The emer (Triticum diccum) and barley are known in Egypt from various Neolithic sites (Fayum, Mer/mde, etc.) from about 400 years ago (2).

The absence of Sebilian implements (Fig. 5) from the desert surface for from the Nile; reflected that the rain-full had virtually ceased in Upper-Egypt by Upper Sebilian times. Lower and Middle Paleolithic implements, but not Sebilian, may be found anywhere between the Nile and the Red Sea(Map 6). Concerning the wester desert, opinions differ. Although Lower and Middle Paleolithic implements have been know for many years to litter the surface between the Nile and Khargah Oasis (Fig. 6-10) their distribution in the remoter parts remains

⁽¹⁾ Mellaert, James: The Chalcolithic and early bronze ages in the Near east and Anatolia, p. 10.

⁽²⁾ Monod, Theodone: The Late Tertiary and Pleistocene in the Sahara». In: Howell, F. and Bourlière, London, Methuen & Co., 1964, p. 117-229 (p. 196).



Map. 6. Settlement expansion on the Kom Ombo Plain, 1902-65. 1: Cultivated lands, 1902; 2: Expansion of cultivation by Wadi Kom Ombo Company, 1903-29; 3: Nubian resettlement areas graded and irrigated, 1961-65.

to be investigated gentelly. Beadnell, Hugh expressed the opinion many years ago that they did not occur(1) Ball, J. more recently, has stated that he thinks they may be expected anywhere in the Libyan Desert(2).

Throughout the Predynastic period, Egypt had been developing a series of small-to moderate sized ferming villages linked by the Nile and local trade in both luxury and utilitarian goods. Although this network of internal riverborne trade facilitated relatively frequent contacts among the communities which lined the Nile, it did not seem to reach out beyond the borders of Egypt to embrace the Near East(3).

(3) Chard, Chester S.: Man in Prehistory, p. 275.

⁽¹⁾ Beadnell, H.J.L.: Neolithic Flint Inplements from the Northern Desert of the Fayuum. Egypt. The geological Magazine, Decade IV, Vol. X, 1903, p. 53.59.

⁽²⁾ Ball, J.v.: Problems of the Libyan Desert. The Geographical Journal. Vol. LXX, No. 3, Sept. 1927, p. 209-224.

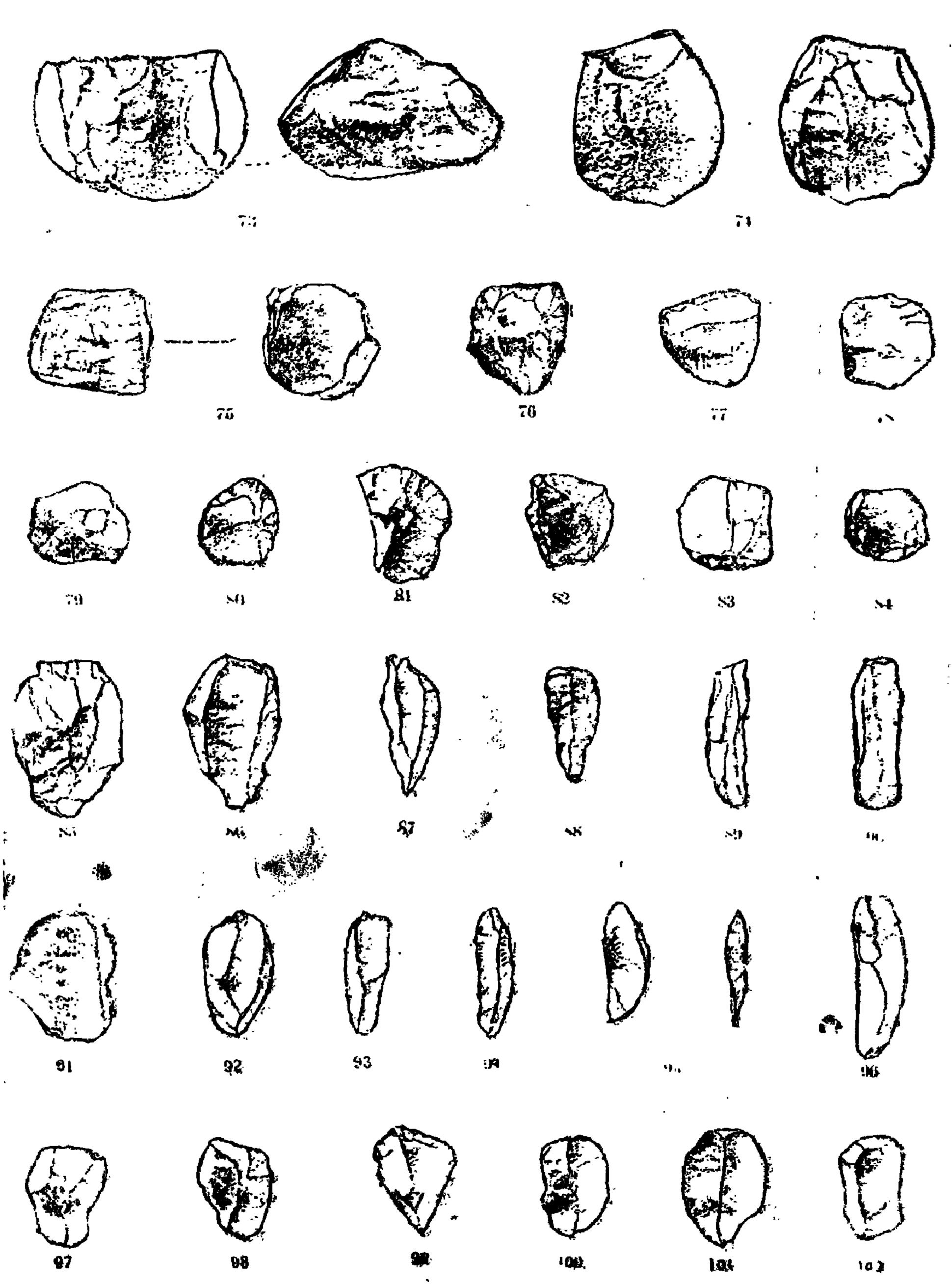


Fig. 5. Upper Sebilian implements from a site 40 above flood plain at Sibeira West, north of Wadi Halfa.

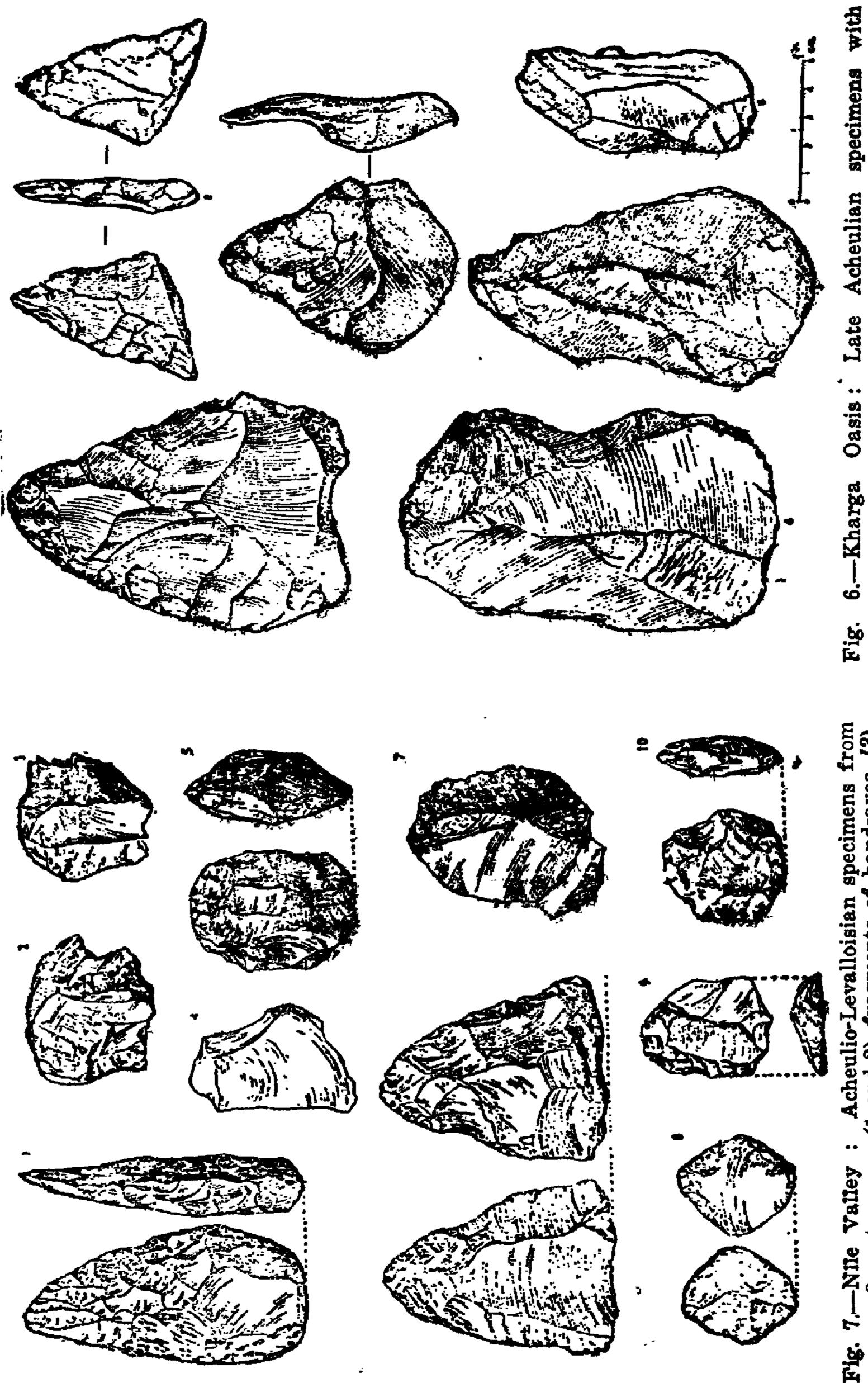


Fig. 7.—Nife Valley: Acheulio-Levalloisian specimens from 9 m. terrace; (1 and 2) fragments of hand-axes, (3) trimmed flake, (4 and 5) coarse tortoise-rore flakes, (6) flakes-blade (X ²/₂).

