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Transliteration of the Arabic Alphabet

adopted by the Editors of *Sudan Notes and Records*

{ at beginning of word omit, hamza (') elsewhere	ذ	dh (coll. d)	غ	gh
	ر	r	ف	f
	ز	z	ق	q (coll. g)
ب	س	s	ك	k
ت	ش	sh	ل	l
ث	ص	s	م	m
ج	ض	ḍ	ن	n
ح	ط	ṭ	ه	h
خ	ظ	ẓ	و	w
د	ع	ʿ	ي	y

VOWELS

fatha	a,	lengthened	ā
kasra	i,	„	ī
damma	u,	„	ū

The *j* of the article always remains *l*.

The silent *t* (ﺖ) is omitted.

DIPHTHONGS

—ai (as in aisle).

—au (as in mauser).

NOTES

1. The system is not applied to well-known names, such as Khartoum, Omdurman, etc.

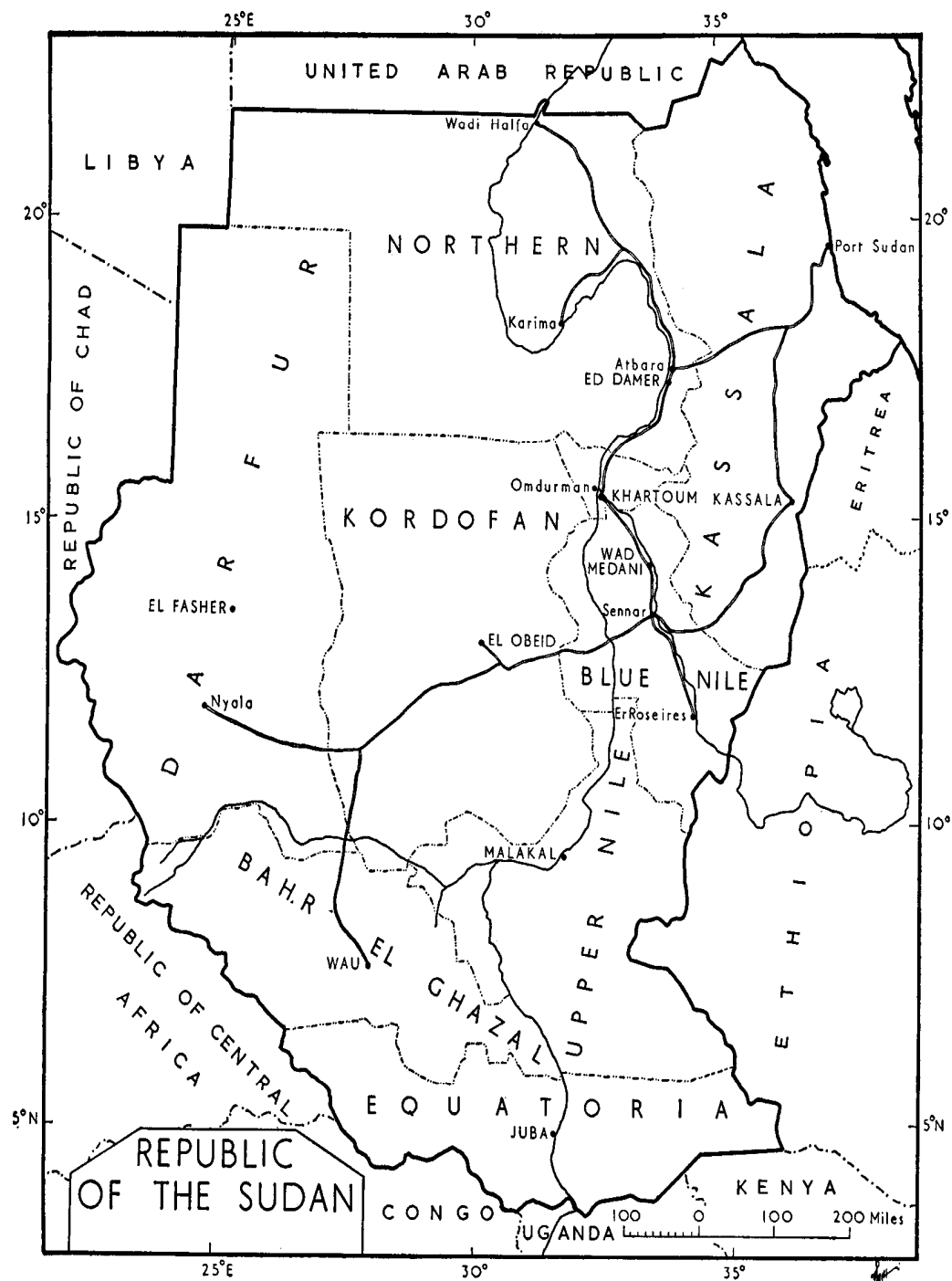
2. The vowel sounds of *e* in 'get' and *o* in 'hot' with the corresponding long vowels (*a* in 'gate' and *o* in 'home'), which occur only in the colloquial, are expressed by *e*, *o*, *ē*, *ō*.

e.g. beled, Mohammed, bēt (or beit), hōsh.

Ei may be used as alternative to show the long *ē*.

3. In geographical names the conventional spelling used by the Sudan Government Survey Department is followed, although not always agreeing with the above transliteration.

4. At present phonetic type is not available for proper reproduction of non-Arabic African languages.



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PRINCIPAL CONTRIBUTORS

T. ASAD : Department of Social Anthropology, University of Khartoum

M. S. BAYOUMI : Faculty of Agriculture, University of Khartoum

S. V. BELL : Department of Geology, University of Khartoum

F. DE LA C. CHARD : Professor of Electrical Engineering, University of Khartoum

J. L. CLOUDSLEY-THOMPSON : Professor of Zoology, University of Khartoum

P. E. H. HAIR : School of History, University of Liverpool

HASAN DAFALLA : recently Commissioner, Wadi Halfa

R. A. HENIN : Department of Economics, University of Khartoum

P. F. M. McLOUGHLIN : School of Business, University of Santa Clara

**MUDDATHIR ABDEL RAHIM : Department of Political Science, University of
Khartoum**

J. R. RANDELL : Department of Geography, University of Khartoum

R. C. STEVENSON : lately of the Church Missionary Society, Omdurman

A. J. WHITEMAN : Professor of Geology, University of Khartoum

SUDAN NOTES AND RECORDS

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OLD KHARTOUM, 1821-1885

by

R. C. STEVENSON

The Khartoum of the Turkiyya (*al-Turkiyya al-sābiqa*) lasted for a period of 64 years—about the same length of time that has passed from Kitchener's re-occupation in 1898 until now. In each case a city was built up from scratch. My aim in glancing back along these years is to try to look at Khartoum, at least to some extent, "in depth". Yet it is not readily apparent that there is much continuity, for of course the development of Khartoum suffered a complete break after its fall in 1885. It is not like some cities in Africa—Algiers, Kano, etc.—which have grown up naturally round older ones, with an "old quarter" and a new. It met its end from across the river as suddenly and surely as Pompeii and Herculaneum met theirs from lava and a hail of fire. The city which Kitchener founded anew arose upon its ruins—or rather arose as the rubble was gradually cleared away. It was scrapped and re-created. It was given a fresh start—but on the same site. The continuity lies in its situation, in its people, and in its functions.

Yet for this very reason the Turkiyya is a handy stretch of time to study—an era with a definite beginning and end. It is rather like studying an island, or a particular dynasty. Indeed, it *was* a dynasty, for the touch of Muhammad Ali and his successors rests upon it. It is in a sense a "closed" stretch, yet we must remember that certain parts of the Sudan, such as Suakin and the extreme north of Dongola, went on unconquered by the Mahdist forces into the new era. And although it is here taken as a unit, this does not imply that it had any particular unity in itself.

Khartoum in the last century sometimes seems shadowy and sometimes very real. Partly perhaps this is due to the inequality of travellers' accounts (some consisting of vague generalities and not telling us what we would really like to know, others fortunately more detailed) and their inconsistency—one traveller will praise it, and a year or so later another will hardly have a good word for it (not always unjustifiably, for it had many vicissitudes). Partly also it is because the Turkiyya has left few visible traces on the ground anywhere in the Sudan—Suakin, decayed and difficult of access, is the one place that does give us an impression of Turkiyya-cum-Arabian Red Sea style. Hill remarks¹ that, regarded culturally, Muhammad

¹ R. L. Hill, *Egypt in the Sudan, 1820-1881* (London, 1959), p. 3. Quotations from Hill will be taken from this book, unless otherwise indicated. For other works quoted, see the Bibliography at the end of this article.

Ali's Turks were among the most barren of all the northern invaders of the Sudan throughout the ages. For those who know only the Khartoum of today with its dual carriageways and ferro-concrete buildings it must require quite an effort of the imagination to picture what it may have looked like in, say, 1865. This applies even to those who knew Khartoum before the First or Second World Wars: the planned city, rustic and "colonial", even a bit "early Middle West" in many respects, but a good deal different from its predecessor. For indeed the Old Khartoum of the Turkiyya is much more the precursor than the lineal ancestor of the new.

Perhaps we should start by dealing with the name. The narrow tongue of land at the meeting place of the two Niles is locally known, we are well aware, as the Elephant's Trunk, *al-kharṭūm*, the actual point being given the name *ra's al-kharṭūm* which figures a good deal in the earlier travellers of last century. A few writers tend to give the impression that it is some sort of local word, but this is not the case. Its literary form is *al-khurṭūm*, and it means any sharp muzzle or snout, particularly of a beast of prey, but also of "nosing" animals like sheep and goats, and was undoubtedly only later applied to elephants. It is found in the Qur'ān (68 : 16) in reference to human beings : *Sanasimuhu 'alā l-khurṭūm*, "We'll mark him on his big nose". It can indicate a Cyrano-de-Bergerac kind of nose, and can be applied to those who put themselves, or are put, forward : *kharāṭīm al-gawm* "the chiefs of the people", *kharāṭīm al-niswān* "old ladies", i.e. nose-pokers of women ! The root also occurs in Rabbinic Hebrew and perhaps in Ancient Egyptian. We might also quote the verbal derivative *ikhrantama* "to raise the nose, be proud"; so, on the strength of this, perhaps today the city of Khartoum can claim proudly to raise its nose and not merely to push it forward between the Niles. Other explanations of the name Khartoum have been given from time to time. J. A. Grant, in Khartoum with Speke's expedition in 1863, thought it might be derived from the name of the safflower (*qurṭum*), which he records as "Gartoom". I have also heard a suggestion that Khartoum is a Shilluk word meaning "the place where the horns of a cow meet"—presumably Shilluk *karo* "to branch" and *tuy* "a horn", like *mugran* in Arabic. But these seem to be stretches of the imagination and I do not find them convincing.

My title is "Old Khartoum" in the sense of "the former city". It is beyond the scope of the present article to go further back—to the neolithic settlements excavated by A. J. Arkell in the vicinity or to the Christian capital of Soba close by. No doubt many sites in the neighbourhood were occupied and deserted many times before last century's city arose. But it may be worth while just to look at the area about the junction of the Niles as it appears to travellers and chroniclers in the preceding few centuries.

When Dongola fell at the beginning of the 14th century, the Christian kingdom of 'Alwa still held,¹ but the way lay open for a considerable southward Arab immigration, stretching down towards the Gezira—*al-Jazīra*, i.e. *Jazīrat Sinnār*, "the Island (Peninsula) of Sennar", of which Khartoum is the most northerly point—as the power of 'Alwa declined. The beginning of the 16th century (c. 1504) saw the end of 'Alwa and the rise of the Funj kingdom. The Jewish adventurer David Reubeni mentions Soba in ruins in 1523 with people living in "wooden dwellings", by which he probably means or includes huts of

¹ Its old capital, Soba, would appear to have fallen at or soon after this period. Cf. Crawford (1951), pp. 27-8.

stalks and branches.¹ Along the main Nile north of Khartoum, up the White Nile as far as al-'Ais (Kawa), and up the Blue Nile, Muslim holy men (many of Maḥasi origin) with their disciples now began to establish seats of learning, many on existing Christian sites. Thus in time sprang up such well-known centres as Ḥalfāya, al-'Ailafūn, Wad Medani and Arbaji.

These centres had varying fortunes, and some bore the brunt of the warfare of the succeeding two or three centuries. In 1784 Muḥammad al-Amin wad 'Ajib, nominal sheikh of the kings of Sennar over the Abdullāb of Gerri (Qarri) razed Arbaji, his own town, to the ground and slaughtered its inhabitants, because they had supported a rival. Before this, it was described as "the fairest town in the Gezira, populous and prosperous in trade, with fine buildings and schools of learning and religion, inhabited by men of wealth and well stocked with provisions".² The holy men who had settled along the White Nile suffered greatly, and their centres were abandoned or destroyed partly as a result of the hunger year, 1684, known as *umm lahm*, partly by Shilluk raids. About the middle of the 17th century, for example, a certain holy man known as "Ismā'il the lute-player" was killed at al-'Ais by the Shilluk together with more than forty of his disciples.

One of the Maḥas settlements was on Tuti Island and two well-known holy men were born there—Khūjalī ibn 'Abd al-Rahmān ibn Ibrāhīm in 1643 and Ḥammād ibn Muḥammad ibn 'Alī al-Mashaikhī, popularly called Ḥammād wad umm Maryam, in 1646. They were adherents of another holy man of Tuti, al-Arbāb al-Aja'id, who is said to have moved in 1690 from Tuti Island to the site of Khartoum "where he built the only house in that day which had any signs of permanency"³; we shall mention one of his descendants later. Before this the site of Khartoum is said to have been occupied merely as a camp for hunters and fishermen and to have been used as a halting-place for people crossing the river.

The village on the site of Khartoum is not mentioned by foreign travellers in the 18th century, but from about this time we find references to Tuti (e.g. d'Anville's map of Africa (1729) shows "Toutti" in its correct position) and especially Ḥalfāya, or Ḥalfāyat al-Mulūk as it later became known under the Abdullāb, which figures in the diaries of Poncet and Brévedent, Theodor Krump and James Bruce. Towards the end of the century, W. G. Browne, who was in Darfur in 1793-96, mentions "Emdurman . . . on the west bank of the Bahr-el-abiad and . . . at the place of union between that river and the Abawi" (i.e. Abbai, the Blue Nile), and Williamson's map of Africa (1800) shows "Emdorman" and "Halfaia" but omits Tuti.

The closing years of the 18th century and the early years of the 19th were marked by the decline of the Funj kingdom in a welter of civil wars which affected the area but which we cannot go into here. It was more or less in its final throes when Muhammad Ali, the Wali or Viceroy of Egypt, determined to try his fortune to the south for a variety of reasons—to recruit slaves in order, as Hill says, "to swell the black army of his dreams", to search for gold, to clean up the remnants

¹ For David Reubeni, see esp. S. Hillelson in *SNR*, xvi (1933), pp. 55-66, and Crawford (1951), pp. 28-9 and Appendix I. Crawford, p. 29 n. 40 quotes MS. D3 in MacMichael (1922) II, p. 227, No. 36, as showing that people lived at Soba as late as the beginning of the 17th century.

² MacMichael (1922), II, p. 370 (MS. D7, §XC).

³ Walkley (1935) p. 225. See also MacMichael (1922), II, p. 231 (No. 65); Hillelson in *SNR*, vi (1923), p. 206; Hill (1951), p. 59.

of the Mamelukes, to establish a firm presence on the upper reaches of the Nile and on the Red Sea coast, and to provide what he considered a healthy occupation for the more turbulent elements in his army.

The invasion expedition consisted of two parts, one under Muhammad Ali's third son Ismail which set out up the Nile valley in 1820, and a smaller branch under his son-in-law Muhammad Bey Khusraw, known as the *Daftardār* ("intendant of finance"), which later made its way across northern Kordofan to defeat at Bara in August 1821 the *magdūm* or representative of the Fur Sultans—that Magdūm Musallam who many years before had encountered W. G. Browne at El Fasher and favoured him with, as Browne puts it, "a rude stare, as an object he was unused to".

On 24th May 1821, Ismail's army, coming up the west bank of the Nile, camped at a spot opposite Halfāya (which, after an attack by the Shāiqiyya, had surrendered) and then moved upstream to a point near the present Omdurman end of the White Nile bridge, where he intended to cross the river. The Frenchman, Frédéric Cailliaud, who was with the expedition, says: "The army camped on the bank of the latter river [i.e. the White Nile] at a place called Omdourmān, near a wood of tall acacias bearing large pods and a white flower".¹ (These were no doubt *harāz* trees, *Acacia albida*.) Early on 27th May, Ismail began transporting his army across, an operation which took three days, until the afternoon of the 29th. Cailliaud describes how the crossing was accomplished with great difficulty and in the utmost confusion. As Walkley puts it:

For three whole days the surface of the water for a considerable distance up and down stream was covered with camels, horses, Turks and Arabs, all in an indescribable state of noise and confusion, and all struggling to reach the opposite bank. Some of the soldiers swam across, others supported themselves on blown-up skins and pieces of wood, others clung to their horses' tails, or climbed on the backs of camels. In this way 5,500 men crossed the river. Thirty men and 150 camels and horses were drowned, and the only thing to be wondered at is that the loss was not greater.²

G. B. English, an American who was employed as artillery officer in the army, says: "The army, on its crossing the Bahar el Abiud, encamped on the point of land just below which the Bahar el Abiud and the Nile [i.e. the Blue Nile, which was then thought, after Bruce, to be the main stream] join each other", and he goes across the point from one river to the other, drinking the waters and comparing the taste of the White Nile favourably with the Blue.³

Cailliaud says further:

This point of land, which forms the northern extremity of the peninsula of Sennar, where the army camped between the two rivers, is called *Rās el-Gartoum* or *el-Khartoum*. . . . The whole country is flat and uncultivated, especially on the banks of the Blue river. At half a league [about 1½ miles] south of the point of *Rās el-Gartoum* we saw, near the Blue river, the first habitations of Sennar. At the sight of the army the inhabitants took to flight.⁴

¹ Cailliaud (1826), II, p. 198, my translation.

² Walkley (1935) pp. 226–7 (from Cailliaud (1826), II, pp. 199–201). G. B. English (1822), pp. 148–9, gives a few more details. See also the account in Douin (1944), pp. 156–9.

³ English (1822), pp. 149–50.

⁴ Cailliaud (1826), II, pp. 201–2 (my translation). He includes "el Gartoum Touty" in his list of towns and villages, III, p. 359.

Not all fled incontinently, however, if we are to accept this statement of the writer of the *Funj Chronicle* :

Then he (Ismail) crossed the river and camped at el Khartoum, and was met by the *feki* Muḥammad walad 'Ali, the *khalifa* of the *feki* Arbāb, and treated him with honour and granted him peace ; and he did not stretch forth his hand against the districts which he crossed excepting only to obtain provisions.¹

The *feki* Arbāb (a descendant of al-Arbāb al-Ajaid mentioned above) was, also according to the *Chronicle*, to be killed a few years later, as will be noted below.²

A day or two after their difficult crossing, Ismail's troops advanced and by mid-June the Funj ruler had surrendered, Sennar was taken, and the Turko-Egyptian regime was established in the region. A Province of Sennar was formed which included the Gezira (and therefore Khartoum) and also Ḥalfāya. Sennar was the headquarters of the troops and proved disastrous to their health during that first rainy season of 1821. A little later that year³ Ibrahim Pasha, the eldest son of the Viceroy, arrived at Sennar to assist Ismail (somewhat to his dismay), and in the next few months (he had to retire owing to illness and was back in Cairo on 6th February 1822) carried out a reorganization of the army and advised on arrangements for taxation. Towards the end of 1821, with the coming of the dry season, both Ibrahim and Ismail were occupied with campaigns to the south of Sennar, and meanwhile a committee of three began work on a new system of taxation.

The administration of the area involved establishing, as had been done further north, the usual *kāshifliks*, or districts under *kāshifs*, i.e. army officers, each with a small body of troops, who were also charged with administrative duties, particularly at this moment with the collection of taxes. A census of the Gezira villages for purposes of taxation was carried out. Under each *kāshif* were a number of *qā'im maqāms*, under-officers also with small forces, in charge of from fifteen to thirty villages each. I am not sure exactly when these small bodies of troops were first stationed in the different localities of the Gezira, including Khartoum, but no doubt some were posted soon after Ismail took Sennar, and others probably after Ibrahim had arrived with more troops and began his reorganization. Linant de Bellefonds mentions a certain Muḥammad as *kāshif* of Ḥalfāya in December, 1821. Certainly by 1822 there was quite a number of them, and in an account of the revolt which followed the murder of Ismail at Shendi (late October 1822) we read of *kāshifs* at Khartoum, Ḥalfāya, al-'Ailafūn, and of a small garrison at Karari.⁴

¹ MacMichael (1922), II, p. 386 (MS. D7, §CCIX).

² Since the *fekis* Arbāb and Muḥammad walad 'Ali were both, according to these accounts, living in the Khartoum area at this time, I can only assume that when the chronicler describes Muḥammad as Arbāb's *khalifa* he means either that Muḥammad was (eventually) the successor of Arbāb, or that he was Arbāb's deputy during the latter's lifetime, or perhaps both. (For *khalifas* as regional deputies, cf. Trimingham, *Islam in the Sudan* (London, 1949), pp. 194, 202-3). In treating this passage from the *Chronicle*, Douin (1944) p. 159 renders *khalifa* as "successeur", but does not explain the difficulty.

³ Cailliaud (1826), II, p. 318, Douin (1944), p. 211, Hill (1951), p. 177, and Crawford (1951), p. 280 all give the date of Ibrahim's arrival at Sennar as 22nd October. In *Egypt in the Sudan* (1959), p. 11, Hill says he reached Sennar at the end of August ; Holt (1961), p. 43, merely says "towards the end of 1821".

⁴ R. L. Hill, "An Unpublished Chronicle of the Sudan 1822-41", *SNR*, xxxvii (1956), pp. 3-4. (A chronicle written in the 1840s.)

We could, therefore, put the "founding" of Khartoum—as a military post—at this time, i.e. the stationing of a *kāshif* and troops there (1821–22), but nevertheless Khartoum was then merely one of such posts and in no sense a headquarters.

During the winter of 1821–22 isolated attacks had been made on the Egyptian troops, and one uprising took place at Halfāya in February 1822 as a result of the false news that Ismail had been killed and his army lost in the hills south of Sennar, but this was quickly suppressed. Restiveness under the new burdens of taxation continued to grow, and Ismail's murder sparked off widespread revolt along the Nile valley from al-Damer to Sennar. Ismail had already, in March 1822, moved his headquarters to Wad Medani. Local successes against the weaker garrisons were achieved, and only Wad Medani managed to hold out. As regards the Khartoum area, we read:

The *kashif* of Khartoum at the confluence of the Blue and White Niles (now the capital of Upper and Lower Nubia but at that time a great forest with scattered native huts) was also menaced by the local people as well as by some Arab tribes from the west of the White Nile who, after dislodging the Turkish soldiers from Karari, crossed the river at a point about two hours south of Khartoum and threatened to besiege the place from the landward side.