Levallois techoniques

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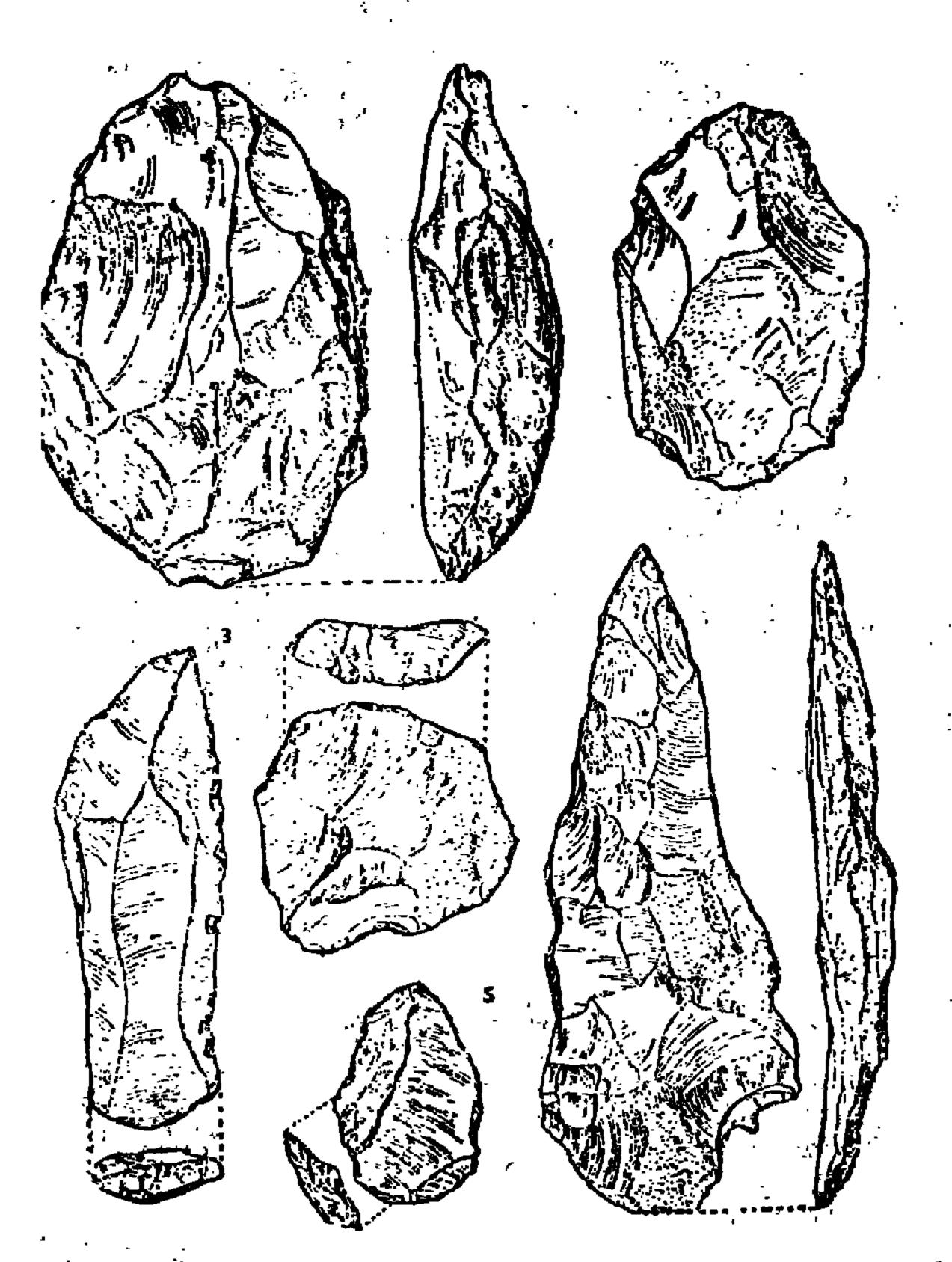
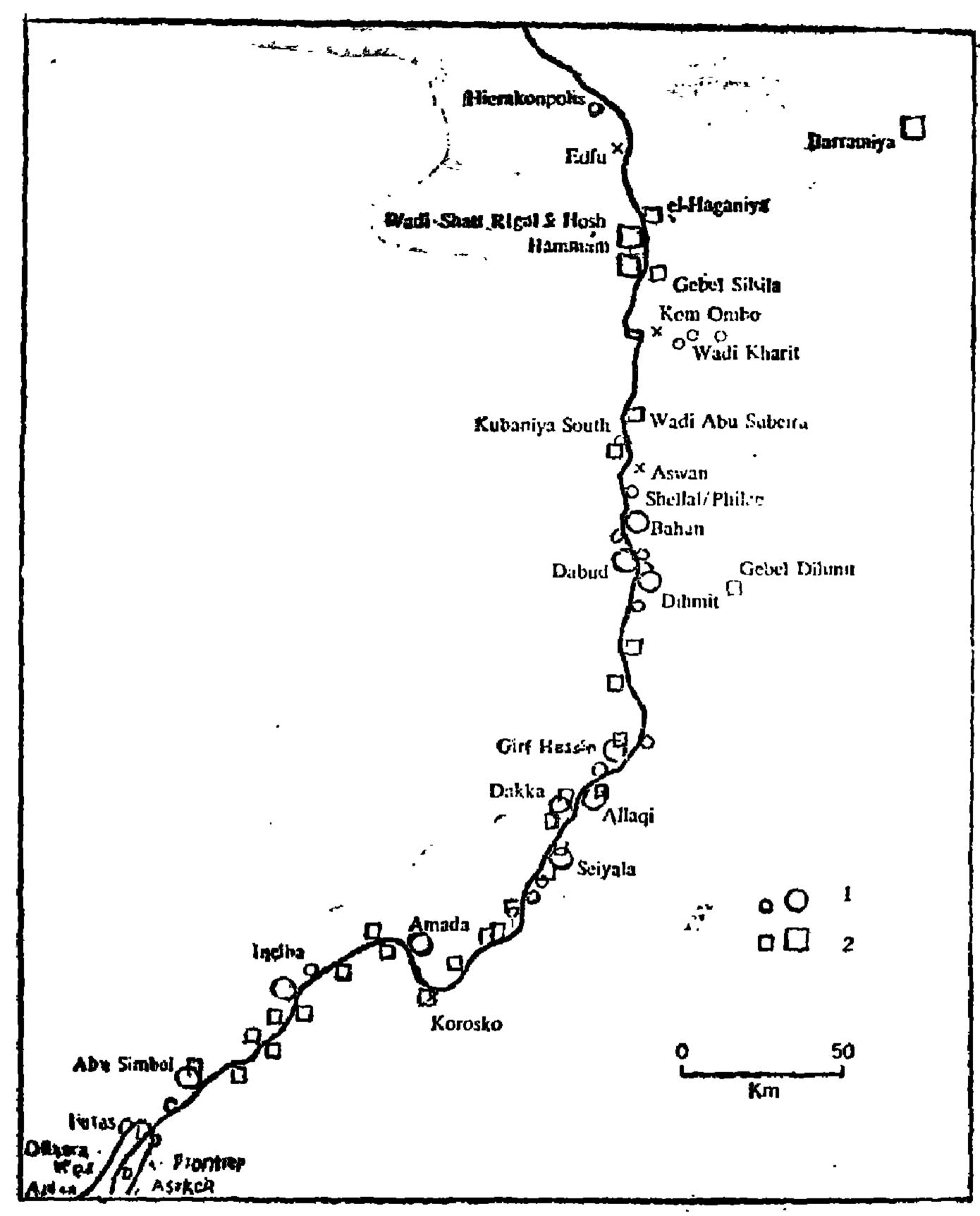


Fig. 8. Kharga Oasis: Acheulio - Levalloisian specimens. $(X_{\frac{2}{3}})$

Our knowledge of ancient Egypt is overwhelmingly from archeology. Fortunately, its material partly because of the prescriptions of a religin which emphasized the necessity of providing for the welfare of the dead by equipping them in the style to which they were accustomed in life. In addition, art from the beginning was representational and concerned itself with depicting situations and events.