Even here the *kashif* had no boats. He explained to his men their critical position and their chances of reaching Wad Medani where, in addition to the garrison of 400 men, other detachments of fugitive soldiers were collected. Fortunately the people of Gereif, a village to the east of Khartoum, had shown no hostility and their shaikh, Ghiabradar (Jabr al-Dar?), came and offered his services to guide the garrison to Wad Medani.¹

Mahū Bey was still holding Berber, but the position was precarious. From Kordofan Muhammad Bey the Daftardar reached the Nile with a striking force in December 1822, and carried out extensive reprisals, burning and killing as he went, cowing the Ja'liyyin and then turning south. At Khartoum there was living that descendant of al-Arbāb al-Ajaid who had moved there from Tuti Island in 1690, the *feki* al-Arbāb wad Kāmil wad al-Faqī 'Alī already referred to. It is said that the Daftardār ordered him to be blown to pieces by being tied to the mouth of a cannon,² a method which, with impalement, the regime had introduced into the Sudan. He burnt a deserted Halfāya, slew many at Tuti and passed on, subduing resistance at al-'Ailafūn and relieving the garrison at Wad Medani. As Hill puts it, "The Daftardār had done his ruthless work; for the moment the Sudanese lay inert under his bloody hand".

At this time, then, there was very little on the site where the city of Khartoum was to develop—a feki's house and mosque and a village of scattered huts, and this was no doubt what Cailliaud got a glimpse of 1½ miles from the junction of the two rivers. One may expect that a little fishing and cultivation were carried on. It is likely too that some simple huts were built to house the *kāshif* and his men. None of the foreign travellers (nor, so far as I am aware, any native chronicler)

¹ R. L. Hill, "An Unpublished Chronicle of the Sudan 1822–41," *SNR*, xxxvii (1956), pp. 3–4.

² Walkley (1935) p. 227 (who says that the Daftardār also destroyed his mosque), Hill (1951), p. 59. See MacMichael (1922), II, p. 391 (§CCXL of MS. D7); however the Chronicle appears to attribute this act to the Daftardār's successor, 'Uthmān Bey, in 1824. Hill (1959), p. 19, says "The Egyptians had killed a holy man who lived there and stationed a *kāshif* in his place" but, as we have seen, it appears that a *kāshif* was stationed there *before* the Sudanese revolt and the Daftardār's attack.

mentions any large centre there as compared, for example, with Halfāya. I mention this because a slight mystery with regard to Khartoum is created by one reference to the existence of a large settlement there before the Egyptian occupation. Antoine Brun-Rollet, an explorer and trader and later Sardinian vice-consul, who lived for many years in the Sudan, states in his *Le Nil Blanc et le Soudan* (Paris, 1855), p. 103 :

Carthum était déjà autrefois une ville assez considérable ; les Chelouk y entrèrent de nuit, il y a environ quatre-vingt-trois ans, massacrèrent ses habitants et la réduisirent à néant. Lorsque les Turcs y vinrent, il y a trente-quatre ans, pour lui rendre le rang qui devait lui valoir sa situation, ils n'y trouvèrent que trois huttes et un grand cimetière.

He is supposed to have got this from an old chronicle, now lost; G. Lejean, in Khartoum in 1860, was told—too late to consult it—that the secretary of the Khartoum *dīvān* had a copy. It is difficult to know what to make of this story ; in many ways Brun-Rollet was a keen observer, but he was also a bit of an adventurer and in some matters prone to exaggerate. In the absence of other evidence I think it probable that the large cemetery which the troops are said to have found may well refer to the neighbouring Soba (East and West),¹ and that there has been some confusion between this and no doubt real Shilluk raids which, we have seen, took place from time to time. At any rate, it is evident that recent historians place no confidence in such a legend as this. P. M. Holt seems sure that there was no large settlement previously on the exact site, for he says (and here we are anticipating its growth) :

Thus Khartoum developed in the space of sixty years from an insignificant fishing village into the most populous town in the Sudan because it was the centre of the administration. Although its site is ideally placed to command the Nile routes and to provide a market for the agriculture of the Gezira, it had never previously been a great centre of population.²

And Hill (p. 19) states :

A small hutted village stood on the banks of the Blue Nile about a mile from its junction with the White Nile. . . . The village had no other importance than its commanding position.

The value of Khartoum's geographical position was soon to be better recognized. These were years of confusion and depopulation. Soon there was a change of command. The Daftardār was succeeded as commander-in-chief in September 1824, by 'Uthmān Bey Jarkas al-Birinji, an old Mameluke, who brought in additional troops from the newly-formed regular army, the *nizām al-jadīd*. At or near Omdurman he took over from the Daftardār, who left for Cairo, then crossed over to Khartoum,³ where he camped, and soon went off to Wad Medani on a tour of inspection. It appears that he quickly realized the strategic value of Khartoum with its commanding position between the Niles at the head of the Gezira ; his visit to Wad Medani convinced him that the latter, by comparison, was unsuitable to continue serving as a headquarters,⁴ while Sennar had already proved unhealthy

¹ Werne (Eng. trans. 1849, p. 68) mentions brick remains at Burri, "where the traces of a very great colony are extant" ; cf. Lejean (1865), p. 31.

² P. M. Holt (1958), p. 13.

³ Where he honoured one sheikh and killed another : see MacMichael (1922), II, p. 391 (MS. D7, §CCXXXVIII-CCXL).

⁴ Its situation in the midst of a still restive, depopulated and famine-stricken Gezira, and the fact that it had been cut off in the recent revolt, may well have daunted him.

as well as risky—experience had shown how easily it could be cut off. So “in this village” (Khartoum) says Hill, “‘Uthmān saw his future capital, and he built a mud-brick citadel, the first public building in Khartoum” (p. 19). This would have been during the winter of 1824–25. The Viceroy approved the site in a communication dated 16th December 1824.¹ We may regard this as the date of the establishment of Khartoum as official headquarters of the two provinces of Sennar and Kordofan.²

‘Uthmān’s term of office was very short. He died at his new headquarters soon afterwards—in March 1825, according to Hill, but 11th May according to Holt; however, his death had been kept secret for a time. Giovanni Brocchi, an Italian geologist who arrived in Khartoum in June 1825, has this to say regarding the choosing of the new headquarters:

Osman Bey, morto ne’ giorni scorsi, e comandante delle truppe fece in questo paese il quartier generale, preferendolo a Sennaar, como luogo di aria meno insalubre nel tempo delle piogge. (*Giornale*. . . (1843), Vol. v, p. 160.)

For the most part, says Brocchi, Khartoum was like other Nile villages, with dwellings of mud, mud-brick, grass and stalks,³ “ma l’abitazione fatta costruire dal Bey è la sola fabbricata di mattoni cotti legati con calce” (ibid., p. 205). So a little permanent building was beginning. It appears too, that trade was now beginning to come to Khartoum or to pass through it, brought by camel caravans which were now using routes not before attempted. About this time Rüppell saw some of these at “Dabbe” (Debba):

Am Brunnen Webri sah ich ganz kleine Handelskaravanen vorbeiziehen, die von Dabbe über Gummer nach Kardum gingen, ein Weg, den vor wenig Jahren kein Kaufmann wagen konnte.⁴

‘Uthmān was not regretted; the new rulers had, it seems, learnt nothing from the Sudanese revolt, and he left behind a reputation for merciless brutality and extortion. After his death Maḥū Bey Urfalī (then governor of Berber) was temporarily in charge. He took up his residence at Khartoum, but stationed his troops at Gubbat Khūjalī across the Blue Nile, a usual military camping-place at this time. MacMichael (1922, p. 423) notes that “it was healthy, and troops could easily be marched thence to Berber Province”. No doubt, in any case, barrack room was still insufficient in Khartoum itself. Maḥū Bey, who was a Kurd, was of a different stamp with common sense and an aptitude for administration. He showed moderation, initiated a more lenient policy as regards taxation, and did much to resettle and feed the population of the Gezira after the ravages of the past years.

¹ Hill, p. 19, n. 3.

² Berber was a separate command. Kordofan was detached in 1825, but put under ‘Alī Khūrshīd (see below) in 1832.

³ “Eso [i.e. Khartoum] è fabbricato sul modello degli altri villaggi di queste parti; vale a dire le case sono costrutte di mattoni crudi e costituite da una sola camera, a cui in parecchie si aggiunge un *retraite*, per lo più molto angusto, che serve di ripostiglio. Esse non sono contigue, e tra esse si frappongono capanne fatte di canne, o di fusti di *Asclepias procera* [= *Calotropis procera*, Dead Sea or Sodom apple, ‘*ushar*’ rivestita all’ esterno di fango, e coperte da un tetto acuminato di paglia, o di quella graminacea, che chiamasi *Alf* [= *Halfā* grass, *Desmostachya cynosuroides*].” (ibid.)

⁴ *Reisen in Nubien, Kordofan* (etc.) (Frankfurt a/Main and Leipzig, 1829). He adds that this particular route took 11–12 days, that the track was open and free from rocky defiles, but that he could glean no information about the individual stopping-places. (Webri was south of Ambukol (near Korti), half-way across the Nile bend.)

The new headquarters began to grow. Maḥū is credited by the *Funj Chronicle* with starting work on the government buildings which were to become the *ḥikimdāriyya* or governor-general's quarters. A trader, J. Chiron, says of Khartoum in 1824-25 that this provincial centre had grown from a village in two years.¹ But the Sudan was taking its toll—dysentery, malaria, and later cholera and typhus. Brocchi, whom we have mentioned above—one of the many foreigners who were to be engaged in prospecting Muhammad Ali's Eldorado—tells us that over 300 men of the Sennar garrison died of malaria in 1824; and he himself died in Khartoum in 1826.

Needed by the Viceroy, Maḥū Bey was recalled to Egypt in 1826 (he died in 1828). Among other things, his name has been perpetuated in the big *ḥarāz* tree which stood on the White Nile—Maḥū Bey's tree, later (but only in the 20th century) known as "Gordon's Tree"—"under which the Bey is credited by local tradition with holding merry picnics" (Hill, 1951, pp. 227-8). He was succeeded by 'Alī Khūrshīd, who was appointed in March 1826 and arrived in June of that year.

In the first years of his long governorship which lasted until 1838, Khūrshīd pressed by the Viceroy, was much occupied with raids to find slaves, penetrating as far as the Sobat, and Khartoum was still small and primitive. Lord Prudhoe, who reached Khartoum on 10th March 1829, in the course of a journey to Sennar, gives this description:

KARTOUM is situated on the Bahr-el-azrak, about two miles from the junction with the Bahr-el-abiad; it has only sprung up into a town within four or five years, in consequence of being fixed upon as the residence of the Sandjar [=sanjaq] or governor, who is lodged in a tolerable house of mud. There are about thirty other mud houses in the town, the rest being built of doorah-stalks; both with respect to walls and roofs they resemble small wheat-stacks or bee-hives.²

Rather shortsightedly, he does not seem to appreciate its geographical position, for he says: "There are no trees" (we note in passing that this conflicts with the description given above of "a great forest")³ "and the position appears to have been chosen for its bare, ugly plain". He goes on:

There are barracks for the Nizam (800), whose commander is the Kaimacam, lieutenant-colonel. . . . The natives are of two sorts, the free cultivators and the Mowelled. These latter are a peculiar race: they are descendants of slaves, who from generation to generation live at large, and pay their masters monthly a part of their gains, which the men derive from labour and the women too often from prostitution.

A small market was already becoming established:

The bazaar of Khartoom consists of twenty sheds [probably *rakūbas*], where corn, coffee and black sugar are sold at a high price; and where are retailed a few looking-glasses and glass beads for necklaces and bracelets—

¹ Hill, p. 19. Part of the MS. of his itinerary has been translated by Hill and was published in *SNR*, xxix (1948), pp. 58-70.

² *Journal of the Royal Geographical Society* (London), v (1835), p. 38.

³ If there were scattered trees (probably acacias) in Khartoum in 1822-23, they might well have been cut down as Khartoum grew. Lord Prudhoe mentions *ḥarāz* trees (*Acacia albida*) on the banks of the White Nile, near the confluence, where he had a breakfast picnic. (Cf. Cailliaud, quoted above.) And there must, I think, have been some *sanj* (*Acacia arabica*).

ornaments generally worn. Every article of luxury comes from Cairo, and during its journey doubles or trebles its price. Occasional arrivals from India bring preserved ginger, sugar-candy, etc.; but these supplies are rare and small in quantity.¹

He describes a dinner-party given for him by Khūrshid, and has this to say of his host :

Courschid Bey is a middle-sized man, of rather a severe countenance, but with much conversation; he had returned from a *gazwah* (incursion) [i.e. *ghazwa*] in the Fazoogle country, above Sennar, whence gold is brought, and had levied contributions by taking all the gold, cattle, and slaves he could lay his hands on. He said the people, though armed with spears only, fought with great bravery, but that they were such savages, that husbands killed their wives and mothers, their children, to prevent their being made slaves by the Turks. . . .

And next day, apparently, "some slaves taken at the Fazoogle *gazwah* were sold by auction at the governor's house, fetching nine dollars each; a woman and a small child reckoned as one man". (Maria Theresa dollar = 20 PT.)

It was Khūrshid who did most to get Khartoum established as a capital. He began the following year (1830) to build brick buildings, including a mosque, and to encourage the townspeople to build permanent houses. Thus, according to the *Funj Chronicle* :

Then Khurshid returned to el Khartoum [the year referred to is 1830] and began the building of the mosque in the same year, and ordered the people to build houses, for most of them lived in tents of hair-matting and cowhide and there were no buildings of brick, excepting those of the family of the *feki* Arbáb near the mosque and those of the families of the *Kaḍis* and of the *feki* Ḥammadnulla and those of the BUDANÁB [a branch of the Maḥas].

Similarly he ordered work to be started on barracks for the troops and storerooms for the equipment of the *Gehadía* [troops of the *nizam al-jadid*]².

Work proceeded apace (much of the brick coming from the ruins of Soba) and the chronicler speaks of the energy shown in building the mosque and dwelling-houses. MacMichael says, in reference to this passage, that "the making of Khartoum into the official capital of the Sudan dates from this time (1830)". Strictly, however, this official designation comes a little later. From the beginning of Khūrshid's term of office as governor of Sennar (the term used is *Sinnār ḥākīmī*), his administrative gifts and his favour with the Viceroy led to other provinces being brought progressively under his control at Khartoum: Berber in 1826, Kordofan in 1832, Dongola in 1833. He was now (Hill says 1833, but Holt gives the date as February, 1834) raised to the grade of Bey (though Prudhoe calls him Bey in 1829 he was still then an Aghā) and made "governor of the region of the Sudan" (*Sūdān iqlīmī mudīrī*),³ i.e. appointed *mudīr* of the four provinces, with Khartoum as their capital. In 1835, having been summoned to Cairo to consult with the Viceroy, he was promoted to Pasha and returned to Khartoum with the new style of *ḥikimdār* (Turk. *hükümdar*), or Governor-General.⁴ (Provincial governors were now styled

¹ *Journal of the Royal Geographical Society* (London), v (1835), p. 39.

² MacMichael (1922), II, p. 395, §CCLIX. [My brackets.]

³ "Sudan its-region its-governor", the Turkish "qualifying relationship" construction. Cf. *Sinnār ḥākīmī* above.

⁴ Establishing himself with a certain *panache* in spite of the lack of many domestic comforts—see Hill, p. 35.

mudīr.) It took a little time for the term "Sudan" to establish itself in this connection, when people had been used to thinking of Sennar; Hill tells us that the British ambassador at the Porte used "Sennar" for "Sudan" as late as 1843—he was evidently not up to date.

So the "founding" of Khartoum (for which authors have given various dates) went through a series of stages—a small military post in a village (1821-22), its selection by 'Uthmān as headquarters with the approval of the Viceroy (1824), its further development under Khūrshīd (1826 onwards), until its elevation to become the capital of four provinces by 1834.

Since my subject is Khartoum itself, I do not want to enter too far into questions of general administration. However, I think it is relevant to note that Khūrshīd's main task was to try to bring some prosperity to a shattered and ruined countryside. Apart from his regular seasonal slave-raids and his views on those unenlightened people who were so awkward as to ensure that their wives and children did not fall into his hands, he is generally regarded as a capable administrator, continuing in other ways the work of moderation begun by Maḥū Bey and building upon it. He convoked assemblies of Sudanese notables in Khartoum, took further steps to encourage refugees to return to their homes in the Gezira and elsewhere, and did his best to bring about some sort of ordered government. There was a big increase in external trade and a strange variety of coins began to circulate in growing towns like Khartoum, although in the countryside the government had to collect much of its taxes in kind. There were other taxes on goods: as early as 1825, Hill tells us, there was a taxing station at the junction of the two Niles where dues were paid on goods from Kordofan via the White Nile.¹ At this period nearly all Sudan exports were state monopolies. The state trading monopoly, which was introduced in 1824 (and not abolished till the 1840s), at first covered only gum arabic, ivory and ostrich feathers, but later indigo and other products were added. It was extremely unpopular with European merchants who were trying to obtain trading rights in the country.² Khartoum had three merchant communities—Turkish, Egyptian and Sudanese—each with its recognized *sirr al-tujār*, a senior merchant as the community representative; this was an old pre-Turkiyya feature of trade centres, now retained by the regime.

By Khūrshīd's time there had come from Egypt foremen cultivators and artisans, blacksmiths, masons, carpenters, growers of indigo and tanners of hides. From Egypt itself many Egyptians were now being sent to Europe for study and technical training. Among those who left Egypt in October 1829 and returned four or five years later I find the names of four Sudanese.³ One went to London to be trained in silk-weaving, the other three to France, the crafts they studied being given as sword-making, the making of broadcloth, and the making of sealing-wax. I have no evidence to show whether any of them returned to the Sudan. Indigo plants were built at al-Kamlin and elsewhere, and attempts were made to start various other industries. Several failed, but sugar, indigo and the gum

¹ pp. 41-2, from Brocchi (1843), p. 190: "A Chartum al passaggio del Fiume bianco havvi una Dogana, ove si paga la tassa per i generi che vengono dal Cordofan, e da Suakem, e pegli schiavi, di cui si fa commercio".

² Nevertheless some were given privileges, e.g. Vaissière, Chiron, Petitjean (Hill, p. 78). Brun-Rollet worked at first with Vaissière.

³ J. Heyworth-Dunne: *An Introduction to the History of Education in Modern Egypt* (London, 1938), pp. 172-3. For students' careers, see also Prince 'Umar Tūsūn: *Al-Bi'thāt al 'ilmīyya if 'ahd Muḥammad 'Alī . . . 'Abbās . . . wa Sa'id* (Alexandria, 1934).

trade flourished. The first consignments of various kinds of fruit trees were sent from Egypt at Khūrshid's request in 1833. The forest woods of the South were as yet beyond the reach of the Egyptian occupation, but *sant* wood was available, and with the setting up of shipyards at al-Manjara on the White Nile (near Wad al-Shala'i), at al-Kamlīn, and another in Berber Province perhaps near the 6th cataract at Sabalōka, a boat-building industry was started and various types of craft made their first appearance on the river.

It cannot be said that Khartoum looked much like a capital as yet. E. Combes, a French traveller who was in Khartoum in 1834 and who in other respects paints an overdrawn picture of developments under Khūrshid, remarks that "Khartoum n'avait pas encore la dimension d'une capitale, mais elle était déjà la première ville du Soudan".¹ But it was growing rapidly, and much was due to its importance as a route centre with the expansion of trade: Combes mentions busy markets and numerous shops and coffee-houses. A. T. Holroyd, who also gives us a good description of El Obeid, was in Khartoum in 1837 and writes as follows:

[It] has risen rapidly into importance at the expense of Shendi and Sennār, and is now a place of considerable trade, being convenient as a rendezvous for the slave-caravans from Abyssinia, Sennār and Kordofān. It contains 15,000 inhabitants, including about 1,600 soldiers and their families. Parts of it are regularly built. Many of the houses are large and isolated, enclosed by a garden. They, as well as Khūrshid Páshá's palace, which is by no means striking, are built of sun-burnt bricks. The bázars are irregular, small, and confined, and, when the troops are absent, extremely ill-supplied. The principal articles of consumption are shoes, calicoes, printed goods, sugar, rice, broad cloth, pistol-belts, saddles, worked saddle-cloths, a little tea, crockery, hardware, *mishmish*, *kamar-ad-dīn*, etc., and a considerable trade in slaves is carried on both by auction and private contract. Just outside the bázár is the market for vegetables, bread, fruit, sugar-cane, butter, dates, grain, straw, grease for the head, etc., etc. And here stands the frame to which criminals are suspended when executed, complete with rings and accommodation for three persons.²

European visitors were increasing: the geologist Russegger, the botanist Kotschy, the engineer Ferdinand Werne, Ignaz Pallme (who went to Kordofan on a business exploration) and others—some commissioned by the Viceroy, some merely curious travellers—all appear about this time or soon after. A colourful figure in Khartoum in 1837 was the German traveller Prince Herman von Pückler-Muskau. He was a bit of a swashbuckler. He bought an Abyssinian girl named Maḥbūba in the slave market in Cairo and took her around with him—Hill remarks that the prince was "a romantic character and a handsome man". He wrote rather an entertaining, if somewhat naïve, account of his travels, *Aus Mehemet Ali's Reich*, which was published in Stuttgart in 1844 in three volumes. (Travellers tended to be expansive—Russegger's runs into four volumes and an atlas.) He describes what he considers the mean housing of Khartoum:

Its lofty mosque and battlemented walls give it an imposing appearance at a distance, but a close approach deceived us, and, like all the towns in this region, its buildings were only rude erections of clay without any dressing.

¹ *Voyage en Égypte* (etc.), (Paris, 1846), II, p. 124.

² *Journal of the Royal Geographical Society* (London), IX (1839), p. 167. The French *savant*, Jomard, mentions 400 or 500 houses in 1839.

The environs on this side [he was about to cross the Blue Nile to the town] are chiefly desert, or fields destitute of trees ; in the immediate vicinity alone we saw a few gardens, and, indeed, we had no right to expect more, for it was only within the last ten years that this capital of Soudan first rose up in the desert. . . .¹

This contrasted with the outward pomp of officialdom ; he was led to a house prepared for him, where he saw a "strange and peculiar medley of splendour, dirt and poverty" :

Its external walls were of clay, having a high, ornamented gate-way, through which we entered by a verandah into an apartment of considerable size ; the roof, however, was formed of rough beams, and the floor of beaten earth, which a slave watered every two hours, from large ox-skins, in order to lay the dust. The divan, which was raised a foot, extended along three sides of the room, being nothing more than an elevated floor with a wooden ledge, but was nevertheless, covered with a profusion of the richest carpets, and soft cushions of variously-coloured silks. The ground near the divan was spread with those beautiful mats of the palm-leaf for which Soudan is famous. The walls of this palace had lately undergone the distinguished luxury of white-washing, but they had already assumed the prevailing mud tint. . . . [The only other objects in the room were zeers and gullas]. . . . A dozen richly-dressed but barefooted attendants awaited my orders in the saloon, and presented me with splendid pipes, coffee, and sherbet, in costly vessels.²

Pückler-Muskau was very soon visited by Muṣṭafā Bey, the governor of Khartoum, who "was attended by a numerous retinue, and having twice cordially embraced me, seated himself beside me on the ottoman". He goes on :

After a quarter of an hour Khourshid Pacha himself came, attended with still greater pomp. . . . Like all the grandees of Egypt, Khourshid Pacha is a person of polished manners and the most winning courtesy, but he bore evident traces of the effects of the climate, and had a feeble, sickly appearance. . . . He was treated with almost greater demonstrations of outward respect than even Mehemet Ali himself, and his physician [an Italian], when he received the Pacha's permission to be seated, did not venture to occupy any place but a mat on the floor.

Later on he paid a return visit to Muṣṭafā Bey:

I found his house furnished with glass windows, the only one in Khartoum, except the Harem of the Governor's [he means the Governor-General, Khūrshīd], which enjoys this luxury.

He is a little contemptuous of the market but, surprisingly, talks about "regularity" in the plan of the town; Holroyd, we have seen, says that "parts of it are regularly built", but most other travellers say it was higgledy-piggledy without any special plan. He also mentions the mosque : "A new mosque which was only half finished, built of well-burnt clinkers and having a lofty tower, even promises to be handsome, and suited to its destination". In 1829-30 Khūrshīd had had a mosque built, but with the growth of the town he pulled it down seven years later and built on the same site this larger one of fired bricks, the foundations of which lie about 300 yards south of the present Mudiria. Pückler-Muskau tells us, too, that he rested in a large vineyard "where good purple and white grapes were set before us" and he

has something to say about the crocodiles, which were always a menace. There was one particularly large one, known as "the Sheikh", who was equally feared and venerated—"to give chase to 'the Sheikh' would be considered a crime, though he himself manifests little gratitude for the reverence paid him, having already devoured many victims".

Among its official buildings Khartoum possessed a military hospital. Europeans and Egyptians were employed as doctors or dispensers. The French doctor Clot Bey, variously regarded, who went to Egypt in 1825, had founded the hospital and medical school of Abū Za'bal near Cairo and was training a number of Egyptian doctors who served with the garrisons in the Sudan. One of the doctors' tasks was to examine slaves for the army. There were many irregularities, and employees came and went. Hospitals were reserved for the troops—"officers and civilians" says Hill, "preferred, not without reason, to be treated in their homes"¹ and he adds: "Egyptian medical treatment and Western medical practice were not extended to the Sudanese" (p. 48). Many officials had to be invalided out, if they did not die in office. The feeble, sickly appearance which Pückler-Muskau had noticed in Khūrshīd was true enough. He had already been to Cairo on medical grounds (his only real leave in all his thirteen years' service), but "in spite of Clot Bey's surgery Khūrshīd's piles still hurt" and now in 1838 he again obtained leave from the Viceroy—for, adds Hill, "Muḥammad 'Ali loved Khūrshīd and was genuinely anxious for his health".

He never came back to the Sudan. He was posted elsewhere, and was succeeded as Governor-General by Aḥmad abū Wīdān (or Adhān). The last years of Khūrshīd's term of office were clouded for the Sudan by severe drought and famine (the price of durra rose from 6 to 200 PT. an ardeb and Khūrshīd had to distribute grain from government stores) and by outbreaks of cholera. Administration was slack, too—perhaps he was getting stale. Nevertheless, as Hill says:

The townspeople of Khartoum owed gratitude to the retiring *ḥikimdār*. He had created a capital out of 'Uthmān's camp, built a mosque and a river landing-place of kiln-dried bricks from the neighbouring ruins of Soba, founded shipyards, provided workmen and materials for building houses, and rewarded settlers with privileges.²

In November 1838, a few months after Khūrshīd's departure, the Viceroy Muḥammad 'Ali himself arrived on a tour of inspection. In Khartoum the old man (he was 70) held a levée and asked a lot of questions. He was still full of ideas for the Sudan—for building railways, opening the cataracts to navigation, introducing a telegraph system, tapping iron deposits in Kordofan. He was still looking for gold and had brought a number of mining engineers with him. He soon discovered at Fāzūghli that gold was not easy to come by in quantity. He had not given up hope, and renewed efforts were to be made, but he retreated from the Sudan suffering from fever and somewhat disillusioned.

Khartoum, however, was growing up. In its convenient position on river and land routes it was now established as a centre of administration and developing considerably as a trade centre. River traffic was increasing. Now another

¹ Pallme, in *Travels in Kordofan* (London, 1844), pp. 214–15, gives an amusing, or rather tragi-comic, dialogue which he says he heard between an "apothecary" (performing a doctor's duty) and a nurse about the condition of their patients. This was in the hospital at El Obeid, but we may well believe it could apply elsewhere.

² p. 65. Cf. Werne (Eng. trans. 1849), p. 55.

advantage was to become prominent. Perched on the edge of the "discovered" world of the riverain White Nile, it was well situated as a jumping-off ground for the interior, a frontier town, a pioneers' centre. Two Egyptian expeditions under Salim Qapūdān had in 1840-42 managed to get through the sudd as far as the Bari country; though depressed that they had found neither gold nor the source of the Nile, they had pioneered the route and others were soon to follow. In the years ahead there was to be a constant coming and going of travellers, explorers, naturalists, traders and adventurers fitting out expeditions, pushing out in search of new trading posts for ivory, new slaving areas, discovering new rivers.¹ We can imagine that much of the local gossip among this class was concerned with who was up the river, in the Equatorial regions or the Bahr al Ghazal, how far they had managed to go, what they had found, and when they might be expected back in Khartoum. New arrivals from the North would be inspected and their equipment examined and appraised. Returning travellers from the South would be the object of great curiosity and often much jealousy, and they would be questioned closely about their experiences, the routes they had taken, their dealings with tribesmen, or the collections they had made, and it must frequently have been in their interests to hide essential information from their competitors.

Ivory had so far been bartered tribally—from the Dinka to the Baggāra to itinerant traders (many of them Danāgla and Ja'liyyīn), who sold it to the state buying agency. The opening up of the White Nile and, under pressure from the interested Powers, the abolition of the state monopoly in the 1840s, enabled all sorts of traders, including bigger European operators, to take a hand in it. The earlier traders profited by the local people's unawareness of its value to the outside world to reap enormous gains from ivory traded for coarse Venetian glass beads.² But in the 1850s the tribes had got wise to it, and the frantic competition of the "ivory rush" (after restrictions on access to the upper Nile were removed in 1853) made such easy profits progressively harder to come by. What could not be gained by trade was then taken by force. We can only mention in passing that of course wild animals and strange birds were another attraction; their export, confined at first to high officials, developed in later years into an industry with professional game hunters supplying zoos and circuses. (See further Hill, p. 57.) They also provided Khartoum with one of its pastimes: gazelles, cranes, even occasionally leopards and lions, were kept as pets in its gardens.

But by far the greatest attraction for many was not the trade in ivory but, as they called it, in "ebony"—"*la traite du noir*" beside "*la traite du blanc*", and the black trade was "*la traite par excellence*". This had been developing from the earlier government seasonal raids into farmed-out trading concessions. At first the opening of the White Nile had little effect—slaves were more easily obtained from the Nuba Mountains or from up the Blue Nile—but gradually these operations were extended, and we come in due course to the time of widespread raiding "districts" in the South and the zaribas of the dreaded "Khartoumers", the era of slave-raiders like Ghaṭṭās and Kuchūk (Turk. Küçük) 'Alī in the Bahr al Ghazal, or Muḥammad Khair who ravaged the Shilluk.

¹ Khartoum people would often see their trading friends off by accompanying them for a short distance up the river in some small craft, or by riding out from the town to the bank of the White Nile to wave them farewell as they passed.

² James Hamilton, who was in Khartoum in 1854, says (1857, p. 338): "Beads to the value of about 12 piastres, 2 shillings English, are the common price for a tooth weighing 100 rotls".

All these developments were to bring to Khartoum, in addition of course to some genuine and honest traders, scientists and technicians, an unruly conglomeration of freebooters, renegades and adventurers, which earned Khartoum the reputation of housing the riff-raff of Europe and elsewhere.

The period of Khūrshīd had been followed by the much shorter one of Abū Wīdān, who tightened up the administration and was wont to deal summarily with complainants. He died in Khartoum in 1843 and his tomb is one of the group just off Sharia el Kasr. He was suspected of personal ambition at the expense of Cairo, which now decided to curtail the powers of its representatives in the Sudan. There follow some years of weak government with a rapid succession of officials and periods of decentralization with the intermittent decline of Khartoum into a mere province headquarters, until Mūsā Ḥamdī was appointed Governor-General in 1862. However, as we cannot here go fully into the political history, let us turn again to the physical Khartoum.

In spite of the building operations of Khūrshīd and his immediate successors, Khartoum was not a particularly comfortable place to live in. Only the mosque and (now) the market were of burnt brick; houses of officials and traders were of sun-dried mud brick plastered with *zibāla*. Many had ordinary mud walls and there were also many *tukls*, especially on the edge of the town. There were numerous crooked alleys and no particular plan was followed, except that the gardens for the most part had to be near the river, where could be heard the creaking of many sagias situated at intervals along the bank. At this stage there was no embankment, and the river-front looked rather that of Burri or Abū Rōf to-day. In some places there were dusty squares which turned into morasses in the rains and then, too, open spaces from which soil was scooped out for building would turn into stagnant pools which became homes for frogs. Khartoum was never able to cope properly with rains and flood.¹ A little later, mud walls were built along the Blue Nile and a big drainage trench was constructed which led into it, while along the south-west side a long sandy ridge (known as *al-teras*) was formed to protect her from White Nile floods; but the town was never safe, and in heavy rain all buildings—government offices, houses and shops—shut their doors. In August 1839 there was a severe storm which destroyed many houses and sank eleven vessels on the White Nile; the Werne brothers relate how they waded through their courtyard up to their knees and had to sit on a table until the water in their house subsided. Houses often crumbled: in 1841 an Italian doctor named Toscanelli was crushed to death in the ruins of his house. As we can imagine, there was little defence against haboobs either: the Africanist Lepsius describes a very severe one which came up on 25th March 1844 while he was walking in the garden of Ibrāhīm Khair, a Syrian.

In spite of all these trials, not unknown in our generation, numbers of the wealthier inhabitants—and some, including Europeans, lived in Khartoum for long periods—managed to live at least tolerably in the bigger houses with their enclosed outer courtyard and *divān* or *salāmlīk* (sitting-room where guests were received) and inner courtyard with harem. No doubt the gardens and hobbies helped. Lepsius, for example, speaks of Ibrāhīm Khair's as an airy, well-situated house, with a large and beautiful garden, where he saw "a rich collection of ornithological species of the Sudan, in number about three hundred". As now, merchants

¹ Flood and rain wreaked such havoc in Khartoum in 1866 that for a time there were suggestions of moving it to another site (cf. Hill, p. 114).

would sit outside their shops or houses (earlier shops, and some later ones, were *in* the houses), often under an awning spread over the roadway. Monotony was varied by weddings and festivals, *ziks*, elaborate dinner-parties and evening entertainments with dancing girls, boating on the Nile and occasional picnics on the banks.¹

The population continued to grow. It was, however, as Hill says, "never constant and never counted" and we can only get an idea of it at different times from various people's rough estimates. Russegger puts it at 20,000 in 1840, but Montuori three years later says "nearly 13,000". Ten years after this there are estimates ranging from 30,000 to 40,000. In the last phase, in 1883, Lieut-Col. Stewart gives a figure of 50,000 to 55,000 of whom two-thirds (nearly 35,000) were slaves; Power, for the same year, gives the number of registered slaves in Khartoum as 27,000. Similarly, it is not easy to gauge exactly the number of Europeans living in Khartoum at different times. From the 1840s the European colony was growing and establishing itself as an element in the town. D'Arnaud, a French engineer who went up the White Nile with Salīm Qapūdān, puts their number in 1841 as nine—thought to be an underestimate. Fr. Giovanni Beltrame says "about forty or fifty" in 1853, while Lejean mentions twenty or thirty "persons or families" in 1860. Their numbers were swollen, as we shall see, by the advent of the Consuls and the Roman Catholic Mission.

In 1842 the Belgian Consul-General in Egypt arrived with Luigi Montuori, a priest of the Vincentian Order² fleeing from persecution in Abyssinia. He obtained from Abū Wīdān, the Governor-General, permission for Montuori "to establish a church and school in Khartoum and to acquire a plot of land on the southern outskirts of the town for a Christian cemetery" (Hill, p. 78). On 13th March 1843 Montuori wrote:

I have opened a school for white, black and mulatto children who also learn the catechism. They are maintained at my expense and I share with them the help that comes from Europe.

Before this, Sudanese had gone to the Azhar and to schools in Egypt, but apart from *khalwas*, this is the first school in Khartoum of which we have record: from this point of view, education was a late starter. Montuori, however, had little in the way of funds and seems to have been met with a mixture of opposition and apathy on the part of the European residents, so the mission was abandoned in 1845.

This short-lived attempt was soon to be followed by a more far-reaching one. In 1846 the Pope created the Apostolic Vicariate of Central Africa, and the mission in the Sudan was entrusted first to the Jesuits and later to the Franciscans. In February 1848 Father Ryllo and his party arrived in Khartoum. Through the help of a Turkish merchant, Sharif Hasan,³ they obtained a mission site at the west end of the town—extending southwards from the Blue Nile to a narrow, rather straggling street running east-west (approximately the present Sharia al-Gamaa)—on what is now the Mudiyya and the Egyptian Irrigation Department. They opened their first church on the Feast of Pentecost, and soon founded a school for negro children whom they bought in the slave market. Children of European

¹ Large hexagonal or octagonal lanterns, nearly four feet high, each burning four or five candles behind strips of coloured glass, were favourite ornamental pieces.

² The Society of St. Vincent de Paul was founded by Frédéric Ozanam and others in May 1833.

³ It is said that he owed his life to the care of Roman Catholic missionaries in the Lebanon at the time of Muhammad Ali's invasion. (Cf. Tappi, 1894, p. 50.)

residents also attended. Besides the catechism, Arabic, Italian, arithmetic, singing and drawing were taught. Financial help from Europe in 1848, the "year of revolutions", being curtailed, the missionaries were at once obliged to start a vegetable and fruit garden to supply food for themselves and the schoolboys. Melly mentions twenty boys "in various costumes and of almost as many hues" in 1850, while Mgr. Knoblehar writes in 1852 :

The Khartoum mission presents a picture of active life. Fr. Milharčić, who has a gift for managing children, is in charge of the boys' school. Its 40 pupils keep their master very busy. In our workshop we work from morning to night, and make all the furniture necessary for the house.¹

It was soon to expand into a trade school as well, and to play a considerable part in coming years in training clerks and artisans, many of whom went into government service. In 1878 the 200 employees at the Khartoum dockyard were mostly former pupils of the mission.

Fr. Ryllo died of dysentery in 1848, only four months after his arrival, and was succeeded by the outstanding Mgr. Knoblehar (his name is germanized as Knoblecher) who died in 1858. There was much sickness and death among the missionaries and great efforts were needed to find funds and replacements. Among new missionaries to arrive in 1853 was Martin Hansal, who served as secretary to Knoblehar and taught in the school ; he was later to become well-known as Austrian Consul in Khartoum. The leading personality to be associated with the mission was Bishop Daniele Comboni, who died in Khartoum in 1881.

The construction of a large mission building in stone and burnt brick with cloisters was started in 1853 under the direction of Fr. Josef Gostner ; by the autumn of 1856 it was 104 metres long, one-third of the structure planned, and afterwards two wings were added on the river side. One Italian bricklayer and mason working on the building was Pietro Agati ("Pietrino") who continued to live and work in the Sudan (he had a Sudanese wife and family) right through the Mahdiyya—he is known as the builder of the Khalifa's house—and died in Omdurman in 1918 at the age of 91.

One temporary educational effort at this time was the result of the banishment from Egypt of Rifā'a Bey Rāf'i Badawī al-Ṭahṭāwī (a prominent Egyptian translator) and a number of his colleagues, who were sent to Khartoum in 1850 ostensibly to found a school but in reality to remove them from Egypt, where they were suspected of modernism by the reactionary regime of 'Abbās Ḥilmī. Several writers speak of the disgruntled state of these exiles. Rifā'a Bey seems to have occupied much of his time translating Fénelon's *Télémaque*. Nevertheless they did succeed in starting a school in 1853. The English traveller, James Hamilton, says he found 84 pupils, "not natives of Soudan, but the children of employés of the government, most of them, judging from their complexion, by Abyssinian slaves". They studied the Qur'ān, Arabic grammar, Turkish and a little geometry, and Hamilton was astonished at their progress. There was also a section for younger pupils, on traditional lines, for he adds :

¹ Quoted in E. Toniolo : "The First Centenary of the Roman Catholic Mission to Central Africa, 1846-1946", *SNR*, xxvii (1946), p. 106. The article "The Catholic Church and Education in the Sudan" by the Educational Secretary of the Comboni Schools (in *Education in the Sudan*, 11th Annual Conference of the Philosophical Society of the Sudan (1963), p. 123) states that in 1853 there were 104 pupils.

I went to the lower school, which contained children from five to ten years old, divided into five classes, each of which was engaged in learning the Koran by heart. . . . I asked if I might inquire the meaning of a not abstruse passage which had just been repeated with extreme volubility by half a dozen of the boys in succession, but this was too much to require. The words are taught, every inflexion is attended to with a superstitious care, but the meaning is left unexplained. . . .¹

In 1854, when Muḥammad Saʿīd succeeded ʿAbbās as Viceroy, Rifāʿa Bey and his fellow-exiles were able to return home, and the school was closed.² No other new educational work was attempted until an elementary school was started at Khartoum in 1867; after a three-year course "some of the pupils were apprenticed as operators in the newly-established Sudan telegraph service, and twenty others were entered as mechanical apprentices in the government dockyard at Khartoum".³

The abolition of the state trading monopoly and the consequent growth of European commercial interests in the Sudan and increase in the number of European residents led to the establishment of a number of consulates in Khartoum. The consuls were a mixed bag, and from time to time came under suspicion (or accused each other) of engaging in the slave-trade. Georges Thibaut had been consular agent for France since about 1829 and was to remain so for 40 years until 1869 (when he and all his family died within a week from the plague)—others were Herbin, Vossion and Lemay—but the French consulate never had a senior position. The founding of the Roman Catholic mission, its members being mainly Austrian subjects, was closely followed in 1851 by the setting up of an Austrian consulate, which took the mission under its protection. Several Austrian consular agents—Reitz, von Heuglin and Natterer—succeeded one another before Martin Hansal began in 1862 the long vice-consulship which ended only when he lost his life in the fall of Khartoum in 1885, a period during which he was a leading figure in the European community. Hansal—how can we describe him? Versatile, volatile, voluble. Versatile—he had had training, among other things, in typography.⁴ He was an accomplished musician—he was one of the founders of the Vienna Male Choir Society, and a practised performer on the piano and organ. In Khartoum on Sundays he regularly played the harmonium at the mission church—and no doubt on that mission piano which can still be seen in the Khalifa's House museum. At official functions he appeared in theatrical attire "in an astounding Austrian consular uniform of red coat with enormous epaulets, a long white waistcoat, and blue overalls".⁵ He is described at times as playing the buffoon and

¹ James Hamilton (1857), p. 344.

² The building was afterwards used as a barracks. Rifāʿa Bey recorded his Sudan experiences in his book *Manāḥij al-albāb fi mabāḥij al-ādāb al-ʿaṣriyya*, which Hourani translates as "The Paths of Egyptian Hearts in the Joys of the Contemporary Arts". He also wrote a book on education, *al-Murshid al-ʿamīn li l-banāt wa l-banīn*, rendered by Hourani as "Guiding Truths for Girls and Youths" (A. Hourani, *Arabic Thought in the Liberal Age, 1798-1939* (London, 1962), p. 72).

³ Hill, p. 127.

⁴ He was not able to exercise this in Old Khartoum, which never possessed a printing-press. Montuori says there was a lithographic press in the Governor-General's office for duplicating maps and orders (Hill, p. 24 and n. 3; cf. "a printing press which issues Government bulletins and maps", letter of Montuori published in *SNR*, xli (1960), p. 102). This was used during the Mahdiyya and can now be seen in the Khalifa's House museum. (Cf. A. B. Theobald, *The Mahdiyya* (London, 1951), p. 183, n. 2.)

⁵ Hill (1951), p. 151. Cf. Col. J. Colborne, *With Hicks Pasha in the Soudan* (London, 1884), pp. 89-90.

prancing about in an undignified manner with dancers at wedding feasts. "When already elderly", says Hill, "he had the courage to marry his pupil, a half-caste Abyssinian girl of 18". In the last days of the city, the strict Gordon thought little of him—"I hear that Hansal, with his seven female attendants, is disposed to join the Arabs; I hope he will do so"—but his reports and letters from Khartoum, published in various journals, are of great interest for the whole period, and the later ones reflect the gathering storm that was to engulf them all.

For Great Britain, John Petherick was appointed vice-consul in 1858, consul in 1861. Mrs Petherick describes their official quarters in these terms:

The Consulate is situated but a short distance from the river. The house and buildings occupy a very large space of ground. The garden is a fine one, in which all the fruit-bearing trees of the East flourish. We have horses, bullocks, cows, donkeys, gazelles, a great ant-bear, birds and poultry of every description, and a large flock of goats.¹

She has her complaints, nevertheless:

The climate is delicious, and I have not known a day of ill health since leaving England; but a disagreeable eruption, called Nile buttons, troubled me some time: this is prevalent after the high Nile. . . . (ibid.)