Thanks to recent archeological explarations at Hierakoponolis in Upper Egypt (Map 7), we now know that the establishment of farmin cultures in the Nile Valley accompanied an increase in rainfall, known as the climatic optimum, which occurred around 5000 B.C. The effects



Map. 7. Predynastic site in southern Egypt 1: Habitation sites and cemeteries (Gerzean, Amratian, Early A - Group). 2: Early rock drowings.

of the climatic optimum were to last about 2,000 years and turned the border-lands of the Sahara into pastures capable of supporting hards of grazing animals and, in favored spots where water collected, seasonal dry farming. Thus, a number of new ecologycal niches were created out of which prehistoric man could make a living.

In Egypt and much of North Africa a mixed economy developed and prospered based upon herding and hunting in the grassy savannahs, seasonal cultivation of wheat along the low-bying wadis which drained the margins of the desert, and intersive farming supplemented by fishing and fowling on the rich alluvial soils of the Nile Valley(1). Elliot Smith derived Polynesians of the Pasific occion from the early type of steppyramid in Egypt, through diffusion, but this is not accepted(2).

Here the problem is to find out when northern Semitic elements penetrated Egyptian, which belonged to the Hamitic Language-group, widespread in north and northeast Africa. Faint traces of Egyptian contact with the Near Eastern world date bach to the Mesolithic Period when settlers with a Natufianlike culture were established near Helwan, south of Cairo.

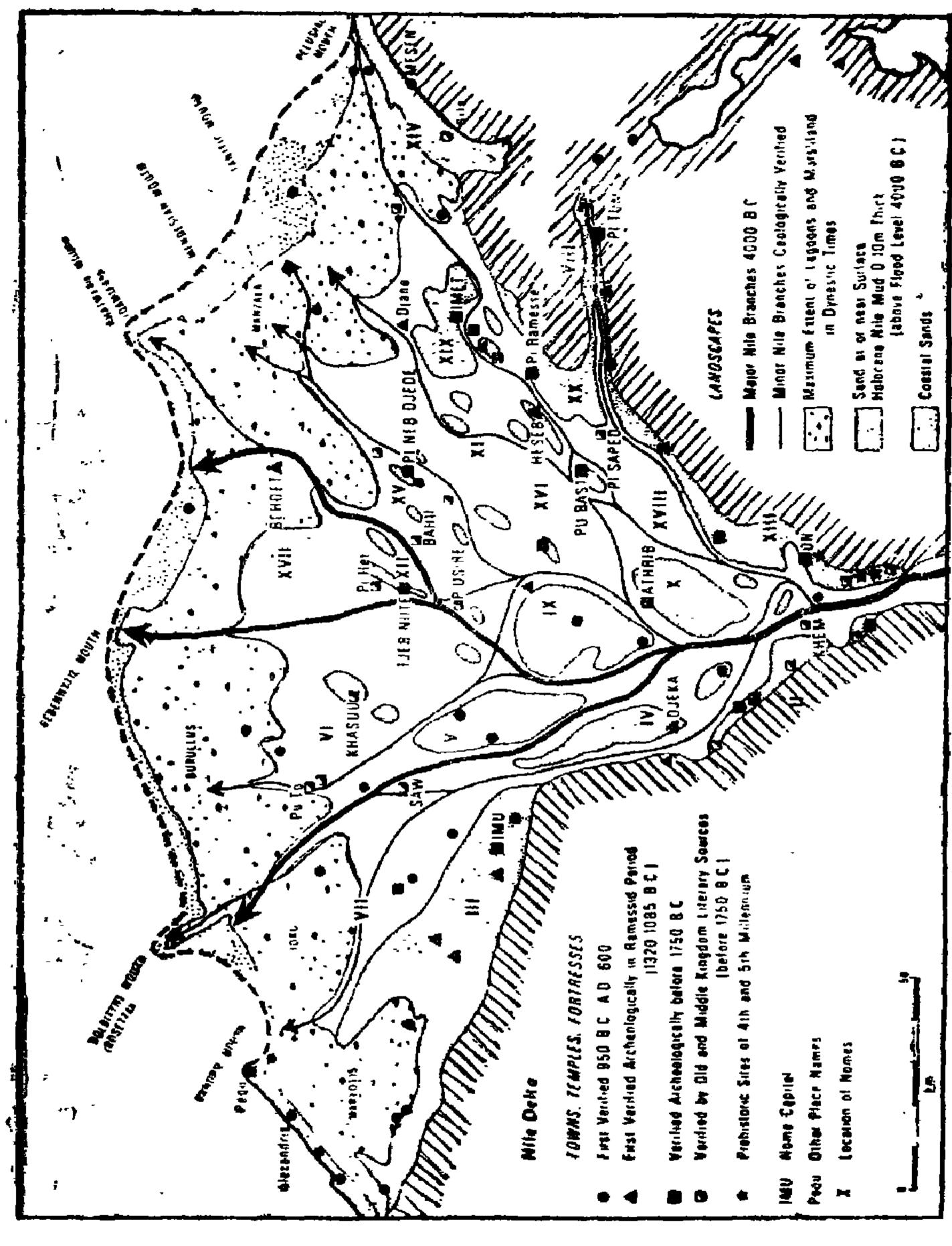
The earliest settlements with agriculture and pottery are found in the Fayuum about 4500 B.C., and at Merimed about 4200 B.C. in the Delta (Map 8), according to radiocarbon determinations(3). Their inhabitans, however, may or may not have been of Near Eastern stock Syrian timber was obtained during the Badari culture of Upper Egypt, about 400 B.C., and copper was probably obtained from the mine on the western side of the Sinai Peninsula. Nevertheless, Egypt maintained her splendid isolation during the Amratian Period. It is only in the Gerzaean Period (Ca. 3400-3100 B.C.) that we have evidence for the ever-increasing contact with Palestine and the coast of the Levant. This period is contemporary with the Late Chalcolithic or Proto-Urban of Palestine, Lebanon and Syria. Then foundations were laid for the greatness of Egypt during the Archaic period and the Old Kingdom. This period is known elsewhere as the Early Bronze Age(4).

⁽¹⁾ Ibid, p. 274.

⁽²⁾ Gates, R. Rugglas: Human Ancestry. Cambridge, Macc., Harvard Univ. Press, 1948, p. 342.

⁽³⁾ Mellaart, James: The Chalcolithic and Early Bronze Ages in the Near East and Anatolia. Beirut, Khayats, 1966, p. 54.

⁽⁴⁾ Ibid, p. 55.



sutzer, (From Delta the ä evolution set lement and Landscape ∞i Map.

There for three winters between 1928 excavations were made by Caton-Thompson G. and Gardner, E.W. of Predynastic and Prehistoric research in Northern Fayuum, first under the auspices of British School of Archarology and later of the Royal Anthropological Institute(1). In 1930-1 they go on their researchs in Kharga Oasis where at an early stage in their work, it become plain that the quantity of prehistoric material to be investigated and reduced to some sort of chronological order was so great. They after that held the expedition and wrote the scientific report which discussed the importance of Levalloision development in Egypt with co-ordinations between the Nile and Kharga, and the position in time and space of the Aterian.

Some years after in 1939 Hans Winkler, published his work about the rock engravings of hitherto unknown type in the sanstone region east of Dakhla Oasis(2). These drawings he attributes to people of Early Predynastic age has named them «Early Oasis Dwellers», in contradistinction to another, partly contemporary group he calls the «Earliest Hunters». The identitz of Winkler's Early Oasis Dwellers» and Caton-Thompson Neolithic Peasants is virtually confirmed by his record of «Neolithic implements typical of the Fayuum».

Since, 1930, Egypt and North-East Africa was accepted to be as an area so extraordinarily of the faceted-platform tradition that the technique persisted in various local guises long after the Palestinian later Palaeolithic peoples had proceeded to a more advanced culture, the term «Epi-Levalloisian» has been here coined rather than «Upper Palaeolithic, to denote these Levalloisian survivals into late Palaeolithic times (3).

In highland areas where caves were available they were extensively used at this time giving the impression that cave dwelling suddenly became the typical human pattern wherever possible. The first known cave site in Africa also date from this time. It should be noted that no one ever lived inside a cave in the drak inner recessos. Habitation was in the mouths of caves, or at the base of overhanging cliffs (so-called «rock shelters»).

It is hypotherized that windbreaks of poles and skins or brush may have bean erected on the outer side for greater warmth and protection

⁽¹⁾ Caton-Thompson, G. and Gardner, E.W.: The Desert Fayuum. London, Royal Anthropological Institute 1934.

Rock-Drawings of Southern Upper Egypt. Egypt Exploration Society.
 Caton Thompson, G.: Kharga Oasis in Prehistory. London. Athlone Press, 1952, p. 4.

from weather, and evidence of a post driven into the ground perhaps for this purpose was found at Combe Grenat in France (1).

The Neolithic found at 5000 B.C. in the Fayuum was followed by the Tasion, the Badarian (Chalcolithic), the site of Merimde, and finally the predynastic Egyptian shortly after 4000 B.C.(2).

The development of Egyptian metallurgy was held on about 3100 B.C. on the appearance of a series of innovations, it may also be involved. Again, though it took local forms and used local materials, the techniques could well have been introduced. But despite all this, it would not be correct to say that civilization was transplanted into Egypt(3). What seems to have happened was that certain ideas and principles were introduced at a crucial time when Egypt was adjusting to environmental change and population growth a series of social, economic, and political alterations. The process, in turn, must have sparked a burst of creative energy, and the end result was a truly Egyptian civilization.