But John Petherick was always mixed up in one sort of quarrel or another, and in the end by asking for customs exemption for a large stand of arms he gave colour to rumours that he was engaged in the slave-trade, and the Foreign Office suppressed the Consulate in 1864. Later on, Rosset was acting vice-consul for Britain (as well as Germany) and in the last phase, Frank Power (*Times* correspondent and author of *Letters from Khartoum*) was appointed British consul in 1883, but was killed with Stewart on his way out to the north the following year.

At different periods, Italy was represented by Brun-Rollet (Sardinia during his time), Vaudey, Binder, Legnani; Germany by W. Duisberg; Greece by Nikolaos Leontides, a universally popular man; and, oddly enough, a Coptic merchant, Jirjis Bulus, was consular agent for Persia. Another Copt, whose name is given variously as Aser or Azer—I think it was probably 'Azir—was employed as consular agent for the U.S.A. Chaillé-Long, the American officer who arrived in Khartoum with Gordon in 1874, says nastily:

Among those who came also to offer their respects was a very dirty Cyclopic Copt, with a very dirty shirt; his Excellency the American Consul at Khartoum, bought and paid for, if you please!²

Now that Khartoum has been growing up—and with its official buildings, its shops and markets, mission and mosque, consulates, houses and gardens it had improved quite considerably by the 1880s—let us take a closer look at the town, its appearance and lay-out, its crafts and its people. For this purpose I shall combine the information given at various times by visitors and residents (e.g. Brehm, Melly, Taylor, Hamilton, Beltrame, Lejean, Grant, Junker, Schweinfurth, De Cosson) especially from the '50s to the '70s, taking as my two main heads, though there will be some overlapping:

¹ J. and (Mrs) K. H. Petherick, *Travels in Central Africa* (London, 1869), pp. 66–7.

² Col. C. Chaillé-Long, *Central Africa: Naked Truths of Naked People* (London, 1876), p. 17. Cf. De Cosson (1877), p. 222. Lejean (1865) notes that the U.S. consulate was in the Coptic quarter, but calls it the "confortable habitation d'un riche Syrien". But the end was tragic: speaking of the fall of Khartoum, Ohrwalder says, "Aser, the American consul, fell down dead on seeing his brother beheaded before his eyes". (Wingate-Ohrwalder (1892), p. 141.)

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salt, and European goods, were being landed from boats for the use of the inhabitants. Gum (the best coming from Kordofan), ivory, bees'-wax, cotton, and sesamum are brought thither, but merely pass through on their way to Egypt. The White Nile is said to have 250 boats trading upon it yearly, including those on the Sobat and Bahr Ghazal. The Blue river probably has as many more; but we only saw forty-five boats lying off Khartoum, and ten on the stocks, of which the largest measured twenty yards in length.¹

Above the sloping shore line there was, in the earlier years, a long mud wall, and the tops of the houses could be seen peeping over it. This parapet (mentioned, for example, by Pückler-Muskau in 1837 and Melly in 1850) was apparently in part replaced by a stone embankment during the governorship of Arakil Bey (1856-58), an Armenian, who, with the assistance of his medical officer, Leopoldo Ori, also improved the drainage of the streets. The river-front street (hardly deserving the name), between the embankment and the nearest gardens and houses, was only a few paces wide and every rains tree-trunks and fresh earth were rammed into it.

Conspicuous along the river-front were the Palace, the Mudiriyya and the Mission.

The Palace (Hikimdariyya): The present Palace is built on the site of the old one, and the elliptical basin which was in the courtyard behind it is still to be seen. The old Palace went through various phases of building and re-designing. We recall that it was begun by Maḥū Bey, that Khūrshīd was "lodged in a tolerable house of mud", and that his harem—evidently a separate building—was unusual in possessing glass windows. Some years later, Bayard Taylor (speaking of 1852) says that the Palace of the Pasha ('Abd al-Latif 'Abdallah, 1850-52) was built the previous year of burnt brick from the Christian ruins of Abū Ḥarāz on the Blue Nile. It had two storeys and a square tower over the entrance. There was a courtyard behind, surrounded by enclosed arched corridors which workmen were still plastering. There was a large and lofty *divān*, or reception-room, in which the Pasha conducted government business—its ceiling was of smoothed palm-logs and the floor cemented, and on the walls were the engraving of a Turkish frigate ('Abd al-Latif had been in the navy) and a portrait of Sultan 'Abd al-Majīd; another reception-room had carpets, mirrors and couches. There was a dining-room and other apartments, a private armoury, and a bathroom with Moorish arches "glimmering in steamy twilight". The harem was a separate white, two-storey building shaded by palm trees. A large leopard and a small lion cub were chained to pillars in the courtyard—a smaller lion cub which had the run of the Palace caused the Pasha much amusement by pouncing from behind a pillar on any boy-slave who might pass by. Soldiers lounged on the bank in front of the Palace, and black slaves in red and white livery were sent off on various errands on donkeys.

The Palace was later rebuilt with the stone facing it had at the time of Gordon—in part by Ahmad Mumtāz (1871-72) and completed by Ismā'il Ayyūb (1873-76). "Designed after the mission building in the style of the *seicento* . . . it had", says Hill (p. 161), "a homely look about it, something of the Egyptian boarding-house, undistinguished but cool". Nearby a public garden was laid out in 1877-78, watered by a steam pump. In this final stage the main building facing the river-front had two storeys, and there were two single-storey wings running back towards the town, with a courtyard between them. The main block had light-coloured walls and

¹ J. A. Grant (1864), p. 412.

green sunblinds and glass in some of the windows. On each floor a corridor, for attendants, ran the length of the building. A stone staircase led to the upper floor on the west side, and a wooden one on the east side, and there was also access to the flat roofs of the main building and wings. The main entrance was through an archway in the west wing, facing the Mudiriyya, from which the Palace was separated by a fence with wooden railings and by a narrow street and little open square. In Ismā'il Ayyūb's time the upper floor was the harem, the lower used by the men; but in Gordon's day the lower floor was used for clerks' offices, while the upper floor contained Gordon's office and bedroom, the rooms of Power and Stewart and a few other offices. The wings were for guards, kavasses, stores, servants, kitchen and lavatories. On the south side of the quadrangle enclosing the courtyard was a vine-trellis. One of Richard Buchta's photographs (taken perhaps about 1877) shows the Palace from the south side.¹ Neufeld's book, *A Prisoner of the Khaleefa* (London, 1899), contains a ground plan, slightly inaccurate (opp. p. 334).

Upstream from the Palace were grain stores, an arsenal, barracks, and a hospital which in 1873 is said to have had 270 beds, and about which varying opinions were expressed. But it is more important just now to mention the buildings in order downstream from the Palace.

The Mudiriyya (Dīvan or Dīwān) : This was an old-established group of buildings which included the house of the governor of Khartoum and various government offices. It was separated from the Palace by a narrow road leading from the river into the town, with a façade on the river-front and side doors opening on to a small open space, which had no special name, on the Palace side. On the town side there was a square (Mudiriyya Square) with trees and another entrance under an archway with a tower above it which led into a courtyard. It is described by Grant (speaking of 1863) as a "substantial brick edifice". On the river side, a flight of steps led up to a great entrance-door opening on to a "lofty and handsome" reception-hall, the *divān* of the governor, which was hung round with "engravings of naval engagements, etc". (I wonder if 'Abd al-Laṭīf Pasha was responsible for these.) Grant goes on :

In the courtyard Lubach trees (*Acacia lebbek*) give shade to orderlies and officials. Baths and all conveniences are attached to the suites of rooms, and comfortable stabling is provided for cavalry and horse-artillery.

The complex of buildings also included clerks' offices, the treasury, a number of lock-ups and a guard-room. Before his term of office ended in 1876, Ismā'il Ayyūb had begun a process of reconstruction.

Immediately downstream from the Mudiriyya was another narrow street in which were nearly a dozen brick houses, unplastered and unwhitewashed and said to have had a dirty grey appearance. On the corner of this street, by the river-front, was the *Austrian Consulate*, a large house with two floors standing in the middle of a date grove, with the double-headed eagle on an oval shield over the door. (It was situated approximately where the Ministry of the Interior is now. A former Austrian Consulate, further from the river, is shown on Lejean's map.) Next in order along the river-front came the one-storey *Telegraph Office* with the house

¹ Photograph No. 4 in R. Buchta, *Die oberen Nil-Länder*, 2 vols. (Berlin, 1881). A copy may be seen in the Khalifa's House Museum, and another is reproduced in Alan Moorehead, *The White Nile* (London, 1960), facing p. 311.

of the Director (Giegler, or his name may be Ziegler, was Inspector-General of Telegraphs from 1875), then the *Post Office*, opened in 1873. Beside the latter was the house in which Junker stayed on one of his visits; on the ground floor of this and of some neighbouring houses to the west of it were a few merchants' shops. Shady awnings were spread from these over the street, and the merchants and craftsmen and their friends would sit under them in the evenings smoking and chatting and drinking mastika or araki. About here, in later years, was a "Sanitary Department". Next came another street leading into the town, and then the Mission compound. With this we are in another quarter.

Ḥillat (or Maḥallat) Mūsā Bey

More than one quarter of Old Khartoum bore the name *ḥilla*, "village", for the town grew up essentially as an amalgamation of small settlements. Lejean (1865; he was in Khartoum in 1860) tells us that *Ḥillat Mūsā Bey* was the name given to the quarter stretching back south-eastwards from the Austrian Mission and including among other buildings the *British Consulate* previously mentioned. He calls this the oldest quarter of Khartoum, and attributes the name to Mūsā Ḥamdī (Governor-General 1862-65) who, he says, built the first houses there. This, of course, would have been during a previous command.¹ We have noted, however, that the first permanent buildings, after the start given by 'Uthmān, were constructed by Maḥū and Khūrshīd's mosque was built in the adjoining Market quarter south-west of this where the family of the *feki* al-Arbāb had their home. Probably we may regard Ḥillat Mūsā Bey and the Market quarter together as representing the oldest stratum of settlement.

The Austrian (Roman Catholic) Mission. The founding of the Mission and the building of the main block church and school have already been described. There were extensive grounds on the river-front, with two avenues of palms in the form of a cross, many other trees and plants (oranges, figs, bananas, jasmine, mimosa), and a vegetable garden, the whole being surrounded by a wall ten feet high. The principal building, a single-storey structure of stone and brick, was on the town side, the main gateway being on a straggling east-west road already mentioned, which ran from the Mudīriyya Square to the west end of the town, very roughly where Sharia al-Gamaa is now. The present Mudīriyya and Egyptian Irrigation offices occupy the site (which, being required for government purposes, was not given back to the mission after 1898), and the former District Commissioner's office includes part of the old building.² A small courtyard was enclosed by the residence of the Vicar or Bishop. Two wings with cloisters extended from the main building towards the river. In the grounds Fr. Ryllo, Bishop Comboni and others were buried.

On one of the little squares in this area, between the river and the market, stood the *German Consulate* at the time of Rosset, a house built by his father-in-law the Maltese ivory-trader De Bono. Junker, who stayed here in 1878 with Romolo

¹ Mūsā Ḥamdī had served in various military commands in the Sudan from about 1837 and apparently on three previous occasions in the 1840s and 1850s as provincial governor of Khartoum. See dates in Hill, *SNR*, xxxii Part I (1951), pp. 85-95.

² "A section of the east wall of what were possibly the school rooms still stands near the junction of Malik Avenue and Kitchener Avenue. Part of the mission building, constructed in 1853-56, has been embodied in the existing office of the District Commissioner". (E. Toniolo in *SNR*, xxvii (1946), p. 100.) These streets are now, respectively, Sharia 'Abd el Mun'im Muhammad and Sharia El Nil.

Gessi and Richard Buchta as his fellow-guests, describes it as "a wide spreading building; the two-storied front and a large room like a hall overlooking the open space in front of the house, and the adjoining rooms were occupied by the Consul and his family. In the large room opening on to two balconies he kept open table every day for his guests. . . . The extensive neatly-kept courtyard was surrounded on all sides by a row of rooms, one storey high, in which the guests found ample accommodation. My spacious airy room looked out over the large garden which stretched away behind the house as far as the Blue Nile".¹ A photograph taken by Richard Buchta about this time (see PLATE 1) shows this Consulate with three elephants passing in front of it. These were some of the six or seven Indian elephants which Baker had intended to be used to tame African elephants in the South.² They were sent up the Nile and reached Kawa, but nothing further was heard of them; they were reported to have died between Kawa and Renk.

Following the river-front again, downstream, next to the Mission was another street leading to the town, which was widened by Ismā'il Ayyūb, who did something towards realigning and improving streets. After this came some gardens and houses of the wealthier merchants. On the site of the present Zoo was the garden of Ibrāhīm Bey Khalīl, an Egyptian merchant, where Gordon used to spend some of his leisure time during the siege.

A little further downstream, where the Mogren quay is to-day, was the old government dockyard known as *al-Manjara*, i.e. "carpentry workshop", named from the other Manjara up the White Nile where boats were constructed. This was a busy place where "steam engines, lathes, steam hammers and punches, in short, all the apparatus necessary for repairing and fitting up steamboats filled the workshops" (De Cosson (1877), speaking of 1873) and Ismā'il Ayyūb's yacht lay alongside the jetty. Later, part of this seems to have been moved up the river beyond the Palace, but until not so long ago there stood near the Mogren "Hillat Manjara", whose inhabitants were descended from the old dockyard workers.

The Coptic Quarter

This lay behind the gardens to the west of the Austrian Mission. Near the site of the present Coptic pro-cathedral was a Coptic Church with three domes, an arched building. It stood in a walled enclosure with a cemetery where Grant (1863) saw twenty or thirty graves. Grant describes the interior and a service he attended. Lejean tells us that the church was almost hidden among the houses and that the Coptic quarter as a whole was "presque élégant" compared with the neighbouring quarter, the "Teras", which we shall come to next. It was in the Coptic quarter that the *American Consulate* was situated.

The Teras, or Bank

This was a long embankment of sand, two or three feet high, on the south-western side of the town, to protect it from White Nile floods. Just inside it and

¹ Wilhelm Junker: *Travels in Africa, 1875-1878*. Transl. A. H. Keane (London, 1890), pp. 506-7.

² Baker, however, left the Sudan in 1873. The elephants were kept for some time in Khartoum in a garden on the river-front (subsequently the site of the houses of the (Condominium) Governor and Financial Secretary); for a number of years after the reoccupation it was still known as "Jinainat al-Fil". (See Walkley, *SNR*, xix (1936), p. 85; Stanton MS., p. 32.)

extending south-eastwards from the Coptic Church was a mass of small houses and mud huts. Lejean says they were inhabited largely by "des vagabonds et des Bohémiens", the men being iron workers and smiths and the women fortune-tellers and prostitutes.

The Market Quarter, the Sūq

Moving eastwards again and southward of the Austrian Mission, we come to the Market Quarter, in which the principal buildings were the *Mosque* and two covered markets. The Mosque, dating from the time of Khūrshid, was a large brick building; its minaret, with a cone-shaped top like a snuffer or extinguisher, dated from 1860, replacing an earlier one. (It can be seen faintly in PLATE 2, which reproduces Buchta's photograph of about 1877 looking south-westwards from the Palace. Its site was approximately 300 yards south of the present Mudiriyya.) It was surrounded by a high stone wall, and the gateways were guarded by sentries (says Grant). Lejean says it was really too big for the number of worshippers who attended, and the weekly public auction which took place on Fridays nearby was something of a counter-attraction. The Mosque stood in a small square which was planted with trees and had a public drinking basin, a "fasqieh" (*fisqīyya*, from Latin *piscina*). Another mosque was built in the town at the time of Ismā'il Ayyūb (1873-76)¹ and Muḥammad Ra'ūf during his term of office (1880-82) had a mosque built which bore his name.

The Markets. Near the Mosque, to the east, were two long covered markets of brick, a larger and a smaller one. Here, especially in the smaller one and in the streets round about, much of the life of the town was centred, and many travellers describe the busy scenes. Although it had its periods of depression (when, on various occasions, the governor-generalship was suppressed and it was reduced to the status of a provincial headquarters), there was generally much commercial activity in Khartoum.

The larger market was 100 yards long and there was an arched entrance, which could be closed, at each end. A wide passage extended through the middle from one entrance to the other, on each side of which were twenty-four shops. Each shop had a slightly raised stand to display its goods, and at night the merchants put their goods into small stores behind their shops. The market was lit by openings from above, closed at night and guarded by a watchman. In it could be bought many of the dearer imported goods—textiles, European clothing, boots and shoes, porcelain and crockery, and hardware. We have seen that other provision shops were on the ground floor of some of the merchants' houses. Greek merchants also kept large warehouses stocked with clothing, cutlery, and other household utensils.

The smaller market, mostly in the hands of indigenous tradesmen, was less solidly built and comfortable, as the shops had dimensions of only about eight feet. Each stand was heaped up with goods and the Arab merchants sat cross-legged among them. Over some individual booths were written the merchant's name and verses from the Qur'an; others used picture symbols such as a lion or horse. In this market were all kinds of provisions, local and imported, wines and beer.

¹ Working on it was 'Umar Muḥammad Hījāzī, another builder who continued into the Mahdiyya and Condominium—he built the Bait al-Māl and the Khalifa's mosque and helped in the building of the Mahdi's tomb. Later he worked on Gordon College and other buildings.

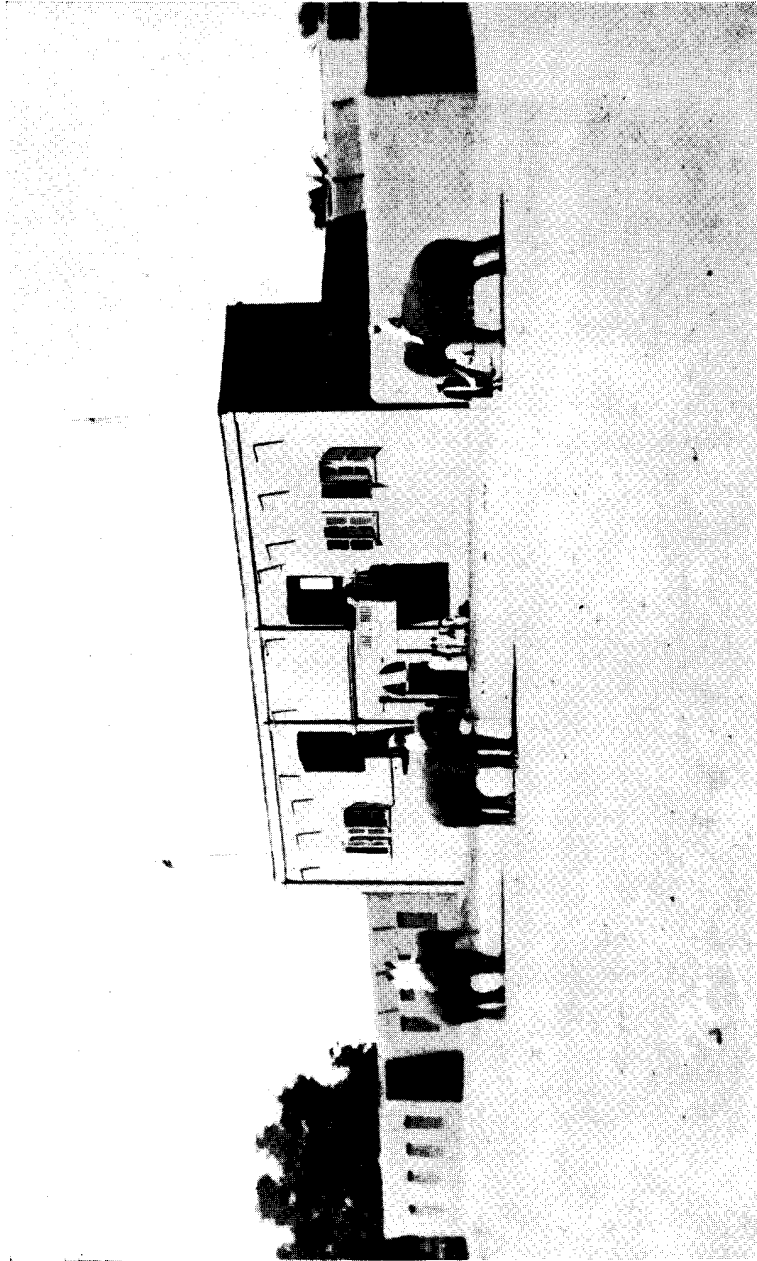


Photo: R. BUCHTA

The German Consulate, Khartoum, in the 1870s
By permission of the Trustees of the British Museum

PLATE 1

facing p. 26



Photo : R. BUCHTA

Khartoum about 1877
By permission of the Trustees of the British Museum

The goods in these markets were by no means always of good quality, though one had to pay high prices for them—musty jams, mouldy macaroni, gritty grey-looking sugar, sour wines and flat pale ale. Hill aptly says: "The amenities of Khartoum should be appraised in the light of contemporary transport . . . every nail and rivet, every steel plate, every bottle of medicine and of beer, every box of groceries and of cartridges, had to be carried on the backs of camels over miles of desert or in rare ships warped dangerously through the Nile cataracts. This unconditional limitation of weights and dimensions alone explains the city's seeming backwardness in the outward signs of civilization". The wonder is, rather, that so much was available. Junker speaks of butter, cheese, milk, and white bread freshly baked every day. Bread and *kisra* were made and sold in the space between the two covered markets, Egyptian bakers working under awnings. Then there were the products of the country—beef and mutton, *dhura*, *dukhn*, and dried dates. There was no lack of vegetables and fruit—onions, egg-plant, *bamia*, *lubia* and other beans, *mulukhiyya*, and *fūl sūdānī* (then called *fūl kurdūfānī*). Besides fresh dates there were custard-apples, pomegranates, oranges and bananas; and in May and June, Junker says, the market was overflowing with water-melons brought in by camel and donkey or across from Tuti Island. Most of these were displayed on open stalls or on the ground. In the same neighbourhood were other small specialized markets. Tobacco was sold in a narrow street whose air was filled with the dust of the dry herbs; in the tallow market could be found cattle fat and dipped tallow, while another section nearby dealt in *dhura* stalks and other cattle fodder. In open spaces and in the streets round about were coffee-houses and brandy-shops.

The streets around the markets and in other parts of the town were often crowded and dirty, though their general condition varied with the energy of particular governors-general or governors, and travellers give varying accounts at different times. 'Abd al-Latif Pasha (1850-52), for instance, seems to have made great efforts to clean up the town. Yūsuf Khūrī, a Maronite priest who visited Khartoum in 1851, says:

Both city and bazaar are very clean, and this must be ascribed to the good government of Latif Pasha . . . (who) found it very dirty. The first law enacted was that Kartum must be clean—that none should kill cows or lambs in the bazaar or in the streets, as was done before, but all the butchers should go to a fixed place to kill the animals, and bring the clean flesh to the bazaar—that everyone should clean his courtyard every day. To succeed in his intention he attached a penalty of imprisonment and money to the law for all those who should transgress it, and formed a body of men to go every morning round about the houses and bazaar, and see that they were all clean . . . In the following year Bayard Taylor found thirty or forty butchers cutting up meat on the banks of the Blue Nile east of the town, but scavenging was left to thousands of carrion birds which so gorged themselves on the offal that they scarcely troubled to move out of people's way.