We do not yet have sufficient archeological information from all parts of the Nile valley to say just to say just where this first took place pinpoint the outside source or sources. If the change first accurred in the Delta region, the Sumerian influence must have been indirect, via the Levant and Sinai. If in Upper Egypt, this would support the view that there was direct sea contact between the Arabian Gulf and the Red Sea coast of Egypt. At any rate, the emergence of the essential pattern of Egyptian civilization was a rapid process, perhaps confined to a few generations, and coincides with the establishment of the absolute power of a single ruler over the ontire length of Egypt(4).

The industries of Paleolithic Man in the Nile valley in Upper and Middle Egypt, may be tabulated as follows(5).

100-foot terrace Primitive Chellean, Chellean, and Chelleo-Acheulean or early Acheulean, also a coarse-blak industry or Egyptian from of the «Clactonian».

⁽¹⁾ Chard, Chester S.: Man in Prehistory. 2nd. ed., New York, McGrow-Hill, 1975, p. 140.

⁽²⁾ Heizelin, J. De: «Observations on the absolut chronology of the Upper Pleistocene». In: Howell, F.Clark and Bouliere, F. (eds.): African Ecology and Human Evolution, p. 293.

⁽³⁾ Chard, Chester S.: Man in Prehistory, p. 276.

⁽⁴⁾ Loc. cft: (5) Sandford, K.S.: Paleolithic Man and the Nile Valley in Upper and Middle Egypt, p. 126.

50-foot terrace Developed forms of Acheulean culculture, with all types of the 100-foot terrace as derived specimens

30-foot terrace Early Mousterian flakes and cores, also Acheulean implements probably derived from the 50-foot terrace

10-to 15-foot terrace of Upper Typical Mousterian industry of Egypt Egypt

25-foot gravels of Middle in part contemporary with 10-to 15-foot
Egypt gravels of Upper Egypt, with same
Base of silts of Upper Egypt industry, but containing later forms
identical with those of the base of the
base of the Upper Egyptian silts.

Aggradation silts of Upper Final development of Mousterian culture:

Egypt industries descending from it termed
Degradation gravels of Upper Lower Sebilian (occurring at the top of
and Middle Egypt, suballuvial the silts) and Middle Sebilian (making
in the north Further degrad- the beginning of degradation throughout
ation the valley), followed by Upper Sebilian
(with foreign technique) in Upper, not
yet identified in Middle Egypt in
geologically dated deposits.

Accumulation End of Paleolithic, then Neolithich to Recent.

An Acheulio-Levalloisian phase stands: but an Early Levalloisian now seen to merge at its lower and into the physiographical position then assigned to the Acheulio-Levalloisian; and to occupy also at the upper end, in later Levalloisian groups, the place formerly attributed what Caton-Thompson, than termed «Pre-Sebilian». The Pre-Sebilian» since 1930, renamed «Khargan» has revealed itself as a direct descendant the local Upper Levalloisian to which it is linked by an indust, intermediate both in typology and stratigraphy, which Caton Thompson have named «Levalloiso-Khargan». (1). In this the stunted Khargan

⁽¹⁾ Caton Thompson, G.: Kharga Oasis in Prehistory. London. Athane, (1942), p. VIII.

industry types with their step marginal retouch occur, in a tentative way, alongside normal Upper Levalloisian form.

In man's early history there were doubtless long periods when the the population was sparse and stationary, in equilibrium with the environment, as is true of most animal species. Before Neolithic agriculture began, about 6000 B.C. in Egypt and may be around that date in Iraq also. It probably began indepently in different parts of the world. Man had no means of increasing his food supply except by improved methods of hunting, there was little possibility of accumulating

The archaeological assemblages of the Siwa Oasis region (Map 9 & Fig. 9) fall within the overall technological framework of Nonth Africa between, 9,000 and 5,000 B.C.(2) Though they share some elements with the Capsian, they are distinguished by the absence of microlithic trapezes and triangles and the scarcity or absence of lunates. Their content of burins and backed elements, however, is similar to that of the «Capsian typique à fort indic burins» from El Outed II, Portal Fakher ta, and Relilei II(3).

Similarities between Saharan assemblages and Siwan assemblages are vague, with the possible exception of the Adrar Bous and Grebon assemblages. The assemblage from Oued Grebon is similar to that of Gara Oasis in the abundance of burins and points, but differs in the prevalence of Ouchtata backed bladelets, which are lacking in the Siwan assemblages (4).

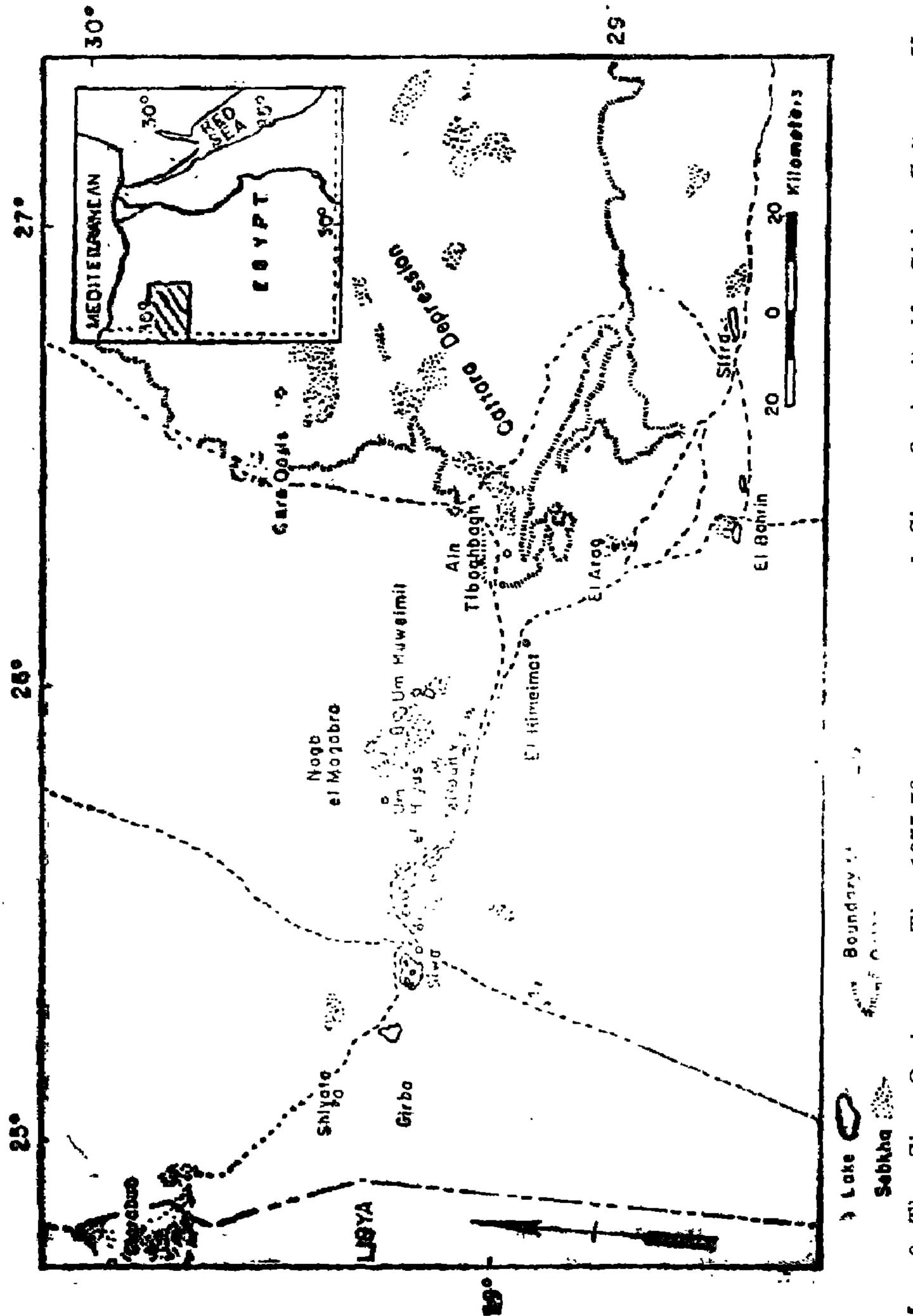
The Siwan assemblages and the Qarumian of the Fayuum (dating from 8,100 B.C. to 7,140 B.C.) are characterized by a high content of perforators, including the méche de forêt. Both also show a very low frequency of microlithic geometrics. The burin index in the Qarunian very low compared with that of the Siwan assemblages.

⁽¹⁾ Gates, R. Ruggles: Human Ancestry. Cambridge, Macc. Harvard Univ. Press, 1948, p. 335-336.

⁽²⁾ Camps, G.: La civilization préhistorique de l'Afrique du Nord et du Sahara. Paris, Doin, 1974, p. 179.

⁽³⁾ Loc. cit.

⁽⁴⁾ Hassan, Fekri A.: Archaeological Explorations of the Siwa Oasis Region, Egypt. Current Anthropology Vol.19, No. 1, March 1978, p. 146-148.



Um Zeitoun, Bahrin itself, and Aroq, Oasis Siwa Oasis, convered Garo Magabra, surveys 1975-76 Nagbel -The el-Hiyus, area. Oasis The Siwa Huweimil, တ် Map.