The market streets were crowded with itinerant sellers such as water-carriers and people selling pigeons and fowls. Old Turks sat playing chess and backgammon and there were open stalls for cooked fish, sweetmeats and trinkets. Barbers (who also practised cupping) would also be at work in the street. Makers of *angareeb*s and slippers, who certainly existed, are hardly mentioned by travellers; to local crafts we should add the making of birish mats, the weaving of *damūr*, rope-making

from palm-leaves and grass, and pottery—burmas, zeers and gullas. In other parts of the town there were an oil-press and a soap-factory. Silversmiths, like those in Omdurman today, did filigree-work as well as other forms of their craft, such as mounting swords and scabbards in silver. There were also goldsmiths' shops; descendants of one family of Khartoum goldsmiths of that time still practise their craft today, in Omdurman. Grant says, "Cups with stalks, made for holding the Turkish coffee-cup, are formed of the purest soft yellow gold, found as dust in the Soudan . . . at the two shops we visited several youths were busy, sitting on the ground, each with a small anvil before him, hammering at threads of pure metal". Small drinking-cups were also made of horn, particularly of rhinoceros-horn since it retained its shape and did not crack like cattle-horn. Other occupations will be mentioned below in describing the elements that made up the population.

The Barrack Quarter

Near the markets were some barracks and other government buildings. One of these barracks was, as we have mentioned, made out of Rifā'a Bey's old school. Near this, when Lejean was in Khartoum in 1860, was a large cavity caused by the explosion of a powder magazine in the 1840s. The officer who guarded it had not received his pay for a long time. One day he went once more to the Divān to claim it and received the usual answer, "There's not a *para*". He thereupon went off and threw a lighted match into the magazine, blowing himself up together with, as Lejean says, "a third of the town and hundreds of unfortunate people". A new powder magazine was then built well to the east of the town.

The Military Quarter

Lejean calls this the "Ordou" (Turk. *ordu*, army), and it must be distinguished from the barrack quarter just mentioned. It was on the east side of the town, beyond the Palace and behind a military hospital situated on the river-front, and was the living quarter for officers and other ranks and their families. Near this quarter were also established later another barracks, small arms and ammunition stores, and a cartridge factory.

Ḥillat al-Markabīyya, or Sailors' Quarter

This stretched out to the west of the "Ordou" as far as the area between the Palace and the Governors' tombs (see below). There was a market here too, and this part of the town was also known as the quarter of the "little market". It was mainly a living quarter for sailors, mostly Danāgla with some negro ex-soldiers, employed on trading vessels up and down the rivers.

Salāmāt al-Bāshā

As a southward extension of the town, south of the Ḥillat Mūsā Bey and Sūq areas (roughly where the Sūq al-'arabī is now, and west of it), lay the quarter dubbed by some wit Salāmāt al-Bāshā. I feel tempted to translate this as "The Pasha's How-d'you do". It was still known by this name after the reoccupation. It was the living quarter of a mixed class of inhabitants, but was particularly known for its complement of prostitutes and makers of merissa and araki.

The Tombs

The tombs of the Governors-General and other officials, etc. who died in Khartoum, which are still to be seen in the town beside the present Sharia el Kasr

at the junction with Sharia el Baladiya about 700 yards south of the Palace, are—east to west—those of:

1. The wife of Mari Bey (a French soldier).
 2. Aḥmad Pasha abū Widān (d. 1843).
 3. Rustum Pasha Jarkas (d. 1852). Domed tomb immediately west of Aḥmad abū Widān's.
 4. Mūsā Pasha Ḥamdī (d. 1865)—the westernmost of the two big tombs.
- The enclosure also contains some graves of senior officials, including that of Muḥammad Rāsikh Bey (d. 1883). (For biographical details of the above, see Hill's *Biographical Dictionary*, 1951, *ad loc.*)

In the foregoing I have tried to present a slight picture of the layout of the town and of a few of Old Khartoum's activities and industries. We must not forget that it had its normal, busy, workaday life. Many European travellers, particularly in the earlier period, tended to write off the merchant class of Europeans (with which they coupled Levantines and others) as utterly worthless, the (as Brehm wrote) "Abschaum und Schande der Europa" (scum and shame of Europe), so that in reading their works one may tend to overlook the fact that there is another side to every picture. Of course quite a number of them—and plenty of others too—were rascals and riff-raff. This is not to minimize the poverty, vice and squalor, the disease, the slavery and prostitution (male and female), the cruelty and brutality, the venality and corruption; nor the decline of the Turkiyya ruling class, the political changes in Egypt, and the various other reasons which led to the crumbling of the whole regime under the Mahdist fire and sword.

Elements of the Population

Let us now look at the principal elements which made up the very mixed population of Old Khartoum. Giovanni Beltrame (1853) distinguishes seven groups among the inhabitants and Lejean (1865) gives another list; by combining these with information from Brehm (1855), Grant (1863) and others we may obtain a cross-section of the people.

1. *Egyptian Muslims* were numerous in the sedentary merchant class. They lived equally in all quarters of the town, but were especially concentrated round the Mosque and the market, and between the market and the military quarter. The majority were artisans and small traders—coffee-house and cook-shop keepers, bakers, shoe repairers, painters, armourers and dyers (using indigo).

2. *Copts*. These were the clerks and accountants of the regime and also to some extent of the trading community. Lejean speaks of the Coptic quarter, on the west side of the town, but not of the Copts as a class. Beltrame (1853) and Bayard Taylor (speaking of 1852) remark that there were only a few, but Grant (1863) says that the head of the Coptic church had a congregation of 500, so their numbers must have been growing quite rapidly.

3. *Nubians from Upper Egypt and Dongola*. The great majority were Danāḡla, of whom Lejean says there were not less than 18,000 in the town. A number were traders (settled or itinerant), but they were for the greater part house-servants (most houses had negro domestic slaves as well), sailors and mercenary troops with White Nile traders. We have seen that the sailors and boatmen were concentrated in the "little market" area on the east of the town called Ḥillat al-Markabīyya. Lejean says they were a superior class to the soldiers. He also

remarks of the Danāgla that their customs had become much arabized since the conquest, but that they were still "African" in their gay and careless humour and their indifference to suffering.

4. *Riverain tribes from North of Khartoum.* The Ja'aliyyīn and some others were colporteurs (hawkers and pedlars) and itinerant merchants. They had a reputation for being industrious and honest. The *Shāiqiyya* are not mentioned by Beltrame or Lejean; there were no doubt some in the barracks and the military quarter, though most of them operated in the countryside. They formed irregular cavalry forces used by the regime for tax-collecting. (Cf. Hill, pp. 89, 94.)

5. *Fekis.* It is convenient to make a separate group of these, although they do not form an ethnic class. A number, no doubt, were Mahas and Danāgla, but a great many were converts of negro or mixed blood from Kordofan and further west. Some led a more settled life as religious teachers running *khalwas*, others were itinerant amulet-makers and healers. Sometimes they dabbled in trade. Many were sailors or camel-drivers, with homes and families in the town. The less reputable, on the fringe of the town in the Teras and Salāmāt al-Bāshā areas, ran merissa shops-cum-brothels with slave women.

6. *Negroes.* These were, in particular, Nilotes, Bari, and from the tribes of the Nuba Mountains, Darfur, and the borders of Abyssinia. They were a very numerous class. A great many (30,000 or more in the last phase of Khartoum) were domestic slaves, or used in portage work. The Mission bought slave children in the market for its school. Many others were recruited into the *jihādiyya* army, and a few attained high rank, for example Adham al-ʿArifi, of Tegali in the Nuba Mountains, who rose to be a *qā'im maqām* and, for a few months in 1872, acting Governor-General; and Faraj Muḥammad al-Zainī, also of Tegali, who was Gordon's chief of staff in command of the defences during the siege. Some of the ex-soldiers were employed as private troops or boatmen in Nile expeditions.

7. *Turks.* With these we include other Ottoman subjects such as Circassians, Armenians, Albanians. They were comparatively few in number and were for the most part Government employees, particularly higher officials and army officers. Some (and there were also Egyptians in this category) were exiles. A few were in business. A number of older Turks lived for years in Khartoum as traders, camp followers, and old faithful cronies.

8. *The European colony.* The Europeans lived mainly in the area between the Palace and the Mission. Lejean mentions twenty or thirty "persons or families". After his time they increased somewhat, especially with the floating population of explorers, etc. There were Italians, French, Austrian subjects who for the most part belonged to the Mission, Greeks (mostly merchants), one or two Germans, and a number of British subjects, including Maltese, Ionians,¹ an occasional Indian, and a few Levantines under British protection. They were traders, consular agents, priests, engineers and builders, and some were government employees. The latter included doctors such as the Frenchman Alfred Peney, the Italian Leopoldo Ori, and the Englishman David Lowe. Lejean remarks that the really bad characters had left the Sudan by his time, 1860, their place being taken by a better element—doctors, geographers, and so on. But there was a looseness and vulgarity which he attributes to the lack of European women. Many settled in

¹ The Ionian Islands were ceded to Greece in 1864.

the Sudan for years, married to Abyssinian women, and Lejean frowns self-righteously at their local unions. With the arrival of the Austrian Mission, there was something a little touching in the way these lonely men, clinging to the vestiges of their Europeanness, showed their anxiety to have these unions recognized and established. Hill says (p. 105):

In homely Latin, strained to breaking-point by outlandish Sudanese names, the registers of the church in Khartoum remain the most intimate record of the lives of the European community. The eagerness of these lonely adventurers, traders and officials to regularize their unions with Abyssinian women and to have their children baptized was sincere. Rome meant the West and the civilization they knew; the Church gave them something beyond themselves, a link with the universal community. . . .

9. *Others.* We can complete this little inventory by mentioning very briefly just a few others: Jews, Syrians (mostly connected with business houses in Cairo), Abyssinian (especially Galla) women as wives, concubines and prostitutes, and (according to Montuori) some Algerians—the latter were very likely some of the Maghāriba volunteers (or their descendants) who were brought in at the conquest, “a military miscellany which included men from the Barbary Coast and blacks from Central Africa”. (Hill, pp. 9, 11.)

The Last Phase—The Siege and Fall of Khartoum

I have not attempted to give a fully consecutive history of Khartoum, so it is not my purpose to write in detail about the siege of the city and its final fall, which have been described by Wingate and many others. Moreover, it has been my object to deal with the life and growth of the Old Khartoum rather than to attend its final obsequies. Yet we must spare this phase a glance, if only to round off the story. I shall confine myself to describing the measures taken for its defence, and the changes in the appearance of the town which resulted. For this I am chiefly indebted to E. G. Sarsfield-Hall's little book, *A Brief Account of the Siege and Fall of Khartoum*, which is itself based on Wingate's account.

When General Gordon arrived in Khartoum on 18th February 1884 he found that 'Abd al-Qādir Hilmī (Governor-General, 1882-3) had built ramparts round the town consisting of an embankment with a ditch outside it. His first inclination, as he said he had come in peace, was to level these ramparts, but the inhabitants of Khartoum begged him not to, and he agreed to leave them as they were. A short time later the Mahdist threat became so serious that he was obliged to strengthen them. The ditch was deepened and widened so that it could not be crossed, becoming, according to some people, 18 feet deep in places. The soil from the ditch was piled up in the form of a high rampart on the inner side of it, the crest of this rampart being levelled off and having a loopholed mud wall about five feet high built along the top of it. Wire entanglements were erected about 100 yards beyond the ditch and, outside these, land mines were laid and “crows' feet” (caltrops) scattered about—some of these can be seen preserved in the Khalifa's House Museum.

Communication with a Fort just across the White Nile at Omdurman was maintained by a signalling post at the junction of the rivers and, at high river, by a large circular fort which was built at the Mogren, on a mound and surrounded by earthworks with loopholed parapets. This fort mounted one gun and was strongly held throughout the siege. No ramparts or earthworks were erected on

the White Nile side of the town between Fort Mogren and the end of the defence perimeter on the White Nile, this sector being regarded as adequately protected by the river, the Omdurman Fort, and troops on the river.

The main fortifications ran round the town in a semi-circle from this point on the White Nile to a point on the Blue Nile approximately where the Blue Nile bridge is now situated. The perimeter varied in length from about $4\frac{1}{3}$ miles at high Nile to nearly $5\frac{2}{3}$ miles at low Nile. The west end of it was defended, in the early days of the siege, by two steamers and later by two barges, each mounting a gun and manned by an officer and twenty-five men.

On the perimeter due south of the town was a large bastion named the Kalākla Fort. (Its site was just south of the present Hurriyya Bridge.) This bastion was strongly garrisoned by a force under the command of Ḥasan Bey al-Bahnasāwī who was in charge of the western sector of the defences. East of the bastion, and probably quite close to it, was a narrow passage through the fortifications known as the Kalākla Gate. This passage was chiefly used by people bringing in milk and other produce. It was closed as soon as the news of the Hicks *débâcle* of 1883 reached Khartoum, opened by General Gordon, but closed again in the early days of the siege.

The largest and most important bastion in the defences, known as the Masallamiyya Fort (which was situated just east of the present railway station) was strongly held by a force under the immediate command of Faraj Pasha Muḥammad al-Zainī, mentioned above, who was in supreme command of the whole line of defences and had his headquarters in or near it. A few yards east of this bastion was the Masallamiyya Gate, the main passage through the fortifications, which consisted of a gap in the ramparts, flanked by walling and closed by an iron gate, which could be lowered like a drawbridge over the ditch by means of winches. It was through this gate that the garrison made its sorties and that outsiders were admitted into the town.

There was only one other bastion between this and the eastern end of the line, and this was of much the same pattern as the Kalākla Fort. The eastern end itself was defended by Burri Fort, which resembled the Mogren Fort and was situated inside the ramparts about 325 yards from the Blue Nile at low river (in the present University grounds). The Burri Fort and the eastern sector was under the command of Bakhīt Bey Batrākī. Near the Burri Fort was a small gap through the defences known as the Burri Gate, which was kept closed from the earliest days of the siege.

The defences on the Omdurman side consisted of Fort Omdurman, about $\frac{3}{4}$ mile from the river bank, which formed the apex of two lines of ramparts and trenches running down to the White Nile. Those at Khartoum North were centred on a double-storeyed red brick building in a wide compound, originally built as a residence, which was surrounded by trenches and converted into a fort, the "North Fort".

Many Khartoum citizens left after Hicks' defeat and during the early part of the siege. The Mission staff left in December 1883 and the main Mission building, being of solid stone, was later turned by Gordon into a powder magazine and ammunition store. When an attempt was made to set fire to one of the houses near it, Gordon ordered all the houses in the immediate neighbourhood to be pulled down as a precaution.

With the fall of the town on Monday 26th January 1885 a line is ruled across the page of history and a fresh scene opens. Four days later the Mahdi entered it in triumph and led the Friday Prayer in the big mosque. Large private houses were prepared for him and his chief followers, the future Khalifa, 'Abdullāhi, taking up residence in the Palace. But the Mahdi's plans soon changed and he began to build his new capital in Omdurman. During his lifetime, however, there was practically no destruction of buildings in Khartoum, and many of his kinsmen (the Ashrāf) and followers were living there. They continued to do so after his death in June 1885. Ohrwalder visited it in April 1886 and describes the crumbling fortifications and the bodies along the parapet. But he notes, "Very few houses had been destroyed, and the town was thickly populated". However, the Khalifa 'Abdullāhi became increasingly uneasy about the rivalry it offered, and in August 1886 enforced orders previously given for its evacuation. The work of destruction then began: houses were pulled down, bricks, ironwork and the woodwork of windows, doors and balconies were transported to Omdurman, and used in the construction of the Khalifa's house and other buildings.

Yet Khartoum did not quite die even then. The dockyard and arsenal were kept going, for obvious reasons, and some of the gardens continued to be cultivated as a source of revenue and to provide the Emirs with fruit and vegetables. However, it was to all intents and purposes a city of the dead and a mass of mud ruins. So Khartoum met its end, and had to wait twelve years for its resurrection; but that is another story.

Lt.-Col. E. A. Stanton's manuscript notes on Khartoum after the re-occupation describe its appearance on the arrival of the Anglo-Egyptian forces, and parts of them help to confirm what we know of the layout of the old city from other sources. Gruesome discoveries could still be made. He tells us that when they were digging in what was then called Victoria Avenue (now Sharia El Kasr), "over forty-two skeletons were unearthed lying in the loose sand just as they had fallen on the eventful morning of 26th January 1885. All appeared to have been cut down when running towards the Palace or river".

What remains of the old city to-day?

There is very little indeed on the surface, the only remains that are in any way conspicuous being the tombs at the corner of Sharia El Kasr and Sharia El Baladiya. Some indications have already been given of the present sites of a number of the old buildings and gardens. The present Palace was built on the site of the old one; the position of the stairway on which General Gordon was killed is marked by a brass tablet. An elliptical basin which was situated in the courtyard of the old Palace was restored and is still in place. The present Palace garden is much larger than the old and extends for a greater distance behind it, where formerly there were some cultivations. The site of the complex of old government buildings which included the Mudiriyya is partly occupied by the space in front of the present Ministry of Finance. The embankment on the river-front has been built further out towards the river than it was in Old Khartoum—the old edge was about the middle of the present roadway. Some of the foundations of Khūrshīd's mosque apparently still lie buried 300 yards south of the present Mudiriyya which, as mentioned above, embodies part of a wall of the old Mission building; and the Coptic Church and school to-day are approximately on the site of the old Coptic Church.

The old government grain-store stood where the Palace outbuildings are now, and the old ordnance store and a general supply store were almost where the P.W.D. building is now, also east of the Palace. The arsenal stood on the sites now occupied by the University Faculty of Engineering and the Ministry of Health, and the old gunpowder magazine and factory was situated south of the present Veterinary Department buildings.

The line of the old fortifications, now levelled, can still be followed since it is indicated on some of the present street-plans. The name "Gordon's ramparts" is marked on the ground where the line cuts the eastern end of the two streets Sharia El Gamaa and Sharia El Gamhoria. Part of the road between these points and the railway station follows the rampart line.

The Khalifa's House Museum in Omdurman contains a few relics—a carriage or two, some chairs from the old Palace, a piece of railing and a derelict piano from the Mission, the lithographic press, a number of cartridge machines, some emergency paper money and medals from the siege, and so on—pathetic vestiges of the old community. The new Khartoum has arisen on a far grander scale than the old, but let us not forget those who lived and laboured in Old Khartoum with few of the comforts and amenities we now enjoy.

* * *

This short study of Old Khartoum is experimental and I am well aware of its incomplete nature. But perhaps it may serve to encourage others to dig deeper. The great majority of writings dealing with or including the Turkiyya have been, perhaps inevitably, studies of the rulers rather than the ruled. We badly need further studies of the period from the point of view of Sudanese society and institutions—their traditional structure, their development and the impact upon them of foreign rule. A deeper study of Old Khartoum would also not so much amass facts for their own sake as consider more closely the *role* it played in various spheres and the *problems* it had to face and how these were met. And certainly consideration needs to be given to such questions as these :

(a) The part played by the Sudanese themselves, local government, the *shaikh al-mashāyikh* system, the *nuzār aqsām*, etc.

(b) The economic growth of the town, economic change, etc., in relation to occupations, wages and prices, and the social structure.

(c) Water-supply, food supplies, communications, defence.

(d) A fuller examination of the history of the layout of the town, its extensions and quarters in relation to its trade, its political and social make-up, etc.

(e) Wider factors of trade, industry and agriculture in other parts of the country—e.g. the gum trade, and the cultivation of cotton, sugar-cane and indigo—and their connection with the life of the capital. Commercial organization in general, the *sirr al-tujār* system, etc.

(f) Specific subjects such as the financial structure, the legal system, medical services, religious education, the training of artisans, etc.

(g) A deeper study of the internal administration of the country, linking this also with the political situation in Turkey and Egypt. Although the Sudan was, in Hill's words, "a dependency of a dependency", outside events had their influence upon the course and forms of administration.

Historians are inevitably handicapped by the destruction of Turkiyya records within the Sudan after the fall of the regime, and no doubt for many details documentary evidence is now unobtainable. But a great deal more can be done.¹ A close examination of land claims during the first years of the Condominium might yield valuable clues to properties in Old Khartoum. The archives in Cairo and Istanbul await fuller research, and there are consular records and correspondence elsewhere, for example in Vienna. There may still be unpublished Sudanese manuscripts to be discovered or to which access might be obtained, and further information may yet be gleaned from the oral family histories of the descendants of Sudanese who lived in the town during the Turkiyya. There is surely more research to be done into the lives of other Khartoum personalities—the Egyptians, Turks, Europeans and others who served in the government, traded or explored in the 19th century Sudan. I am equally sure that much study remains to be done in regard to the religious history of the period and of that preceding it—sheikhs' tombs and shrines (we do not yet possess, I think, even an authoritative map or series of maps showing the location of all known sites of this kind), *ṭarīqas* and *khalwas*. These remaining possibilities raise hopes that a fuller study may yet be made of the old city, its activities and its personalities.

Acknowledgments : I wish to acknowledge my debt to C. E. J. Walkley's connected account, "The Story of Khartoum", published in this journal thirty years ago (see bibliography below), and to R. L. Hill's *Egypt in the Sudan 1820-1881* (London, 1959), from which I have quoted, which together helped to arouse my interest in the history of the old city and to send me to many of their sources. I also thank the Trustees of the British Museum for permission to reproduce two photographs of Old Khartoum (Plates 1 and 2) from Richard Buchta's *Die oberen Nil-Länder* (Berlin, 1881).

Note on Maps : There are not many good maps or plans of Old Khartoum. It may be convenient here to mention a few of those which are more readily accessible :

A map of Khartoum and environs about 1840 by the French engineer J. -P. d'Arnaud is reproduced in H. Dehérain, *Le Soudan égyptien sous Méhémet Ali* (Paris, 1898), opp. p. 118.² G. Lejean, *Voyage aux deux Nils* (Paris, 1865), vol. 2 atlas, has a useful street-plan showing the various quarters of the city in 1860, and also a map of Khartoum and environs of the same date. These are reprinted in O. G. S. Crawford, *The Fung Kingdom of Sennar* (Gloucester, 1951), pp. 70-1. A very similar "Plan von Chartüm und Umgebung 1876" appears as "Tafel 4" of W. Junker's *Reisen in Afrika* (Vienna, 1889). The cartographers Bartholomew and Menzies published a "Large scale map of the Sudan . . . with enlarged plan of Khartoum" in 1885 (Edinburgh and Glasgow) : the street plan of "Khartoum about the time of Gordon" may be seen in Bartholomew's *A Literary and Historical Atlas of Africa and Australasia* (in "Everyman's Library", Dent, London, n.d.). Likewise maps in Wingate's *Mahdism and the Egyptian Sudan* (London, 1891) and

¹ Hill makes many suggestions for fields of investigation in the section "Opportunities" of his paper "The Period of Egyptian Occupation, 1820-1881" presented to the Philosophical Society Conference on "The Sudan in History" and published in *SNR*, XL (1959).

² A recent reproduction of this map may be found in F. Rehfish, "A Sketch of the Early History of Omdurman", *SNR*, XLV (1964), p. 39. The original map, which was in Paris, is now apparently lost, *vide* Rehfish, p. 38.

Gleichen's *Handbook of the Sudan* (London, 1895, and many subsequent editions) show the city in its last phase. Reproductions of these may be found in other works, for example in G. W. Steevens, *With Kitchener to Khartum* (London, 1898) opp. p. 246, and J. Ward, *Our Sudan, its Pyramids and Progress* (London, 1905) p. 109.

Photographs, etc. Photographs of Old Khartoum are comparatively few, and this is another field for further research. Among the best I have seen are those taken by Richard Buchta about 1877-78, which include the Palace, German Consulate, Mission, and views over the city in different directions from the Palace. (See esp. Plates 1-9 in vol. I of his *Die oberen Nil-Länder*, 1881). One or two of these are reproduced as drawings (usually without acknowledgment) by Grant and others. A few other photographs (marked "Albert") may be found in G. Casati, *Ten Years in Equatoria* (Eng. trans., London, 1891), including one view (opp. p. 22) looking westwards from the Palace. I have not yet succeeded in tracing whether any photographs taken by Carl Berghof (killed in the Sudan in 1881, *vide* Hill's *Biographical Dictionary*, 1951, *ad loc.*) now exist. There are some drawings in Junker, Grant and other travellers, and a few photographs and drawings, in particular of the Mission and of personalities connected with it, in Tappi (1894) and in Toniolo (1946, 1958).

BIBLIOGRAPHY (SELECTED)

- ABBATE PASHA, O. "Khartoum revu après cinquante ans, 1856-1906". *Bulletin de la Soc. Khédiviale de Géog.*, VIe série, No. 11, 1906, pp. 551-75.
- ALLEN, B. M. *Gordon and the Sudan*. London, 1931.
- ALMAGIA, R. *Gli Italiani nel Bacino Medio e Superiore del Nilo (1840-1890)*. Rome, 1926.
- BAKER, Sir S. "Letters from Khartoum . . . 1862". *Proc. of Royal Geog. Soc.*, vol. 7, 1863.
- *Albert Nyanza, Great Basin of the Nile*. London, 1866.
- *Ismaïlia*. London, 1874.
- BELTRAME, Fr. G.—see "Three Impressions . . ."
- BREHM, A. E. "Chartum und seine Bewohner". *Zeitschrift für allg. Erdkunde*, VI, 1856.
- *Reiseskizzen aus Nord-ost Afrika . . . 1847 bis 1852*, 3 vols. Jena, 1855; Leipzig, 1862. (See esp. Vol. I pp. 139-240, 335-43, Vol. III pp. 74-101.)
- "Chartum". Leipzig, *Illustrierte Zeitung*, 11th and 25th May 1861; Gotha, *Globus*, Nos. 32, 33, 1863.
- "Chartum und der ägyptische Sudan". Gotha, *Petermanns Mitteilungen*, vol. 30, 1884.
- BROCCHI, G. B. *Giornale delle osservazioni fatte ne' viaggi in Egitto, nella Siria e nella Nubia*. 6 vols. Bassano, 1843. (See esp. Vol. v.)
- BRUN-ROLLET, A. *Le Nil Blanc et le Soudan*. Paris, 1855.
- BUCHTA, R. *Die oberen Nil-Länder*. Volkstypen und Landschaften. 2 vols. Berlin, 1881. (160 photographs.)
- *Der Sudan unter ägyptischer Herrschaft*. Leipzig, 1888.
- CAILLIAUD, F. *Voyage a Méroé, au Fleuve Blanc, au-delà de Fâzogl . . . fait dans les années 1819, 1820, 1821 et 1822*. 4 vols. Paris, 1826.
- CALLOT, Baron E. von. *Der Orient und Europa, Erinnerungen und Reisebilder von Land und Meer*. Leipzig, 1855. (Visited Khartoum in 1831. See also "Eduard Freiherrn Callots Reise durch Kusch und Habesch", ed. F. J. Bieber, I, pp. 114-314 of L. FROBENIUS and F. J. BIEBER, *Zur Herrlichkeit des Sudans*. Stuttgart, 1923.)
- CHAILLÉ-LONG, Col. C. *Central Africa: Naked Truths of Naked People*. London, 1876. (See Chaps. iii, xvii.)
- CHURI, J. H. *Sea, Nile, the Desert and Nigritia: travels in company with Capt. Peel, R.N., 1851-1852*. London, 1853.
- COLBORNE, Col. the Hon. J. *With Hicks Pasha in the Soudan*. London, 1884. (See Chaps. vii, viii.)
- COMBES, E. *Voyage en Égypte (etc.)*. 2 vols. Paris, 1846.
- CRAWFORD, O. G. S. *The Fung Kingdom of Semmar*. Gloucester, 1951.
- DE COSSON, E. A. *The Cradle of the Blue Nile*. London, 1877.

- DEHÉRAIN, H. *Le Soudan égyptien sous Mehemet Ali*. Paris, 1898. (See esp. Chap. ii, "Khartoum".)
- DOUIN, G. *Histoire du Soudan égyptien. Tome I : La Pénétration, 1820-22*. Cairo, 1944. *Histoire du règne du Khédive Ismail*. 3 vols. Cairo, 1936-41.
- DUFTON, H. *Narrative of a Journey through Abyssinia in 1862-3*. London, 1867. (He travelled via the Nubian Desert and Khartoum.)
- DUJARRIC, G. *L'État mahdiste du Soudan*. Paris, 1901. (See "Khartoum avant la Révolution mahdiste", p. 115 ff.)
- EDWARDS, F. A. "The Foundation of Khartoum". *SNR*, v, 1922, pp. 157-62.
- ELTON, Lord. *General Gordon*. London, 1954.
- ENGLISH, G. B. *A Narrative of the Expedition to Dongola and Sennar . . . by an American in the service of the Viceroy*. London, 1822.
- GESSI, R. *Sette anni nel Sudan egiziano*. Milan, 1930. (The edition of 1891 and the Eng. trans. of 1892 are not recommended.)
- GORDON, General C. G. *The Journals of Major-Gen. C. G. Gordon, C.B., at Kartoum*. ed. A. E. Hake. London, 1885.
- *General Gordon's Khartoum Journal*. ed. Lord Elton. London, 1961.
- GRANT, J. A. *A Walk across Africa*. Edinburgh, 1864. (See Chap. xvii describing his stay at Khartoum.)
- *Khartoum as I saw it in 1863*. Edinburgh, 1885.
- HAMILTON, J. *Sinai, the Hedjaz and Soudan*. London, 1857. (Visited Khartoum in 1854; see pp. 318-59.)
- HANSAL, M. L. *Neueste Briefe aus Chartum*. 2 vols. Vienna, 1855, 1856.
- "Nachrichten aus Chartum". Vienna, *Mitteilungen der kaiserlich-königlichen geographischen Gesellschaft in Wien*, 6, 9, 1879.
- "Aus Chartum. (Über Gordon's und Gessi's Kämpfe im Sudan.)" Vienna, *Oesterr. Monatsschrift für den Orient*, pp. 168-9, 1879.
- "Zur Geschichte des Aufstandes im ägyptischen Sudan". Vienna, *Oesterr. Zeitung für den Orient*, Nos. 1-2, 1882; No. 3, 1883.
- "Der Aufstand im Sudan 1883". Vienna, *Oesterr. Monatsschrift für den Orient*, 7, 1883.
- HEUGLIN, T. von. "Reisebericht aus Chartum . . . 1852". Vienna, *Kaiserl. Akademie der Wissenschaft*, 9, 1852.
- HILL, R. L. *A Biographical Dictionary of the Anglo-Egyptian Sudan*. Oxford, 1951.
- "Rulers of the Sudan, 1820-1885". *SNR*, xxxii, Part I, 1951, pp. 85-95.
- "An Unpublished Chronicle of the Sudan, 1822-41". *SNR*, xxxvii, 1956, pp. 2-19.
- "Death of a Governor-General". *SNR*, xxxix, 1958, pp. 83-87.
- (On the mystery of the death of Ahmad Pasha abū Adhān in Khartoum on 6th October 1843.)
- *Egypt in the Sudan, 1820-1881*. London, 1959.
- HOLROYD, A. T. "Notes on a Journey to Kordofan in 1836-7". *Journal of Royal Geog. Soc.*, ix, pp. 163-91, London, 1839. (See pp. 167, 183-4 on his visit to Khartoum.)
- HOLT, P. M. *The Mahdist State in the Sudan, 1881-1898*. Oxford, 1958.
- *A Modern History of the Sudan*. London, 1961.
- JOMARD, E. F. *Études géographiques et historiques sur l'Arabie, suivies de la relation du voyage de Mohammed-Aly dans le Fazoql*. Paris, 1839.
- JUNKER, W. *Reisen in Afrika, 1875-1886*. Vienna, 1889. (Eng. trans. by A. H. Keane, 3 vols., London, 1890-2.)
- LEJEAN, G. *Voyage aux deux Nils . . . 1860 à 1864*. 2 vols. (text and atlas). Paris, 1865.
- LEPSIUS, R. *Discoveries in Egypt, Ethiopia . . . in the years 1842-1845*. ed. K. R. H. Mackenzie. London, 1853. (Visited Khartoum in 1844; see pp. 168-70, 208.)
- MACMICHAEL, Sir H. A. *A History of the Arabs in the Sudan*. 2 vols. Cambridge, 1922. (See esp. MSS D3 and D7 in Vol. ii.)
- "Old Khartoum". (A Note.) *SNR*, vi, 1923, p. 110.
- MELLY, A. *Lettres d'Égypt et de la Nubie . . . 1851*. ed. G. Melly. London, 1852.
- MELLY, G. *Khartoum and the Blue and White Niles*. 2 vols. London, 1852. (See esp. Vol. II, Chaps. vi-viii.) (And see WHITEHEAD, G. O. on the visit of André Melly and his son George to Khartoum in 1850.)
- MESSEDAGLIA, L. G. *Uomini d'Africa*. Bologna, 1935. (Life of G. B. Messedaglia Bey and other Italians in Khedivial service.)
- MONTUORI, Fr. L.—see "Three Impressions. . ."
- MOOREHEAD, A. *The White Nile*. London, 1960.
- *The Blue Nile*. London, 1962.

- OHRWALDER, J. (ed. WINGATE, F. R.) *Ten Years' Captivity in the Mahdī's Camp, 1882-1892*. London, 1892, many edns.
- PETHERICK, J. *Egypt, the Soudan and Central Africa*. Edinburgh, 1861.
- PETHERICK, J. and (Mrs) K. H. *Travels in Central Africa*. London, 1869.
- POWER, F. *Letters from Khartoum*. London, 1885.
- PRUDHOE, Lord. "Extracts from Private Memoranda kept by Lord Prudhoe on a Journey from Cairo to Sennar in 1829". *Journal of Royal Geog. Soc.*, v, pp. 38 ff. London, 1835.
- PÜCKLER-MUSKAU, Prince H. von. *Aus Mehemet Ali's Reich*. 3 vols. Stuttgart, 1844. (Eng. trans. by H. E. Lloyd, *Egypt under Mehemet Ali*, 2 vols., London, 1845.) (See Chap. "Kartum" of German edn., Vol. III, pp. 226-56; in Lloyd, Vol. II, Chap. xii, pp. 293-5, Chap. xiii, pp. 296-316.)
- ROLLERI, Fr. B. "Chartum e costumi del Sudan". Verona, *Gli Annali del Buon Pastore*, 1881, No. 26, pp. 19-26; No. 28, pp. 33-39.
- see "Three Impressions . . ."
- RUSSEGGER, J. *Reisen in Europa, Asien und Afrika*. 4 vols. and atlas. Stuttgart, 1841-8. (See esp. Vol. II (1844).)
- SAMMARCO, A. *Viaggio di Mohammed Ali al Sudan*. Cairo, 1929. (Consular dispatches.)
- SARSFIELD-HALL, E. G. *A Brief Account of the Siege and Fall of Khartoum*. (Booklet.) Khartoum, n.d. (Based on Wingate's account pubd. in *United Service Magazine*, 1892, and in *SNR*, 1930. Sarsfield-Hall was Governor of Khartoum, 1929-36.)
- SCHUVER, J. M. "Chartum und der ägyptische Sudan". Gotha, *Petermanns Mitteilungen*, vol. 30, 1884.
- SCHWEINFURTH, G. *Im Herzen von Afrika, 1868-71*. Leipzig, 1873. (Eng. trans. *The Heart of Africa*. London, 1873.)
- SHIBAÏKA, M. *Al-Sūdān fī Qarn : 1819-1919*. Cairo, 1947.
- SHUKRĪ, M. F. *Al-Hukm al-Miṣrī fī l-Sūdān, 1820-1885*. Cairo, 1945.
- *Ghurūdūn fī l-Khartūm, 1884-1885*. Cairo, 1951.
- STANTON, Lt.-Col. E. A. (MS.) Memoranda on the Sudan, including "Appearance of Town on Arrival (i.e. in 1898)" (pp. 26-37). (In Sudan Library, University of Khartoum, Cat. No. 161.)
- STEWART, Lt.-Col. J. D. H. *Some Notes on the Town of Khartoum, its Population, Position, Manufactures, Trade and Education*. Blue Books, Egypt, 1883, No. 13.
- TAPPI, C. *Cenno Storico della Missione dell' Africa Centrale*. Turin, 1894. (On the Mission in Khartoum, see pp. 30-7, 50-4.)
- "La Capitale del Sudan". Verona, *Nigrizia*, 1898, pp. 180-6.
- TAYLOR, BAYARD. *A Journey to Central Africa, or Life and Landscapes from Egypt to the Negro Kingdoms of the White Nile*. New York, 1854.
- THIBAUT, M. *Expédition à la Recherche des Sources du Nil, 1839-40*. Paris, 1856.
- "Three Impressions of Khartoum during the Turkiya" (from the letters and diaries of Italian missionaries), *SNR*, xli (1960), pp. 101-6, comprising :
I. Khartoum in 1842 (Fr. L. Montuori), pp. 101-3.
II. Khartoum in 1853 (Fr. G. Beltrame), pp. 103-4.
III. Khartoum in 1881 (Fr. B. Roller), pp. 104-6.
- TONIOLO, Fr. E. "The Centenary of the Roman Catholic Mission to Central Africa, 1846-1946". *SNR*, xxvii, 1946, pp. 99-126.
- *Daur al-Irsāliyyāt al-Kāthūlikiyya fī ḥarakat al-kashf al-jughrāfī wa 'ilm al-ajnās al-bashariyya bi l-Sūdān mā bain 1842-1899*. Khartoum, 1958.
- VINCO, A. "Briefe aus Chartum . . . 1852". Vienna, *Geog. Mitteilungen*, 1857.
- WALKLEY, C. E. J. "The Story of Khartoum". *SNR*, xviii, 1935, Part II, pp. 221-41; xix, 1936, Part I, pp. 71-92.
- WERNE, F. *Expedition zur Entdeckung der Quellen des Weissen Nil 1840-1841*. Berlin, 1848. (Eng. trans. by C. W. O'Reilly, *Expedition to discover the Sources . . .*, 2 vols., London, 1849.)
- WHITEHEAD, G. O. "André Melly's Visit to Khartoum, 1850". *SNR*, xxi, 1938, Part II, pp. 291-305.—see also under MELLY, G.
- WINGATE, F. R. *Mahdism and the Egyptian Sudan*. London, 1891.
- "The Siege and Fall of Khartoum, with map". *SNR*, xiii, 1930, Part I, pp. 1-82. (Reprinted from the *United Service Magazine*, Jan. to July 1892.)
- see also under OHRWALDER.
- ZAGHI, C. *Vita di Romolo Gessi*. Milan, 1939.
- *Gordon, Gessi e la riconquista del Sudan*. Florence, 1947.

EARLY SUDANESE NATIONALISM: 1900-1938

by

MUDDATHIR ABDEL RAHIM

Professor Wilfred Cantwell Smith, in his classic study of *Islam in the Modern World*, gives a perceptive description of the sense of loss and utter disarray which a Muslim people experiences when it is subjected to alien rule. In the process of soul and heart searching which follows such a catastrophe the situation, he finds, is viewed not merely as one in which sovereignty has been lost or the body-politic put in chains, but rather as one in which history itself has gone wrong and the governance of the universe has been upset.¹

This is a fitting description of the feeling of the Sudanese people after the decisive battle of Omdurman. The Mahdi's own "Ansar", who formed the backbone of the regime which had then perished, no doubt had a more intense experience of this feeling than the rest of the people, some of whom had been alienated by the Khalifa's rule and were, therefore, driven to react differently. Like the Wahhabis in Arabia the Mahdists had hoped to conquer the Muslim world—as well as other areas²—and regenerate Islam. These hopes, however, had been severely checked at Toshki in 1889, and numerous setbacks were suffered afterwards.

But now that the Mahdiyya had been crushed in its own homeland and the Mahdi's tomb shattered by the shells of the infidels, the agony was unbearable and a series of desperate risings took place. They were all poorly organized and hopelessly ill-equipped to withstand the superior arms and forces of Egypt and Britain. Nevertheless, frustrated by their recent experience and inspired by the messianic belief that, after the Mahdi, the Nabi 'Isa (or Prophet Jesus) was bound to come, deliver the faithful and "fill the earth with justice even as it had been filled with iniquity", Mahdist risings continued to occur at least once a year for well over twenty years. The fact that, materially speaking, they were no match for the new regime did not deter these men from seeking "either of the twin excellences, victory or martyrdom"³—and the latter was their usual lot either in the battlefield or by hanging.

The most serious of these risings, that of 'Abd el Gadir Wad Habbuba in the Gezira in 1908, was no exception, and the villages of his supporters, moreover, were burnt down.⁴

¹ W. C. Smith: *Islam in the Modern World* (Princeton University Press, 1957). The same point was expressed in the Report of the Milner Mission as follows: "That a Mohammedan should occupy a position of political subordination to a Christian is opposed to the essential spirit of Islam, and the sentiment which this spirit has engendered survives long after strong religious feeling has been greatly attenuated. . . . There is in the East a patriotism of religion which is an even more fundamental sentiment than the patriotism of home and tradition". Report of the Special Mission to Egypt. Cmd. 1131. 1921.

² The Khalifa 'Abdullahi sent letters to numerous people, Muslims and non-Muslims, asking them to accept the Mahdiyya and follow him. Among these was Queen Victoria to whom he offered, not only salvation, but the prospect of becoming his wife.

³ A saying of the Prophet regarding Jihad.

⁴ In a private letter dated 10th March 1908, Wingate wrote to Gorst: ". . . in the present political situation both in Egypt and at home, I think the less said in official reports about burning insurgents' houses, putting them in chains, etc. the better; so I shall cut out references of that sort when sending it on officially, and I shall accompany it with a further explanatory note which I hope will have the effect of silencing all this twaddle about the Dervish Prisoners, Ali Yusef's

(continued on next page)

Wingate's opinion on the subject (and he was probably influenced in this by the Inspector General, Slatin Pasha, who was his personal friend) was that "it will be kinder in the end to deal severely"¹ with the insurgents. "The long and the short of the matter," he wrote to Gorst, "is that Mahdism in this country is not really dead; it has been stifled but there is still plenty of vitality in it and only the occasion is needed to bring it to the surface; nor is it to be wondered at when one remembers that most of the present generation have been born and brought up in the faith";² "... it behoves us therefore never to relax for a moment our precautions to guard against the spread of such movements and the only means of doing this, with our meagre sources, is to crush them—almost mercilessly—in their inception".³

Under these conditions it is not surprising that none of these risings was a success. The Ansar were treated as an obvious security risk. The sale and circulation of the Mahdi's "Ratib" (a selection of Daily Readings which also served as a political manifesto) was forbidden. And his son⁴ 'Abd el Rahman was kept under close watch. In order to counteract popular forms of Islam—represented by the semi-mystical *ṭarigas* in which the Mahdi had himself been nurtured—an official organization of seven ulemas was established in 1901. On that occasion Wingate wrote to Cromer that *ṭarigas* had been rather on the increase—"but I hope with the aid of the Council (of Ulemas) to quietly but firmly deal with them."⁵ Cromer, who was fully aware of the relationship between the religious feeling of the people and their resistance to the new regime, was equally concerned to prevent subversion from within government institutions. "Some one", he wrote to Wingate, "told me that the historical textbooks in schools were all of a nature to encourage Moslem feeling. If so, they should be changed".⁶

Ironically, however, the most important of government institutions, and the one which constituted its main support, i.e. the army, was also imbued with a similar spirit. The Sudanese battalions in the Egyptian Army were certainly not Mahdist. They belonged to other, normally rival, *ṭarigas* such as the Khatmiyya—whose leader was Sayed 'Ali el Mirghani—or to no *ṭarigas* at all; but they were also, in different degrees, resentful of the British presence in the Sudan. Typically, as it was to become increasingly clear in subsequent years, the anti-British sentiments of these non-Mahdist, or anti-Mahdist, elements were pursued and developed in close co-operation with Egyptian officers and troops or Egyptian civilians in the Sudan. The first manifestation of this spirit was the mutiny of 1900, when the Condominium was less than one year old. As Cromer told Salisbury, "It is next to impossible to obtain direct evidence of the origin of the mutiny . . . but by degrees enough leaks out to form a pretty fair idea of what happened. It seems that there has been great discontent and a talk of combined action for a long time".⁷

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nonsense & Co." ('Ali Yusuf was the editor of *El Mu'ayyad*, the organ of the Egyptian Nationalist Party). A fortnight later Wingate thanked Gorst for his favourable response to this suggestion adding: "The silence of the F.O. is satisfying and I hope it will long continue!" The Wingate Papers. School of Oriental Studies, Durham (hereafter referred to as "Durham").