Swan assemlages resemble the «Libyco-Capsian» and the earliest Neo-assemblages also called «ante-Neolithic» or «proto-Neolithic» (10,000-7,000 B.C.) at Haua Fteah in the scarcity of notches and denticulates (1).

We can sea in the latest gravel terraces of the Nile maney characteristic of emblement technique. The 9 m terrace in its characteristic form, containing the first reliable traces of Levalloisian technique. is found only with certainly as far north as Asyuut (2). Below it another better-preserved feature, the 3-4 m. terrace widely represented in Middle Egypt, is virtually absent north of Samalut, Farther north, however, in the lower reaches proper, an exceptionally well-marked terrace occurs at 8 m. That this is certainly not the same as the 9 m. terrace further upstream is clearly shown by its archaeological content, which, as will shortly be described, is appreciably more evolved. The relationship of the 8 m. to the 3-4 m. feature upsteram is, however, much harder to establish, and as yet by no means certain. It is not impossible that it may even be the equivalent. The point is of interest owing to its rich archaeological context. Isolated terrace fragments at various points further northwards flanking the Delta have been plausibly equated with the 8 m. terrace, and suggest connexion with the late Last Interglacial sea-level at 7 m.

According to this work both the 8 m. in the lower reaches and the 9 m. represented in the middle reaches of the river are likely to have been graded to a level approximating to the first high sea-level of the Last Interglacial (at about 18 m.). These results can, however, be criticized from a number of points of view. In the first place there is every reason to think that a long interval of time separates the 9 m. from the 8., and no evidence has been noted any where else in the world of two 18 m. maxima during the Last Interglacial; such a possibility can indeed be ruled out of any feasible working theory. (3).

Despite this uncertainty it seems none the less clear that the most likely date for the 8 m. terrace and its contents falls some time in the Last Interglacial. All that is certainly known of the 3-4 m. terrace upstream is that it follows the 9 m. terrace after a substantial interval; both topographical and stratigraphical data place this beyond question.

⁽¹⁾ Mcburney, C.B.M.: The Haua Fteah (Cyrenaica) and the Stone Age of the southeastern Mediterranean. Cambridge, Cambridge Univ. Press, 1967, p. 205

⁽²⁾ McBurney, C.B.M.: The Stone Age of Northern Africa. London, Penguin Books, 1960, p. 135.

⁽³⁾ Ibid, P. 136.

The lake levels of the Fayuum may then be tabulated as follows (heights in metres above sea-level): (1).

Lake	Corresponding level in Nile Valley	Classification of
Level	(heighas above alluvium in brackets).	associated Human cultures
40 m.	42 m. (51 m. lower portion of meander).	? Evolved hand-axe culture.
34 m.	36 m. (8 m.)	Evolved Levalloisian
28 m.	? (no certain surviving traces)	Final Levalloisian
22 π.	24 m. (6 m.at et Hibah)	Final Levalloisian

No certain remains were associated with the 40 m. level, which is variously estimated as somewhat higher by other authorities, although the Fig. 9) fall within the overall techological framework of North Africa position and weathering of a few loose finds of hand-axes suggest that they may conceivably be referable to it.

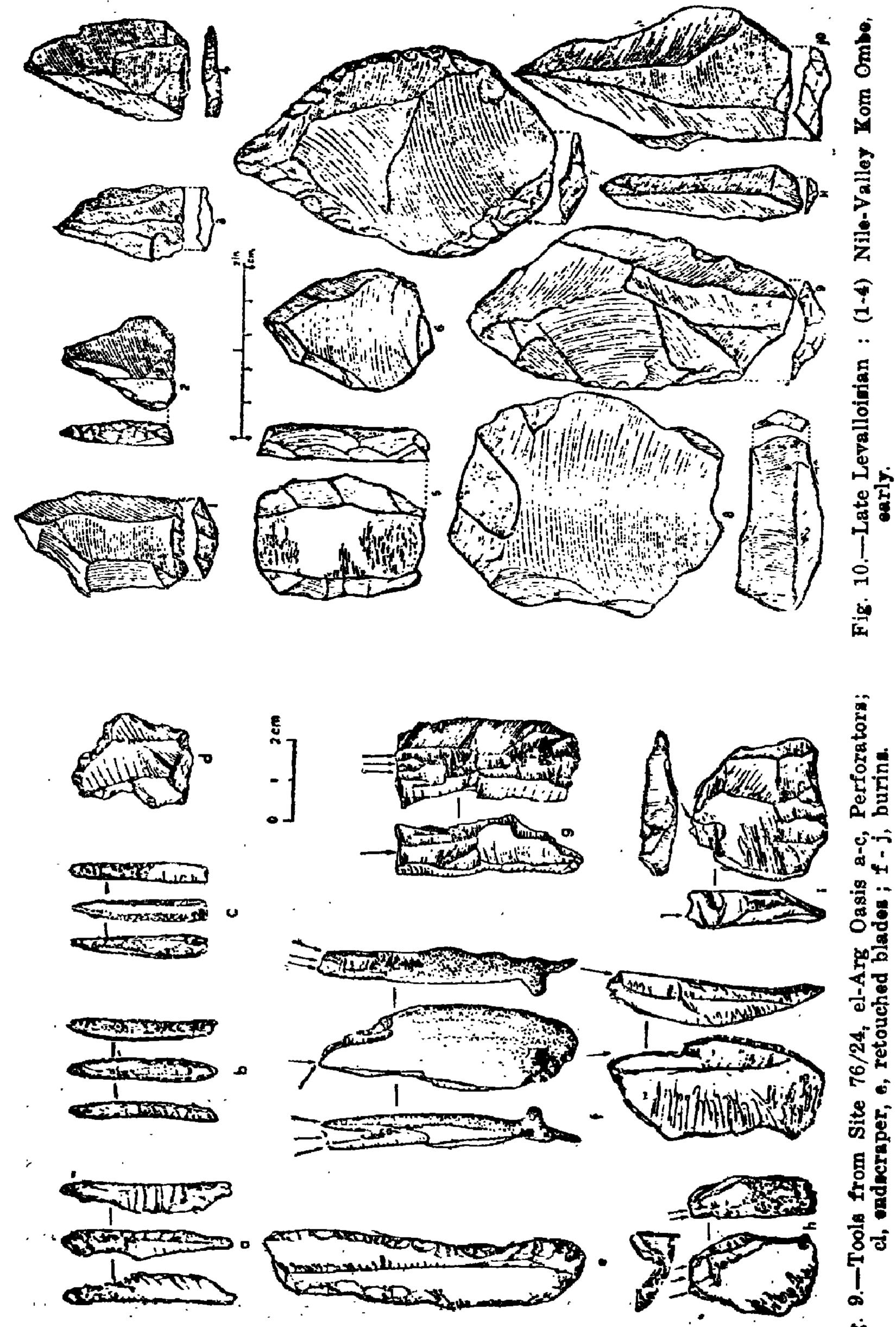
The 34 m. lake level is represented by a impressive shingle bank over considerable distances. From then on the successive levels are apparently linked into a continuous succession by numerous minor beaches preserved in favoured positions. The presence of some low-level Levalloisian finds, far below the levels just mentioned, suggests that a low level may have occurred between the 40 and 34 m. levels, as the sequence in the main valley further upstream would lead one to expect.

The cultural remains associated with the 28 and 22 m. levels so far recovered (Figs. 9 and 10) are only sufficient to suggest and advanced and diminutive version of Levallois, and there is really no justification for likening them at all closely to the second stage of the proposed Kom Ombo sequence. The same is true of the still more exiguous series found in the low-levels gravels at el Hibah, not far upstream from the Nile end of the Hawara Channel.

The people of the Middle East* had made an even greater invention-agriculture. Agriculture begane about 6000 B.C., along with animal

⁽¹⁾ Ibid, p. 146-149.

^(*) A certain geographical focus in : Egypt, Iraq, Syria, across Iran and Afghanistan to the Indus Valley.



Perforators; buring. Oasis el-Arg Casis uched blades; 76/24, el-Ars, retouched -Tools from Site epue 9 Fig.

husbandry, pottery-making, and the manufacture of polished-stone axestraits that, taken together, constitute a way of life known as the Neolithic (New Stone Age) culture. Following the Neolithic, about 3000 B.C., the Middle East provided the setting for the world's earliest manufacture of copper and bronze tools and weapons, its first use of the wheel, and its earliest forms of writing. This combination of traits is called the Bronze Age(1).

The growth and elaboration of irrigation systems, at least in arid Egypt Mesopotamia and Peru, was an immediate consequence of urbanization(2). In the 5th. millenium B.C. forming villages appeared along the edge of the upper Nile Valley and on the shores of the Fayum lake. During the next millenium the formers developed their techniques and social organization enough to master the papyrus-need swamps and fierce animals such as the crocodile and hippopotamus of the Valley proper (3).

In the area of Middle and Lower Nubia and that of Upper Egypt till Luxor, we can notice in the 100 foot terrace primitive of Early chellean, Chellean, and Chellean-Acheulean implements have been found, but not in older beds. Many are made from pebbles. A coarse flake industry occuring somewhat sparsely, recalls the Clactonian industry bound at a similar, pre-Acheulean horizon in England and Europe.