¹ Wingate to Gorst, 24th May 1908. Durham.

² Wingate to Gorst, 10th May 1908. Durham.

³ Wingate to Gorst, 3rd May 1908. Durham.

⁴ Two other sons of the Mahdi were killed in a clash with government forces in August 1899. 'Abd el Rahman was born posthumously.

⁵ Wingate to Cromer, 13th January 1901. Durham.

⁶ Cromer to Wingate, 3rd February 1904. Durham.

⁷ Cromer to Salisbury, 27th April 1900. (F.O. 633/63. P.R.O.)

The discontent was in large measure due to Kitchener's stern discipline and harsh treatment of the troops. In so far as the Egyptian officers and troops were concerned there was the added resentment of the British occupation of Egypt and the recently signed Anglo-Egyptian Agreement which put the administration of the Sudan in the hands of the British. Egyptian views on the matter were clearly, if somewhat inaccurately, expressed in *El Liwa'*, the organ of the Egyptian Nationalist Party of Mustafa Kamil. "The officers and soldiers", it said, "exhibited great feats of courage in the re-occupation of the Sudan—such as the English themselves admired. They were, however, soon greatly insulted—an insult which no other army in the world has expected, for they saw the British flag flowing over Khartoum. . . . It was further seen that an agreement was passed between England and Egypt which made the Sudan a common possession of both. . . . The regret was greater when it was further noticed that the Governor General was English and not Egyptian. . . ."¹ In addition it was rumoured that arrangements were being made to send the Sudanese and Egyptian troops to the Transvaal in order to fight the Boers. The eleventh and fourteenth battalions mutinied in January 1900 and the mutiny assumed serious proportions before it was finally put down. "The idea", Cromer reported, "was not to kill the English officers—except perhaps Kitchener—but either to keep them in confinement at Omdurman or to send them to Cairo. The whole army was to join, and then one of two programmes was to be adopted—either the Khedive was to be informed that there were 20,000 men at his disposal, and his orders requested, or else, without waiting for an expression of the Khedive's views, the whole force was to move on to Egypt".²

There are remarkable similarities between the 1900 mutiny and that of 1924. Both were inspired by a vision of an independent Nile Valley under the leadership of Egypt; both were staged by Egyptian and Sudanese army officers and troops working together; and both ended in failure. Also the reactions of the Sudan Government in 1900 compared remarkably with those adopted a quarter of a century later. For example, after the mutiny of 1900, Kitchener suggested that an Imperial Service Corps of purely Sudanese units should be formed³ to replace Egyptian battalions in the Sudan. For the same reasons the Sudan Defence Force was established in 1925 following the evacuation of Egyptian units from the country. But although Kitchener's suggestion was seriously considered at the time, no mass evacuation of Egyptian forces was effected. Instead, it was decided that the army should be reduced and Sudanese should replace a number of Egyptian officers.⁴ Salaries were, in due course, increased; grievances considered legitimate were redressed and the importance, to the regime, of keeping British battalions in the Sudan was more fully realized. A few years later Wingate wrote to Gorst, "I have ample proof that the Nationalist spirit has taken deep root in the Army, though, so far, beyond taking a keen interest in the personal questions of pay and allowances and pensions, they have nothing to call down reproof on them".⁵ In these circumstances, therefore it is not surprising that with the exception of the Mahdist rising of Wad Habbuba of 1908 (which was, significantly, crushed by Sudanese, as well as British and Egyptian, troops) no serious armed conflict took place until 1924.

¹ Official translation of an article in *El Liwa'* of 7th February 1900 which was forwarded by Cromer to Salisbury on 8th February. (F.O. 78/5086. P.R.O.)

² Cromer to Salisbury, 27th April 1900. (F.O. 633/6. P.R.O.)

³ Cromer to Lord Lansdowne, *ibid.*, 28th November 1902.

⁴ Cromer to Salisbury, 25th February 1900. (F.O. 633/6. P.R.O.)

⁵ Wingate to Gorst, 8th May 1908. Durham.

Politics, however, continued to engage the more thoughtful and enlightened sections of the population. And as the country gradually recovered from the devastation which it had suffered during the later days of the Khalifa's rule and as a result of the conquest and "pacification", more and more people began to take an interest in national questions and the spirit of nationalism gradually spread. Improved economic and living conditions greatly facilitated the growth of national consciousness especially after the Gash Delta, the Gezira and other parts were turned into cotton-growing areas on a scale large enough to meet the needs of Lancashire and enable the Sudan Government to carry on after the cessation of Egyptian subventions in 1913. But the gradual expansion of modern education and schools, though they were few in number and closely geared to purely administrative purposes, was perhaps the most important factor in the development of this process. Besides, the influence of Egypt continued to be felt through her Arabic papers and publications, through her personnel working in the Sudan, through Sudanese traders, students (especially of El Azhar University) and visitors in Egypt and, above all, through the example of the Egyptian nationalist movement.

* * * * *

The First World War marked a turning point in the growth of Sudanese nationalism. It stimulated the younger generation, which had been through government schools and had acquired some idea of modern methods of administration by working in government offices. Their interest was also aroused by the outbreak of the Arab Revolt in 1916. But the greatest stimulus was perhaps that of President Wilson's fourteen points which were widely discussed in the Egyptian press. In 1918 the graduates (i.e. former pupils of the Gordon College) opened the Graduates' Club at Omdurman. In an often quoted speech on the occasion Mr Simpson, the Deputy Director of Education who was appointed first President of the Club, said that the Club was destined to play an important role in the future development of the country.

The outbreak of the war was also a turning point for the leaders of the *tarigas*, especially the Ansar. Until then "Sayed 'Ali el Mirghani stood alone as the only great religious leader in whom the Government placed confidence; Sayed 'Abd el Rahman el Mahdi and Sherif Yusuf el Hindi were even under the eye of suspicion—and were very well aware of it".¹ But the war put the Ansar and Sayed 'Abd el Rahman in a different light. The main factor which occasioned the change was Turkey's declaration of war on Britain and the allies, and her subsequent attempts to persuade Sultan 'Ali Dinar of Darfur to attack the British Government of the Sudan simultaneously with a similar proposed attack on Egypt by the Sanusi of Libya. The anxiety of the Government about the possible effects on the Sudan of Turkey's call to the Muslims of the world to rise against their infidel oppressors, was clearly demonstrated in a speech which the Governor General delivered to "*Mashaikh el Din*, men of education and intelligence" who were specially summoned to the Palace. "God is my witness," Wingate told the gathered dignitaries, "we have never interfered with any man in the exercise of his religion. We have brought the Holy places within a few days' journey from Khartoum. We have subsidised and assisted men of religion. . . ." Britain had nothing but goodwill and friendship to the Muslims of the world. She had no quarrel with Islam or with its spiritual leaders and did not enter the war with the object of gaining territory

¹ Intelligence Report dated 19th December 1921. Durham.

at the expense of any Muslim state : "Her anger is directed solely against the Germans and their Turkish allies". The Government of the Young Turks had not only overthrown Sultan 'Abd el Hamid and—through their reckless maladministration—created discontent amongst the non-Turkish races of the Ottoman Empire ; but, like broken gamblers, they were now staking their last coin by going to war against Britain "the one Power who, by her actions and the sentiments of her people, has ever been a true and sympathetic friend to the Muslims and to Islam". "You in the Sudan have had the bitter experience of the evils of Turkish rule and can judge better than those people who have been fortunate enough never to be under the Turkish Empire. But you may feel—and believe me I sympathise with you truly in this matter—a certain sorrow at this war. You may feel, some of you, that the result of this war may in some way affect the situation of Mohammedans in other parts of the world. I assure you before God that your fears are groundless, that in the British Empire the position of no single Mohammedan will be changed one iota and no single privilege granted to Islam will be repudiated". The Governor General concluded his speech by appealing to his audience to give humble and wise counsel to the people and thus save their followers from being misled by rash and irresponsible suggestions : "for here in the Sudan, as elsewhere in the world, the fools will listen to the wise, the ignorant to the learned, and the common people to men of wisdom and education".¹

It is clear the Government was intensely anxious about the situation and was straining to win the support—or at any rate the neutrality—of the Muslim population through their leaders. In these circumstances, therefore, Sayed 'Abd el Rahman and the Ansar were naturally seen in a more favourable light. For the Mahdists were the traditional enemies not only of the Turks but also of the Egyptians. Both, in the eyes of the tough and puritanical Ansar, were soft, corrupt and decadent. They were held responsible for the general decline of Islam in recent times and for numerous iniquities in the treatment of their Sudanese subjects during the Turco-Egyptian regime of Muḥammad 'Ali and Isma'il. Moreover the Egyptians were held guilty for bringing the British into the Sudan and wrecking the Mahdist regime there in the hope of, one day, re-establishing their own authority in the land. It is true the British were infidels and themselves guilty of unspeakable enormities, not least of which was the destruction of the Mahdi's tomb. But, it was felt, they were bound to leave the country one day or perhaps to be forced out of it. But the Egyptians, if only because of their proximity to their homeland, would be infinitely more difficult to get rid of once they were established in the Sudan. From a Mahdist point of view, therefore, a tactical alliance with the British authorities, who were in any case in control of both the Sudan and Egypt, was for the time being acceptable.

A tacit agreement was thus reached whereby Sayed 'Abd el Rahman, to be able to counteract the Pan-Islamic propaganda of the central powers—was allowed to visit and live in Gezira Aba, the cradle of Mahdism. He was also allowed to consolidate his position and that of his followers by engaging in large-scale farming and cotton cultivation. The tight restrictions hitherto ruthlessly imposed on the Ansar were gradually relaxed. And for them things became generally brighter after the disappearance from the scene of Slatin Pasha, the Inspector General. By 1916 the intelligence department reported that Sayed 'Abd el Rahman was

¹ The Governor General's speech to the Ulema on 8th November 1914. Durham ; and Milner Papers, New College, Oxford (referred to hereafter as "Oxford").

"gaining considerable influence with the people". But "he was regarded by many as the Khalifa of his father". It was, therefore, necessary "for this man to be watched daily".¹ It was also considered necessary to watch and control all other leaders, both tribal and religious, even in the wake of the Egyptian Revolution when their support was needed most. To quote another Intelligence Report, "the length of the rope which it is possible to give to the religious or the tribal sheikhs must be regulated with due regard to ignorance and inflammability of the peoples among whom they desire to expand their influence and the means at the disposal of the Government to deal with the possible infringements of law and order which may be anticipated as the process develops. The middle way is not easy to find. Undue suppression of what may be held to be the legitimate expansion of the power of either the religious or secular leaders can only result in antagonizing them. Too free a hand may lead to serious trouble, either because the individual gets an exaggerated idea of his own importance and is tempted to try to throw off control to a degree which is not permissible, or because (and this is the more probable difficulty) his motives, harmless in themselves, are misrepresented by his agents and misinterpreted by his followers".²

Within such limits as the government wished to impose, the three Sayeds, tribal sheikhs and other influential persons were to be allowed full freedom of action and, where their views happened to coincide with those of the Government, even encouraged or actively supported by the administration.

The first important success of this policy was the neutralization of the Pan-Islamic sympathies of the population during the war, except for a while in Darfur which was finally annexed in 1916. "The actual outbreak of hostilities with Turkey caused no excitement, and messages were received from all over the country affirming the loyalty of the people and their trust in the Government".³ The fact that Pan-Islamism had such little effect during the war was all the more interesting, as Stack wrote with obvious satisfaction, "because the outstanding result of the war in the neighbourhood of the Sudan has been the establishment of an Arab Kingdom just across the Red Sea . . . the movement has aroused in the Sudan nothing but a friendly interest in spite of distinct efforts on the part of King Hussain himself to court the sympathy of the Arabs over here".⁴

In the immediate post-war period, the most important question facing the Sudan Government was how to implement its policy⁵ of separating the country from Egypt and, at the same time to demonstrate, to Egypt and the world, that this was in accordance with the wishes of the Sudanese people. It can be safely assumed, therefore, that official encouragement was not withheld when the three

¹ Secret Intelligence Report, Khartoum, 10th September 1916. Durham.

² Political Situation, Khartoum. 19th December 1921. Durham.

³ Report on Egypt and the Sudan 1914-19 (Egypt No. 1 (1920), Cmd. 957), p. 93.

⁴ Stack to Wingate, 23rd February 1919. Durham.

⁵ Until 1919 British policy in the Nile Valley was based on the principle that for financial and administrative purposes Egypt and the Sudan were one country, the Sudan being viewed as a province of Egypt. After the Egyptian Revolution of 1919 this policy was reversed mainly because of the fear of the spread of nationalism across the Sudan to British East and Central Africa. For the same reason the "Southern Policy"—which was aimed at the gradual separation of the southern provinces with a view to their eventual separation from the Sudan and linking them with Uganda, Kenya, etc. to form an East African Federation under British control—was simultaneously launched. These points are discussed in some detail in a forthcoming study, by the present author, on *The Constitutional Development of the Sudan: 1899-1955* which will be published by the Clarendon Press, Oxford.

principal religious leaders expressed, in informal conversation, "a keen desire that the Government should take a stronger line than is taken at present (February 1919) to emphasize the fact that the Sudan is under the British Empire and that its future is with British control (and especially when) Sayed Ali Morghani in particular spoke of his ambition to see the people of the Sudan grow up under the guidance of Great Britain a united people with their own laws, customs and administration, capable of both governing and fighting for themselves".¹ For, a few weeks later, the Governor General received the following letter :—

"We beg you to convey to His Excellency the High Commissioner in Egypt, and the Government of His Majesty the King in London the following.

"We read daily the news contained in the Egyptian papers about the demonstrations in Egypt directed against the British authorities there, and about the demands of the Egyptians that the British occupation should leave the Valley of the Nile, and we have throughout been confident that, through the wise counsel of the British Officials in Egypt and the Egyptian Officials, everything will be settled satisfactorily.

"Yet, in order that nothing should reach the hearing of the British Authorities in Egypt and in London which may tend to make them believe that we are here in agreement with the movement now in progress in Egypt, we, the undersigned, on behalf of ourselves and of the whole population of the Sudan have hastened to express to the British Government the following :—

"Firstly, that we are extremely grateful for all that the British Officials in the Sudan have done for the welfare of the Sudan, which has resulted in the country's advancement and progress.

"Secondly, our great loyalty and sincerity to the British Government which is unalterable.

"Thirdly, our perfect and complete assurance that we have no hand in, or connection with the movement which is now in progress in Egypt, nor is the movement in accordance with our desires.

"In conclusion please accept our highest esteemed respect. (Sgd.)

Sayed Ali El Mirghani

Sayed Abdel-Rahman El-Mahdi

El Tayib Hashim—Mufti of Sudan

Abu El Gaseem Ahmed Hashim (President of the Board of 'Ulema)

Ismail El Azhari (Grand Kadi, Darfur)

Sayed Mirghani El Sayed El Mekki (Head of the Ismailia Tarika in the Sudan)

Omdurman 23.4.19".²

Sherif Yusuf el Hindi sent a similar letter dated 21st April.³

At the same time it was agreed that a deputation of Sudanese notables, including tribal sheikhs and government officials as well as the leaders of the religious fraternities⁴ should be sent to England in order to present officially their congratulations to the King on the signing of the peace.

¹ Stack to Wingate, "Note on the Growth of National Aspirations in the Sudan", 23rd February 1919. Durham.

² Official translation. Oxford.

³ Ibid.

⁴ It was feared, at first, that "sentimental objections might make Sayed Abd el-Rahman an unacceptable visitor to England" (Stack to Wingate, 8th May 1919. Oxford). But these fears were eventually overcome by Wingate and Curzon (Graham to Wingate, 16th June 1919. Oxford).

newspaper jointly owned and directed by Sayed Sir 'Ali el Mirghani, Sayed 'Abd el Rahman el Mahdi and Sherif Yusuf el Hindi.¹ The editor of *El-Hadara*, Sayed Hussein Sherif (one of the ablest writers and orators of his day) then published a series of articles under the general title: "The Sudan Question". The theme of the articles was that Egypt and the Sudan were indeed sister countries held together by many bonds. But each had certain rights and interests which must be respected and rationally maintained without reference to sentimental considerations. For the time being the Sudanese were unable to govern themselves and required outside assistance. This could indeed be provided, after a fashion, by the existing condominium regime. But the condominium was an anomalous and cumbersome arrangement which was also harmful to the Sudanese because it made them a bone of contention between two conflicting forces. The condominium should, therefore, be ended and the country should, instead, be governed by one power. Egypt was no doubt one of the most sophisticated countries in the Orient, but it was still far from capable of governing herself let alone ruling the Sudan or helping its people; "We are therefore left with the English. And they are undeniably the most able and efficient of all colonial powers". They should, therefore, be the guardians of the Sudan. When the Sudanese had learnt to administer their own affairs properly the need for paternal guidance would cease and the Sudan would be for the Sudanese. The same argument was used by Sayed 'Ali el Mirghani, Sayed 'Abd el Rahman el Mahdi, Sherif Yusuf el Hindi, Sheikh el Tayib Hashim, Sheikh Isma'il el Azhari and Sheikh 'Abdul Gasim Ahmed Hashim.²

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Today, "The Sudan for the Sudanese" is, naturally, taken for granted. But in 1920 (and for the next thirty-five years or so) it was the subject of bitter controversy both in Egypt, where it was strongly felt that the Sudan was an inseparable part of Egypt, and in the Sudan itself. In so far as the Sudanese were concerned there were two main reasons for doubt and controversy. The first was that most graduates (both of the Gordon College and the Military College) were convinced that "The Sudan for the Sudanese" was not a genuine nationalist motto, but one inspired by the British in order to exclude the Egyptians from the Sudan and leave Britain a free hand in running the country for her own ends. The very fact that the Sudan Government had allowed the propagation of this view, while opposing propaganda for the opposite view, was enough to condemn it in the eyes of most of the enlightened parts of the population, for some of whom suspicion of everything favoured by the Government was a first principle of sound nationalist thinking.³

The second reason for the opposition of the majority of the graduates was that they felt that independence, even if it was sincerely desired by its protagonists, could only be achieved by allying the Sudan with Egypt, which was not only a Muslim and Arabic-speaking neighbour, but one which was also suffering the same experience of alien rule by British imperialism. It was argued that once the common enemy was expelled, then Egypt—which was after all only a nominal

¹ Op cit. p. 19. Sayed 'Ali was knighted in 1919 before the return of the delegation to the Sudan.

² Their joint letter to Mr Willis, the Director of Intelligence dated 11th February 1927. Archives, Khartoum.

³ Ahmed Kheir: *Kifah Jil* (Cairo 1948), p. 22.

partner in the condominium—could easily be persuaded to leave the Sudan for the Sudanese.¹

Accordingly the open propaganda of *El Haḍara* for “co-operation with the British Imperial Idea, with the ultimate object of cultivating a spirit of national unity among the Sudanese”² was met by secret, but determined, propaganda for “The Unity of the Nile Valley”. Thus in November 1920, for example, “A Faithful Advisor” sent copies of a circular letter to hundreds of addresses all over the Sudan. The letter, of which a rather poor translation was sent by Stack to Lord Allenby in Egypt and thence to Britain where it was circulated to the Cabinet, is a good example of the pro-Egyptian and anti-British feelings of that period. Beginning with a quotation from the Holy Koran “And hold fast, all of you together to the cable of Allah, and do not separate”, it goes on to say: “. . . The aim of this (British) policy is to create divisions between the different tribes and to gain the help of one against the other. . . . It aims also at creating divisions between the leading religious notables. At one time they draw one nearer to them and send away the other, and at other times they support one with money and imprison the other. . . . They (the English) have expropriated your own lands which you possess by legal rights and which have come down to you from your fathers and grandfathers, in order to give them to English companies for their benefit.³ They deprive you of your liberty and your rights, forcing you to sell your products to their English companies at the lowest prices. . . . They have enslaved the high and the low. . . . They have blocked the way of advancement and education. . . . If the Government were a Mohammedan one, it would not enforce regulations which are against the Mohammedan law. . . . Look at their schools in Khartoum and Omdurman where students are forced to attend the preaching of the Gospel; the Government is also introducing Christianity throughout the Southern Sudan. What more proofs do you wish of their bad institutions than the fact that in Khartoum itself there are six churches and only one mosque, which has not been completed in twenty years. . . . Now they have started a new policy to create divisions between us and them (our brothers the Egyptians). For the execution of this policy they have published a paper called *El-Hadara* in order to serve them to attain aims which are evident to everybody. What we deeply regret, however, in the matter is the utilisation of the names of three religious leaders who are respected throughout the land. God knows that the policy of the paper is enforced on them, but they are obliged to keep quiet owing to the military rule prevailing in the Sudan. My brethren! The English have adopted for a long time the policy of creating dissension between Mohammedans and Copts in Egypt, causing continual intrigue and bringing misery to both. When, however, the two elements appreciated this and united they attained their object and God helped them. Put this before your eyes: unite with your brethren the Egyptians and work for your independence. . . . Your brethren the Egyptians are now working for themselves and for you. If they attain their objects you will be on the same level as they. . . .

¹ Interview with Sayed Isma‘il el Azhari, Omdurman, August 1960. Also Dardiri Muḥammad ‘Uthman, *Mudhakirati*, Khartoum, 1961, p. 50. In 1924 the Department of Intelligence reported that “The attitude of the Sudanese towards Egyptian politics is subservient to national self interest. The ‘Unity of the Whole Nile Valley’ is at most but a temporary expedient to get rid of the British before turning on the Egyptians”. Archives, Khartoum.

² Stack’s report (on an interview with the three religious leaders) to Wingate, 23rd February 1919. Durham.

³ This is a reference to the Gezira where land had been bought at nominal prices for the purpose of establishing the scheme.