In the 50-foot terrace Chellean-Acheulean and Acheulean implements occur, with small nather crude, flakes. The 30-foot terrace is known elsewhere to contain early examples of the Mousterian method of detaching flakes from roughly prepared blocks of flint. The Mousterian technique reached an exceedingly high standard at the time of the 10-foot terrace and the beautiful workmanship seen in the implements here figured represents the «typical» Mousterian of Upper Egypt at its best.

During the following period of silt accumulation the previous high standard was not maintained. For a while flakes with equal beauty of form and technique were made: but imperceptibly they became thicker, lost their fine edges and retouch, and changed their shape from that of a broadbased leaf to a rough rectangle or a simple point. Similar changes

⁽¹⁾ Coon, Carleton S.: Seven Caves; archaeological exploration in the Middle-East. London, Jonathan Cape, 1957, p. 30.

(2) Chard, Chester S.: Man in Prehistory, p. 259.

⁽³⁾ Starr, Chester G.: Early Man. New York, Oxford Univ. Press, 1973, p. 100.

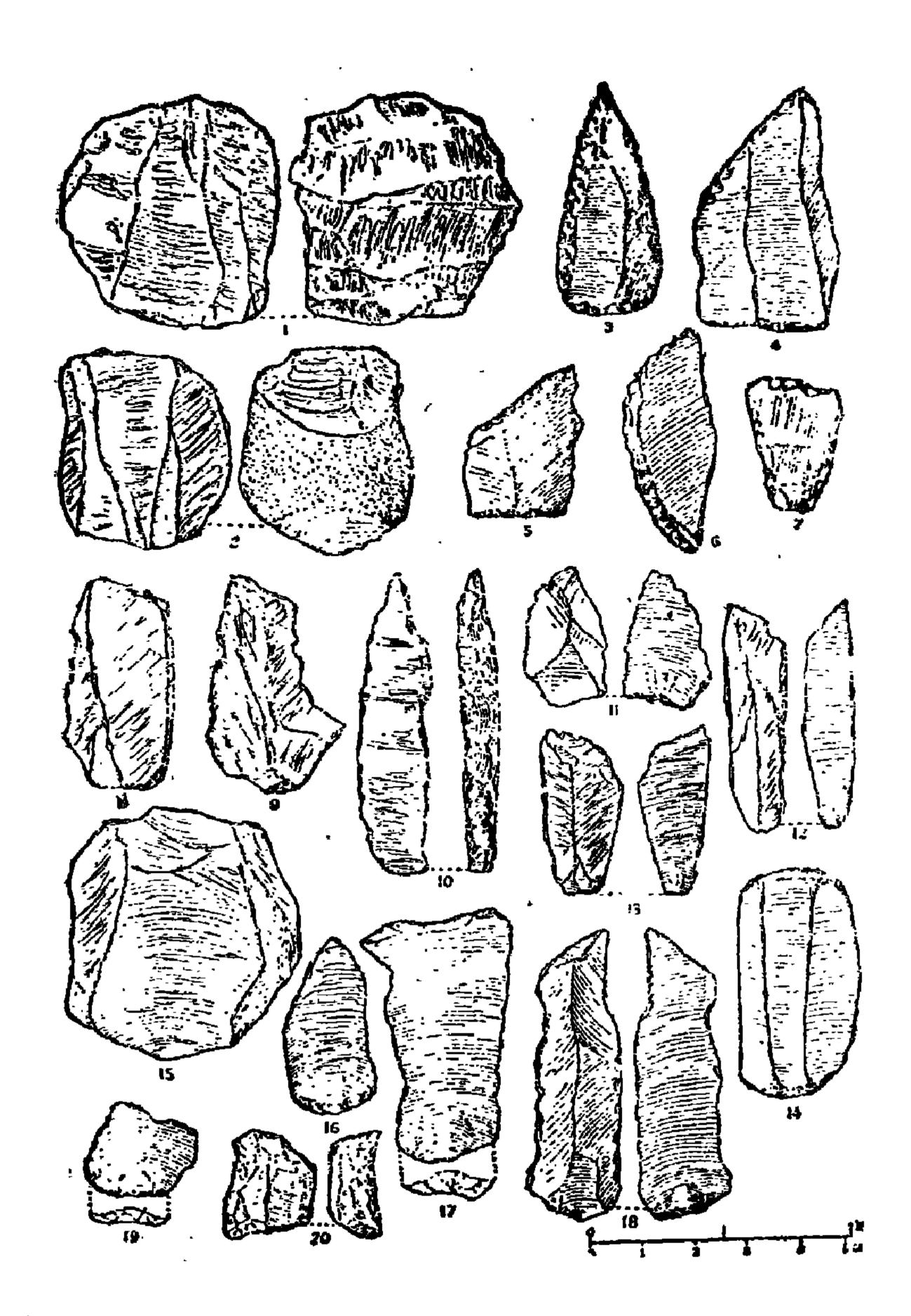


Fig. 11. Nile Valley: (1-10) later silt stage, (11-20) Fayum 22-24 m, beack (X2/3)

took place in the cores, small pebbles being used almost invariably instead of larger masses. To these changing stages the term «Sebilian» has been applied, and the Lower and Middle Sebilian may be regarded as essentially of Mousterian derivation. Since the word serves its purpose and records the admirable researches of its author, M. Vignard, there seems no reason to abandon it(1).

Distinct from the Lower or Middle Sebilian is the Upper Sebilian, which has essentially neanthropic character of workmanship and suggests the introduction into this part of the Nile Valley of Capsian-like influences from North Africa or elsewhere. The apparent hiatus between Middle and Upper Sebilian industries, reflected in their geological positions, that some event of considerable human importance took place at this time. At present there is insufficient evidence to jude what it was, but we suspect that the growth of deserts here and elsewhere had set in motion those migrations which continue at the present day among the desert population(2).

Ancient Man and his Civilization in Northern Sudan:

The study of prehistory differs in many respects from that of conventional history. There differences, mostly enforced by the nature of the evidence, offer both handiceps and certain advantages from our point of view. For one thing, prehistory is anonymous, while so much of conventional history is biographical; the familiar «great man» concept of history is thus ruled out (3).

Like anthropology, prehistory embraces the whole range of human activities and accords them equal attention, it is interested in all men who have ever lived, anywhere in the world - the total record of humanity(4). Another adavantage of prehistory is the opportunity it provide, to study the interelationships of men and their societies with the natural environment over long periods of time (5). Map 10).

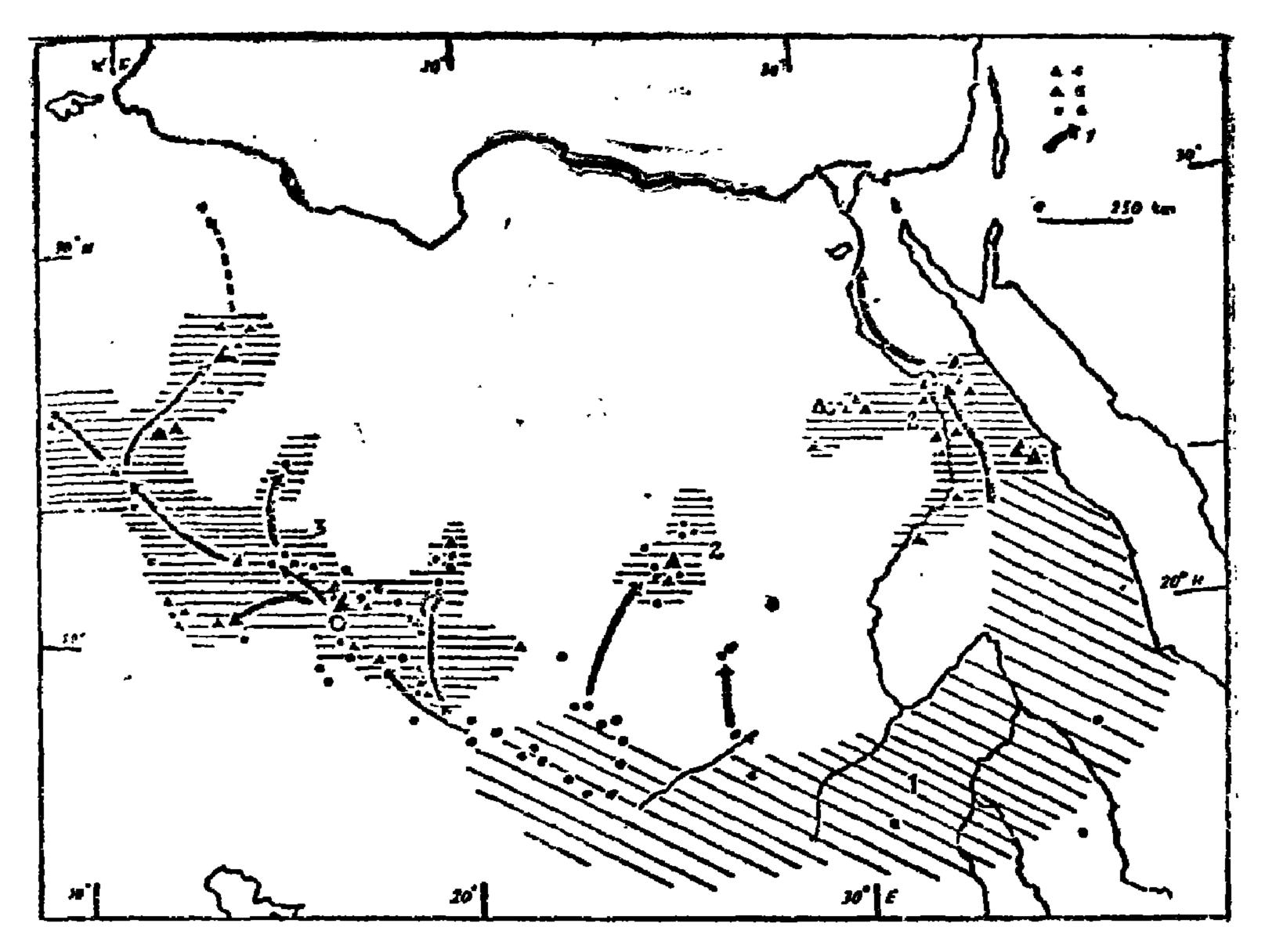
Breasted, J.H. (1865-1935), held an epigraphic survey of Nubia and

⁽¹⁾ Sandford, K.S. and Arkell, W.J.: Paleolithic Man and the Nile Valley in Nubia and Upper Egypt, p. 86.

⁽²⁾ Loc. cit.
(3) Chard, Chester S.: Man in Prehistory, 2nd ed. New York, McGrow Hill, 1975, p. 6.

⁽⁴⁾ Ibid, p. 7

⁽⁵⁾ Loc. cit.



Map, 10. Neolithic hunters and herders in the easten Sahara (From Butzer, 1958).

the Sudan (1905-1907) in the collaboration with Sir Flinders Petric(1), they discovered many implements, most of it related to the prehistoric period.

Mousterian implements have been found in the Sudan, but the Neolithic was much later than in Europe. Grinding stones occur, as well as microliths. There is evidence of Egyptian influence, in the form of scarabs and plaques, from 700 B.C. Although contact with Egyptian civilization dates from this period, there was no permanent development as a result. Even if there was physical heterosis, it was accompanied by mental stagnation through the ages. In the northern Sudan (Nubia), which was in direct contact with southern Egypt, the Meroitic Kingdom-developed from about 700 B.C. to A.D. 350. Extensive ruins on the eastern bank of the Nile near Khartoum include palaces, temples, and the pyramids of Meroitic Kings. The Meroitic language was debased

⁽¹⁾ Sanders, James A. (ed): Near Eastern Archaeology in the Twentieth Century. New York, Doubleday 1970, p. 43.

from of Egyptian hierolyphics but it lasted only about four centuries.

The rest of the Sudan never acquired even a temporary civilization (1).

Iron was probably introduced from the Meroitic Kingdom about two thousand years ago. The Nubians are much the same now as they were 2000 B. C. It must be pointed out that the vast swamps of sudan on the White Nile rendered any direct communication with Egypt by this route impossible; but Egyptian influence passed southwards by a more easterly route up the Blue Nile into Abyssinia and thence to the Great lakes. The modern Nilotes disart the homs of their cattle into the same bizarre shapes that the Egyptians used in the Pyramid Age of Saggara 2700 B.C. The Congo burial customs also show Egyptian influence. It is said that no Negroes are represented in Egypt until after the Age of the Pyramids (2).

A.J. Ackell says (3) that the Wanyarga -Ennediarea which lying on the western of the Nile Valley; must hold the key to several problems that at present confront the student of prehistory and early history in the Nile Valley. One question to which Arkell particularly hoped to find the answer was how, on neolithic sites situated at two points in the Nile valley and separated from each other by approximately a thousand miles (vis. the Fayuum and the Khartoum) (4). (Fig. 12).

Arkell, A.J. agreed with M. Dalloni and Théodore Monod(5) that the stone implements of an unusual type, a semi-polished hollowcut adze (desigrated «gouge» by Miss Caton-Thompson in «The Desert Fayum»), and which had been found by him over a wide area west of Tibesti north-west of Lake Chad, probably spread to the slopes of that massif itself. He suggested after Theodore Monod that these two outstanding (Bilmas and Djado to Tummo) peculiarities of the Neolithic, and common to both found in Fayum and Khartoum, which must have come from the same source outside the Nile Valley, had probably come from the west. It therefor seemed resonable to expect to find a neolithic culture with these featurs in the area of the large Quaterrary lakes known to have existed on the eastern side of Tibesti, of which Great Wanyanga (Ounianga Kebir) is the best example suriving as a lake today.

⁽¹⁾ Gates, R. Ruggles: Human Ancestry, p. 213.

⁽²⁾ Tbid, p. 214.

⁽³⁾ Arkell, A.J.: Wanyanga; and an archaeological reconnaissance of the south-west Libyan Desert; the British Ennedi Expedition 1957. London, Oxford Univ. Press, 1964, p. VI.

⁽⁴⁾ Loc. cit.

⁽⁵⁾ Dalloni, M. and Monod, T.: Géologie et Préhistoire (Fezzan méridional, Kaouor et Tibesti). Mission scientifique du Fezzan (1944-5), tome VI, Travaux de l'Institut de recherches sahariennes de l'Université d'Alger. 1948, p. 133, 153-154.

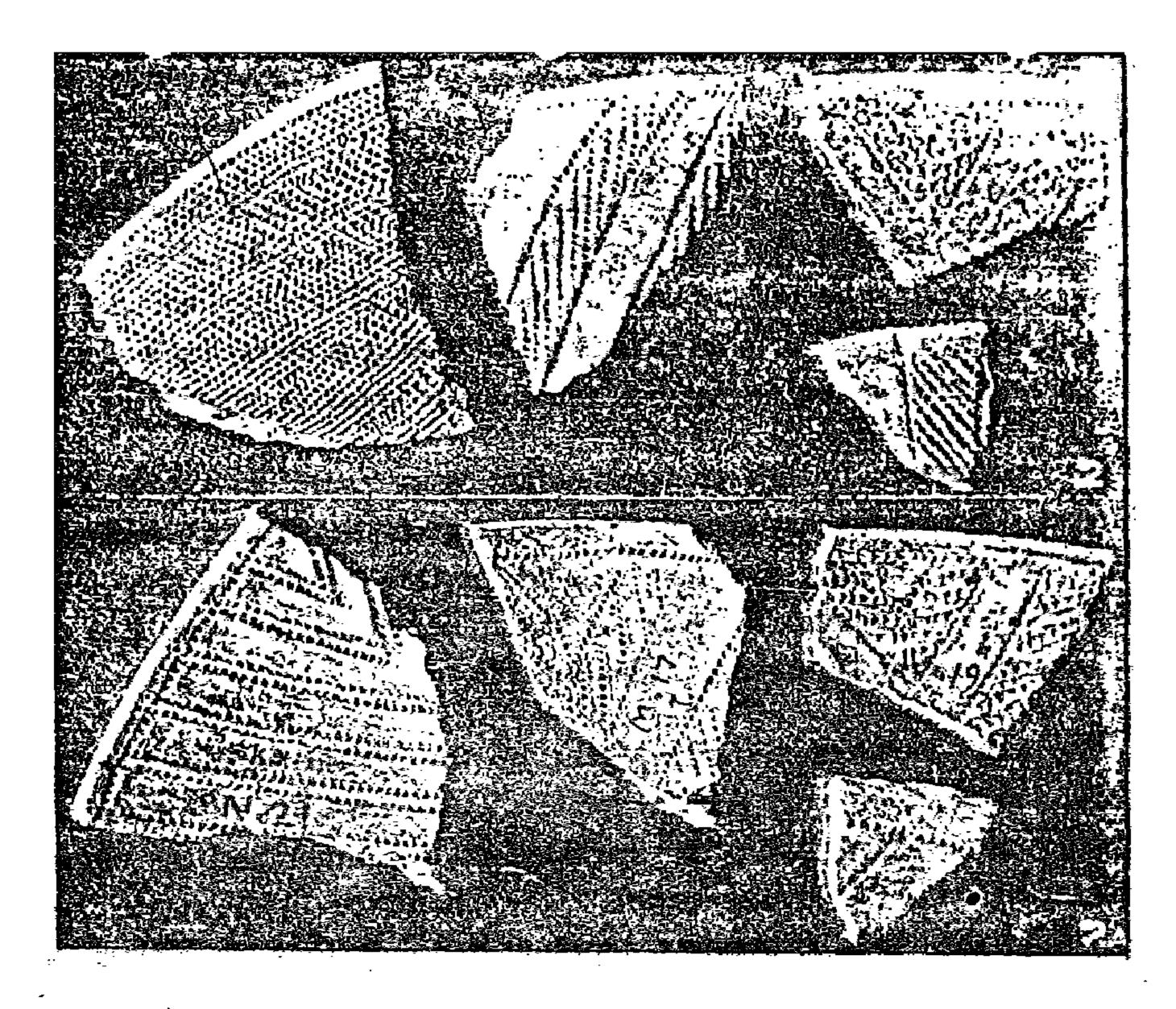


Fig. 12. Sherds from Saucers with impressed decoration

K.S. Sandford and W.J. Arkell said(1) that there was at Dibeira (before the construction of the High Dam at Aswan, 1960) a Sebilian beach, it had certainly closed before the 40-foot level was reached by the Nile, for this is undoubtedly the riverside habitation level and perhaps the flood level of Upper Sebilian times. At Darau the 40-foot level is Middle Sebilian fiaking site is at 45 feet, we can find it south of Edfu. This seems to limit the Middle Sebilian.

In lower, 20-foot levels (Edwah to Wadi Abdad) rolled Upper Sebilian implements still fail to appear in the gravels. There thus appears to be a considerable break in the Human sequence.

The lowest known Upper Sebilian site is at 33 feet, but the river was apparently then below 20 feet. This, with the striking relation of Upper Sebilian sites to rives silts at Dibeira West (in the Sudanese Nubia), suggests a temporarily greater rate of river-fall than obtain in

⁽¹⁾ Sandford, K.S. and Arkell, W.J.: Paleolithic Man and the Nile Valley in Nubia and Upper Egypt Chicago, Univ. of Chicago Oriental Institute Publications, Vol. XVII, 1933, p. 52.

recent times. The outstanding fact is the absence of Upper Sebilian implements from the 40-to 20 foot bars between Darau and Wadi Abdad(1).

The negro has not yet been traced bach into the Old Stone Age in the Sudan for certain, but the excavation of Arkell, A.J. (1949) of the mound just north-east of the railway station in Khartoum showed that it was a negro people who by making and using pottery took the first step towards civilization in the Sudan that we know of yet(2).

Its occurrence in the eastern Sudan on a route to Upper Egypt still used occosionally by camel thieves, suggests that futtern incised on it, first developed into the true rippled pottery typical of Badari(*). In Egypt and the Sudan there are a few minor fossil localities but only two have provided significant collections(*).

The links between the Pleistocene of the Mediterranean area and the tropical zone of East Africa are few. A part from the terraces of the Nile Valley which cannot be discussed in this paper and the climatic character of which is by no means clear, there are the Kharga Oasis,, Eamer and Ethiopia, providing stepping stepping-stone to Kenya and Tanzania (5). I think that Fayuum in the future will take its position in providing another link, but too many points of its Pleistocene succession are still a matter of controversy.

The bones which the early Khartoum negroes left on their camp were mostly those of antelope and fish. But for the indiscriminate use of firearms and the consumption by large hards of domestic cattle of such grass as comes up in the rains, there would no doubt be more antelope in the vicinity of Khartoum than the few gazelle that survive to-day, but it is probable hat there was more grass then owing to a greater rainfall (whatever the cause of the advance of desert conditions), or there would not have been such a high proportion of antelope (including buffalo) among the remains (6).

⁽¹⁾ Loc. cit.

⁽²⁾ Arkell, A.J.: A history of the Sudan; from the earlist times to 1821-2nd ed. 2nd pr. London, Athlone Press, 1966, p. 24.

⁽³⁾ Ibid, p. 38.

⁽⁴⁾ Loc. cit.

⁽⁵⁾ Zeuner, F.E.: The Pleistocene Period; its climate, chronology and Faural Successions. London, The Roy. Society, 1959, p. 208.

⁽⁶⁾ Arkell, A.J.: A' history of the Sudan, p. 26.

On the Blue Nile near Singa A.J. Arkell reports implements of Nanyukian or Kenya Fauresmith type from calcareous growelly sands in the river bed bared a tlower stage. The locality and horizon is that of the Singa «protobushman» skull and a variety of mammalian bones. The age probably corresponds broadly with that of the post-Acheulean or developed levallois «stage of the northern region» (1).

A specimen stated to have been that of a Negro was found in 1948 in Khartoum, near the rail-road station as mention before. Several skeletons had been buried in a mound along with Mesolithic stone tools and with pottery. According to McBurney, the Khartoum Neolithic began about 3,253 ± 295 B.C.(2) and the Mesolithic material, including the pottery, could hardly be much more than 500 years older(3). One skull has been partly described(4). It is Negroid, but to Coon, C.S.(5) it looks like the skull of a modern, local Sudanese, a mixture of Hamite and Negro, than like the skull of a full Negro: As these burials may not have been much more than a thousand years older than the earliest Egyptian mural representations of Negroes, the presence of a Negro or Negoid in the Sudan at 3,700 to 4,000 B.C. not surpoising.

In 1924 the theory of a northern origin of Man in Africa, was re-enforced by the discovery, made by W.R.G. Bond, of a Bushman-like at Singa, 200 miles south of Khartoum, on a bank of the Blue Nile. Grabham, G.W. who had studied the site geologically from the standpoint of rates of soil deposition caused by the overflow of the Nile, stated, in 1938, that it could not be less than 5,000 nor more than 10,000 years old. The skull, however, was completely mineralized, despite the fact that it is thought to be of fairly recent date.

In any event, the Singa skullcap is clearly as old as, if not older than, any known and competently dated Capoid skull found yet in South Africa. The skullcap is nearly complete, but the face is missing.

(3) McBurney: The Stone Age of Northern Africa. New York, Peliocene Books, 1960, p. 244.

(5) Coon, C.S. The Origin of Races. London, Jonathan Cape, 1963, p. 651.

⁽¹⁾ Andrew, G.: «Geology of the Sudan». In: Tothill, J.D. (ed.): Agriculture in the Sudan. London, Oxford Univ. Press, 1948, p. 84-128 (p. 106).

⁽²⁾ Calculated date from two date: C-753=5,060 ± 450 B.P. for charcoal from Shakeirab, and C-754=5, 446 ± 380 B.P. for skell from the same site. The average of the two is 5,253 ± 415 B.P., or 3,253 295 B.C., if 2,000 years are subtracted in conversion from B.P. to B.C. (Coon, C.S.: The Origin of Races, footnote p. 551).

⁽⁴⁾ D.E. Derry: Report of Human Remains ». In: A.J. Arkell: Early Khartoum. London, Oxford Univ. Press, 1949, p. 31-3.

The bone is thick (13 mm. on the parietals) and the brown ridges moderately heavy, with a distinct notch above glabella, like Sinanthropus and like the best infantile of the Bushman skulls. The forehead is narrow, but bulgin; the parietals also bulge, giving the brain case a pentagonoid appearance. The orbits were apparently rectangular. Morphologically the skull could have been that of a full-sized progenitor of a Bushman. It is brachy cranial (L. 186, B. 154, C.I. 82), but it may have been distorted. Even if, the index of 82 is correct, this does not invalidate the racial identification of the Singa skull because there are some living brachy cephalic Bushmen. So, the theory that ancestral capoids migrated southward from North Africa is true to goes back to the discovery(1).

BY WAY OF CONCLUSION

We can see that prehistoric civilization in the Nile Valley was the earlest one in Africa and to in great extend all over the world. Its history of living is still with any no interruption of dead period. The civilization in Egypt and in Northern Sudan was in connection start from the prehistoric period till at the moment as one civilization.

The industrial traditions of tropical regions in Africa during the later Palaeolithic, as far as can be judged at the present, appear to have been characterized by a greater degree of survival from earlier periods, and the centre of cultural evolution-and no doubt biological as well-seems to have moved to more temperate regions.

In late post-glacial times, however, this shift was reversed and the great cultural advances of the seventh to fifth millenia B.C., heralding the development of settled life, were quite certainly centred in the worm-temperate to sub-tropical regions of western Asia and Northern Africa-

The position as a whole may then be summed up as follows. Throughout temperate Eurasia a succession of climatic events can be recognized which go far to provide a chronological basis for a dynamic picture of early cultural evolution; south of this, however, cultural happenings of least equal if not greater significance can as yet only be integrated in the general pattern with considerable reservaions. In particular cases, however, it is frequently possible to offer a reasonable working theory of correlation.

⁽¹⁾ Shewika, Fareuk A. Gawad: «The African Capoid group; an anthropogeographical study». (In Arabic). African Studies Review, Caire, Vol. 6, 1977 p. 111-208.

It has remarked that the study of Egyptian culture leaves one with the impression that the Egyptians were a celever and ingenious people whose progress was stultified by the development of one the most rigid and highly centralized governmental systems the world has ever seen (1). The complete union of the religions men and of the state one, resulted in a correspondingly complete control over their subjects minds and bodies. And such a system can function successfully only by rigidly maintaining the status quo.

The Atrican prehistoric industries are essentially those of stone. Bone cultures play but a very small part indeed in Africa, there was no bone industry in the Aterian. Bone artifacts were but slightly developed in the Capsian. It is only in the Meso-Neolithic of the Sudanese regions and in the merolithic and predynastic periods of Egypt that there is any considerably number of objects out of bone.

Various sorts of stone were used for the polishedstone implements, but, as in Europe, the most popular were magmatic, eruptive or metamorphic. Rare rocks were sought out for ornamental purposes especially during the Neolithic. Towards the end of prehistoric times clay was used for making pottery throughouh Africa. The quite remarkable wealth of prehistoric art found in many parts of Northern African especially the east erea.

The occurrence of stone implements classifiable as Neolithic (by reason of the use of pressure-flaking, the presence of undoubted arrowheads, and here and there of ground axes), a similar distribution of pottery impressed with characteristic basket-work designs, and, finally, the distribution and content of the art provide evidence of a remarkably uniform state of pastoral culture (of cattle not of goats or sheep which were very rare) over vast areas from the Atlantic to the Nile.

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⁽¹⁾ Chard, Chester S. : Man in Frehistory, p. 279.

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F.A. GAWAD

Canbridge, Mar. 1980.