Do not let the British enslave you for ever, as they had done in their other colonies, which are unable to find a way of escape. You are still outside the net, so do not get into it. Consider other countries such as Canada, Australia, New Zealand, South Africa, etc. See how the original inhabitants have been extinct and have been replaced by the English colonisers. . . . Rise and claim independence for Egypt and the Sudan, and may the Almighty grant us victory which is a victory for our religion and for Islam".¹

Anonymous articles expressing similar views and sentiments were secretly smuggled into Egypt where they were published in the daily press. In 1921 various Leagues and Societies were formed in the principal towns of the Sudan. "To some extent the methods of all secret societies" were used: groups of five were formed, each member heading a subsidiary five, each group being intimate within itself but ignorant of and unknown to subsidiary or parallel groups—the whole system being so organized as to ensure an adequate replacement of casualties from arrest.² The most influential of these groups, "The League of Sudanese Union" was formed in 1922. By concentrating on teachers at the village school level, the League of Sudanese Union made a substantial contribution to the organization of opposition especially among the young.³ Through their rapidly increasing circle of contacts the critics of the regime were better able to spread hostile propaganda up and down the country. "The employee was told he deserved better pay and prospects. The merchant was told that the Traders Tax was an unjust imposition. The English were accused of robbing the peasant to enrich their own companies".⁴ A turning point was reached in May 1922 when 'Ali 'Abd el Latif (a Sudanese ex-officer of Dinka origin who had been dismissed from the Army following a personal clash with an English officer whom, he felt, had treated him arrogantly) sent an article entitled "The Claims of the Sudanese Nation" to the editor of *El Haḍara* requesting the publication of the article in the newspaper. Sayed Hussein Sherif (who was greatly respected by his opponents and believed by them to be sincere, though mistaken, in his attachment to the policy of the Sudan for the Sudanese⁵) thought the article was "very good" but felt that the time had not come for its publication.⁶ A few days later both he and 'Ali 'Abd el Latif were arrested. After a brief trial the editor of *El Haḍara* was discharged, but 'Ali was sentenced to a year's imprisonment. It is interesting to note that, in the words of the Director of Intelligence, "The document for writing which he was convicted contains no word in favour of Egypt, it advocates the Government of the Sudan by the Sudanese and the ending of foreign rule. In this respect and in view of its inflammatory phraseology the document was actionable".⁷

On his release from prison during the following year 'Ali 'Abd el Latif, as may be expected, was generally acclaimed as a national hero and became the acknowledged leader of the opposition to the British Government of the Sudan. His recent experience moreover convinced him of the necessity of having closer relations

¹ Official translation. Oxford. Extracts from the original written in elegant Arabic style have been reproduced in Najila, op. cit.

² Intelligence Department's Report on "The History of Politics and Political Agitation in the Sudan, 1919-24". Archives, Khartoum.

³ Ibid.

⁴ Ibid. Appendix 7.

⁵ Najila, pp. 21 and 32.

⁶ Extract from the Memoirs of Ahmed Fahmi el Rayah, first director of *El Haḍara*—in Najila.

⁷ Intelligence Report on "The History of Politics and Political Agitation in the Sudan, 1919-24". Archives, Khartoum.

with Egypt and finally led him to the formation, in close co-operation with Egyptian officers and officials working in the Sudan, of an organization which though in some respects identical with the League of Sudanese Union, was much more militant in character. The new organization was called "The White Flag League" and was formally inaugurated on 20th May 1924.¹

Four days before the inauguration of the White Flag League the central committee (consisting of 'Ali 'Abd el Latif and, it is worth noting, a postmaster Hasan Sherif, two postal clerks Şaleh 'Abd el Gadir and Hasan Şaleh and an ex-postal clerk 'Obeid Hag el Amin) sent a telegram to the Governor General protesting that the Sudanese people, for whom they spoke, had not been invited to the forthcoming Anglo-Egyptian negotiations during which the Sudan question, which had been declared a reserved subject in 1922, was to be discussed. In the meantime the Sudan Government, acting through Governors and District Commissioners, had asked certain "leading natives in the provinces . . . to express their wishes. This signal produced a number of addresses to the Governor General protesting the desire of the signatories and those they represented to remain under British tutelage until such time as they were able to govern themselves".² To counteract this move Sudanese army officers and civilians who were members of the League of Sudanese Union and the White Flag League toured the provinces urging the people not to express a too wholehearted desire for purely British rule or, better still, to throw their weight behind the movement for the unity and independence of the Nile Valley. Their arguments were mainly to the effect that the English and Egyptians acted as checks on each other and that the idea of "The Sudan for the Sudanese" would be better served by the continuance of the condominium than by the sole dominion of either party. Their activities were not without effect on the tone of some of the later addresses presented to the Governor General and led to stories gaining currency in Egypt and in the Sudan as to the methods alleged to have been employed in stimulating pro-British declarations which did much, it must be admitted, to minimize the effect of these declarations".³ In addition petitions of loyalty to Egypt were collected by members of the White Flag League, including Muḥammad el Mahdi, a son of the Khalifa 'Abdullahi. Furthermore, Muḥammad el Mahdi and another colleague, acting as a Sudanese *wafd* (delegation) proceeded to Egypt where they proposed to meet the leaders of the Egyptian Wafd Party and present them with the petitions of loyalty to Egypt which had been collected in the Sudan. But they were arrested at Halfa and sent back to Khartoum. Their arrival in Khartoum on 17th June triggered off the first political "demonstration" in the history of the Sudan.⁴ A series of demonstrations, constantly fed and popularized through anti-British speeches in the mosques, took place during the following weeks. On 4th July 'Ali 'Abd el Latif was once more arrested and, after another trial during which he was defended by an Egyptian advocate, was sentenced to three years' imprisonment. The general excitement which followed the trial and imprisonment of 'Ali 'Abd el Latif induced the cadets of the Military College to join the growing wave of demonstrations in August. On the 9th they took arms and ammunition and marched with the

¹ Intelligence Report on "The History of Politics and Political Agitation in the Sudan: 1919-24". Archives, Khartoum.

² Ibid.

³ Ibid.

⁴ Ibid.

Egyptian flag to 'Ali 'Abd el Latif's house where they presented arms. The performance was afterwards repeated outside the prison where 'Ali and other members of the White Flag League were kept—thus raising the already mounting enthusiasm to a still higher pitch. The cadets (51 in number) were eventually arrested and sent to prison where further demonstrations finally led to a mutiny of the prisoners. Outside the prison walls in the meantime, the members of the White Flag League—especially the postal clerks with their numerous telegraphic contacts all over the country—spread the news and the spirit of insurrection throughout the Sudan, as far as Talodi and El Fasher in the west and Wau and Malakal in the south. The fact that a number of clerks and military officers had been posted to these distant places "on account of disloyalty" only served to spread anti-Government feeling and propaganda. "This method of dealing with troublesome people by transfer," the Director of Intelligence subsequently wrote, "has nothing to commend it. The postal clerk Şaleh 'Abd el Gadir sent to Port Sudan promptly organized an active branch of the White Flag League there. . . . Few things are more striking in a study of the records of sedition in the Sudan from 1922 onwards than the way in which some half dozen individuals have been able to spread disaffection all over the country owing to being transferred on duty from place to place".¹

However, a far more serious situation was precipitated when, on 19th November, Major General Sir Lee Stack, the Governor General of the Sudan and Sirdar of the Egyptian Army (and a personal friend of Lord Allenby, then the British Consul in Egypt) was shot and fatally wounded in Cairo. Allenby promptly, and without previous consultation with the British Government, delivered a strongly worded ultimatum to the Egyptian Government requiring them, among other things to "Order within twenty-four hours the withdrawal from the Sudan of all Egyptian officers and the purely Egyptian units of the Egyptian Army", and to note that "The Sudan Government will increase the area to be irrigated in the Gezira from 300,000 feddans to an unlimited figure as need may arise. . . . Failing immediate compliance with these demands", the ultimatum concluded, "His Majesty's Government will at once take appropriate action to safeguard their interests in Egypt and the Sudan".²

The Egyptian Government under the leadership of Sa'ad Zaghlul refused to order the withdrawal of her troops from the Sudan. The troops, for their part, refused to obey orders to evacuate the country unless they were issued by the Egyptian Government. In order to demonstrate their solidarity with the Egyptian troops and because, as men and officers of the Egyptian Army, they had taken an oath of allegiance to the Egyptian crown, the Sudanese battalions also mutinied. The mutiny involved various battalions all over the country, including Wau and Talodi. But it was in Khartoum, while on their way to join the Egyptian battalion in Khartoum North on 27th November, that Sudanese troops were involved in a direct clash with British forces who wanted to prevent them from crossing the bridge to Khartoum North. A pitched battle ensued during which many were killed on both sides and the Khartoum Military Hospital, where some of the mutineers took cover during the night, was shelled and partly destroyed. Rifa'at Bey, the Commander of the Egyptian battalion in Khartoum North, had promised to open fire on the British troops if they attacked or tried to stop the Sudanese platoons from crossing the bridge to Khartoum North. This promise, however,

¹ Ibid.

² Quoted in J. Marlowe's *Anglo-Egyptian Relations, 1900-1953* (London, 1954), pp. 268-9.

was not honoured, and orders to evacuate having been issued by a new Government in Cairo, the Egyptians proceeded to evacuate "without other delay than that imposed by the incompetence of their officers".¹ The bitter disappointment at thus having been let down by their friends and fellow men-in-arms had a great disillusioning effect on some of the Sudanese officers and civilians who had hitherto been staunch advocates of close co-operation with Egypt.² Some, like Sayed 'Abdulla Khalil who, until then, as a young officer was an active member of the League of Sudanese Union and a close associate of 'Ali 'Abd el Latif, became staunch protagonists of the opposite view—"The Sudan for the Sudanese". Sayed 'Abdullah Khalil himself eventually became the secretary of the Ansar-dominated Umma Party which was hostile to having any form of close association with Egypt.

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The mutiny having collapsed, those of its leaders who were still alive and had not managed to escape,³ were arrested on 29th November, and brought to trial. Four were condemned to death by firing squad (the sentence was carried out on three of them) and others were given long terms of imprisonment.

Politically, the reactions of the Government to the mutiny were to accelerate the process of mitigating Egypt's influence in the Sudan, though relations between the two countries were not formally severed; to hasten the separation of the northern from the southern provinces of the country making special use in this connection of the Christian missions; and to substitute as far as possible tribal organization for bureaucratic methods—which necessitated the education and training, however limited—of Sudanese people in the administration of the country.

Four years before the outbreak of the mutiny, the Governor of Berber Province had warned his colleagues, in the Annual Conference of 1920, of the consequences for the British regime in the Sudan, of repeating the mistakes made in India and Egypt by creating an educated and, almost by definition, dissatisfied class of Sudanese people.⁴ In his final assessment of the political development which led to the rising of 1924, the Director of Intelligence made similar remarks. "It must be recognized", he wrote, "that there is now in the Sudan a class, small but vocal and inevitably possessing influence out of all proportion to its members, which has ideas and aspirations whose growth has been 'forced' so that they are now at a stage, the attainment of which would have taken a generation of more normal growth. Forced growths from shallow roots" he continued—revealing a somewhat surprising misunderstanding of the nature of Sudanese nationalism, "cannot result in a healthy plant, but the seed was sown deliberately by the British Administration, which has a peculiar responsibility for its after care".⁵

¹ Appendix II of Intelligence Report above.

² Interview with Sayed 'Abdullah Khalil. Summer 1960. Also Ahmed Kheir, p. 28.

³ One of them managed to swim across the Blue Nile during the night and then proceeded to Egypt where he lived, under cover, until 1936 when—The Treaty of Alliance between Egypt and Britain having been signed—he showed up again.

⁴ Civ. Sec. 1/9 L.F.I., Vol. I. Archives, Khartoum. Mr Brown's actual words are: "I think there is now general agreement based on what has happened in India and Egypt . . . (that) . . . we must have a definite policy unless we wish to have the same phenomena repeated in countries like the Sudan, the moment they awaken to some rudiments of national self consciousness. . . . It is . . . our business to strengthen the solid elements in the country, sheikhs, merchants, etc., before the irresponsible body of half-educated officials, students and town riff-raff takes control of the public mind".

⁵ Int. Dept. Report on the History of Politics and Political Agitation in the Sudan, 1919-24. Archives, Khartoum.

The small class of educated Sudanese being regarded in this light, it is not surprising that not a single school was opened during the decade following 1924 except in the three southern provinces where the prevention of the growth of a common Sudanese nationalism in accordance with the Government's "Southern Policy" necessitated the opening of many non-Arabic and non-Muslim schools. The Military College was closed down. The courses for training Sudanese administrators were discontinued. The sending of students to Beirut (as an alternative to Cairo, to which many had fled from the Gordon College,¹ and in order to replace Egyptians by a cadre of Sudanese teachers, officials, etc.) which had been started in 1922, was stopped. The attitude of the Government towards the educated class became generally hostile and students who went to the Gordon College during the decade following 1924 retain memories of unusually harsh treatment by their British masters at a time when the cane was an integral part of the teacher's equipment.² Mr Edward Atiyah, a young Oxford graduate, who was then appointed to the staff of the Gordon College which, however, he soon deserted for the Intelligence Department, gives us a telling "outsider's" impression of the College in those days. "The British Tutors," he writes, ". . . exercised a kind of military authority, and the discipline they enforced savoured strongly of the barracks. This is why I disliked the Gordon College the moment I walked into it. It was a military not a human institution. It was a Government School in a country where the Government was an alien colonial government. The tutors were members of the Political Service. They were there in the dual capacity of masters and rulers, and the second overshadowed the first. The pupils were expected to show them not the ordinary respect owed by pupils to their teachers, but the submissiveness demanded of a subject. . . . Even if the master was individually kind and human, there stood behind him, in the eyes of his pupils, the Director of Education, the Civil Secretary, the Governor-General, the Union Jack, and the power of the British Government. Behind him there also stood the District Commissioners who ruled their village homes. The master himself, indeed, would one day be a District Commissioner and rule over them and their fathers".³

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Finding themselves at the mercy of a powerful and hostile Government, the nationalists thought it expedient to lie low for the time being. But the pressure imposed on them by the Government on the one hand and the dramatic happenings of the recent past on the other, required an effective outlet. Since organized political and, of course, military action were out of question, the required outlet had to be social and literary in character. The dominant form of literary expression, in the immediate post-1924 period, was the anonymous patriotic poem or song⁴ often containing allusions to Egypt—"The beloved one who had been taken away"—but usually given to the expression of more virile and robust sentiments. That poems should be the chosen vehicle of national feelings in an Arabic-speaking

¹ The feelings and attitudes of these young adventurers and their admiring friends in Khartoum are well reflected in their poems, some of which have been published in Najila's *Malamih*.

² The joint autobiography of Muḥammad Aḥmed Mahjub and 'Abd el Halim Muḥammad, *Mawt Dunya*, Khartoum, 1946, pp. 26 and 76. Aḥmed Kheir, pp. 33-4. This point was emphasised by all those whom I interviewed in Khartoum during the summer of 1960.

³ Edward Atiyah, *An Arab Tells His Story* (London, 1946), p. 138.

⁴ Najila has collected a number of these in his book.

country (where poetry has traditionally played a social role not unlike that of newspapers in modern society and where almost everything of public importance, from the opening of a national bank to the celebration of the anniversary of the Prophet's birth, is greeted with a spate of poems, is by no means unusual. The most famous author of such song, as it afterwards became known) was 'Obeid 'Abd el Nur, a teacher who, like Isma'il el Azhari, subsequently the leader of the "extremist" Ashigga Party and the first Sudanese Prime Minister, had been sent to Lebanon to study at the American University of Beirut—away from Cairo and the infectious nationalism of the Egyptians. The most popular singer of the day, Khalil Farah, whose memory is still greatly cherished by the Sudanese, did not receive any form of advanced or higher education. This, coupled with the fact that he was educated enough and sensitive enough to read and appreciate some of the classical Arab poets, enabled him to be at home both with the "graduates" and the multitude. The type of patriotic song which he popularized, half-way between literary and colloquial Arabic in style, was "designed" primarily to articulate the former to the latter—a function of considerable importance in a predominantly illiterate society. Almost ideally suited to play this part, Khalil Farah became the singer of patriotic songs *par excellence*. Since most of the hostile references to Britain and the "loving" allusions to Egypt were allegorically expressed and could be interpreted in more than one way, Farah, it was felt, was personally safe *vis-à-vis* the Intelligence Department. For the same reason, and because it was not easy to trace the origins of popular songs composed in a basically colloquial form of Arabic, the authors remained practically anonymous and equally safe.¹

Considering its obvious limitations as a means of political education, mobilization and general advancement of the nationalist movement, it is not surprising that this form of expression soon began to fade into the background, its place being gradually taken by the serious discussion and study group. Having been brought up in an orthodox Muslim society which traditionally attached great importance to learning, considered it a secret pursuit and urged the faithful to "seek knowledge even if it were in China",² the nationalists, especially the young post-1924 generation who considered they had a peculiar responsibility towards the country at that difficult juncture in its development,³ came to the conclusion that the failure of 1924 was primarily due to lack of knowledge and general political maturity on the part both of the leaders and the rank and file of the nationalist movement. In order to educate the masses and groom the leaders for the proper execution of their duties, it was necessary that all efforts should, for a while, be directed to learning and serious thinking. Special emphasis had to be given to the study of international politics and the history of other nationalist movements.⁴ Above all Sudanese society had to be thoroughly and "scientifically" studied with a view to establishing close links between the people and the new generation of educated young men.⁵ Since this type of education was not provided by any of the existing Government

¹ Najila, p. 171.

² An often quoted saying of the Prophet.

³ Mahjub and 'Abd el Halim, op. cit., pp. 41-2 and 86-8 and MacMichael's Memorandum No. 222. 36/G/1/81 on "The Attitudes of the Sudanese Towards Egypt", Khartoum, 10th September 1933, Durham. "Our generation," wrote the editor of *El Fajr* in 1935, "is the living articulated position of Young Sudan. We aspire to distinguish ourselves by having an outlook on life political, social and literary. We stand at cross roads and we shall either follow the right road or go astray": No. 21, 1st June 1935, p. 1019.

⁴ Ahmed Kheir, p. 25.

⁵ Ibid.

institutions, young men had to either go to Egypt and other Arab countries, or seek to attain cultural maturity by means of personal effort. Provided they were willing to make the necessary effort, their knowledge of the English language enabled them to improve their understanding of the modern world and its thought, while through Arabic on the other hand, they rediscovered their own roots, developed their national character and formed closer links with like-minded people in Egypt and other parts of the Arab world.¹

Study groups of earnest young men began to appear almost wherever a "group of five" of the League of Sudanese Union or the White Flag had previously been convened. It can safely be assumed that there was a somewhat high mortality rate among these study groups once the novelty of the idea had worn off, but many, especially in Omdurman and Wad Medani, survived and in due course produced recognizable types of political and social attitudes which proved important in the development, at a later stage, of national political parties. Judging by the calibre of some of the products of these study circles it is obvious that they were also successful agents of advanced general education. The short lived but lively journals which they pioneered, under difficult circumstances, such as *El Sudan*, *El Nahda* (The Renaissance), and more important, *El Fajr* (Dawn), 1934-7, testify to the vigour and earnestness of that generation. *El Fajr*, established and edited by Arafat Muhammad 'Abdalla, a former postal clerk and member of the White Flag League who was described by the Director of Intelligence as very capable², has set a standard of literary journalism in the Sudan which has scarcely been surpassed even to-day. The poems, short stories and purely literary materials published in *El Fajr* were sometimes unconvincing, structurally weak and infected with a pathetic form of romanticism which, under the circumstances, is perhaps understandable; but with poets like El Tijani Yusuf Beshir and writers like Muhammad Ahmed Mahjub they often reached impressive standards. Foreign affairs—from Sino-Japanese relations, communal strife in India and European rearmament to T. E. Lawrence and Arab unity, Italian imperialism in the Horn of Africa and Atatürk's exciting victories *vis-à-vis* the West and his saddening policies at home—were eagerly followed and commented upon. Articles were written on Greek mythology, Lord Nuffield and his Morris works, the nature of living things, the co-operative movement, nationalism and internationalism, Aldous Huxley and Anatole France, Shakespeare and Al-Firdawsi, Muhammad 'Abdu and G. B. Shaw, and a host of Eastern and Western themes and persons. Most of these writings were, naturally at that stage, heavily dependent on second-hand accounts in Arabic or on secondary literature in English. Nevertheless, taken as a whole (and some of them were excellent) they clearly demonstrate the determination of that generation to deepen its understanding of Arabic-Muslim culture, to widen the scope of its education as far as available means permitted and to develop some appreciation of universal thought and literature. This, Mahjub said (in a debate on the theme "Sudanese culture is independent and should be separate from Egyptian culture" which took place in the Graduates' Club at Omdurman, just over thirty years ago) was the diet on which a revitalized but distinctly Sudanese nation, firmly based on Islam, Arabic culture and African soil, should be brought

¹ This theme was best developed by Mahjub in an interesting lecture on "The Intellectual Movement in the Sudan" which will be mentioned below. Also Ahmed Kheir, pp. 35-9 and 50-4.

² Intelligence Department's Report on the History of Politics and Political Agitation in the Sudan, 1919-24. Archives, Khartoum.

up. As such it would have close friendly relations with the neighbouring Egyptian culture but would be independent from it, it would retain its own distinct character but learn from the culture and thought of all other nations both ancient and modern.¹ As one of its most outstanding leaders, Mahjub who alone among the writers of his generation showed a constant and clear-minded concern with the question, made yet another attempt to clarify the goals and character of the nascent literary movement in the Sudan in a remarkable pamphlet, based on a public lecture, which he published in 1941. "The objective towards which the literary movement in this country should be directed," he said, "is to establish an Islamic-Arabic culture supported and enriched by European thought and aimed at developing a truly national literature which derives its character and its inspiration from the character and traditions of the people of this country, its deserts and jungles, its bright skies and fertile valleys. . . . By giving an increasingly more prominent place to political studies of a kind more directly concerned with our problems and ambitions, this movement should then be transformed from a cultural to a political movement whose final goal should be the achievement of the political, social and cultural independence of this country".²

This is indeed the attitude which, consistent with nationalist tenets, eventually prevailed. It had been gradually, but fitfully, gathering momentum since 1924 when many pro-Egyptian Sudanese nationalists having been bitterly disillusioned by the course of events of that year either retired from politics altogether, or began to think that the best way of achieving their final objectives was to rely on their own efforts using whatever help they could get from Egypt but without reliance on the permanent support of any outside forces. In May 1926 the Egyptian Wafd Party, which was greatly admired by the young men of the Sudan as the embodiment of vigorous nationalism, won an overwhelming majority in the elections, but Zaghlul was nevertheless debarred from the premiership and the Wafd, tamely in the views of Sudanese spectators, accepted the humiliation of forming a coalition government with other groups. Each new disappointment added to the impression that Egypt was but a "broken weed".³ In 1929 moreover an Anglo-Egyptian Nile Waters Agreement was signed which gave the Sudan less than one twenty-second part of Egypt's share which was (because the Sudanese had not been consulted) resented in the Sudan, especially by the Ansar. By 1932 Egypt seemed finally to have withdrawn and it was officially reported that "for the last four or five years" Egyptian interest in the Sudan had virtually disappeared.⁴ The Sudanese nationalists, for their part, had "few, if any illusions left concerning Egypt. They would no doubt welcome any development calculated to hasten the day when the destinies of the Sudan would be entrusted to its *jeunesse dorée* . . . but they feel that Egypt, save as a field for intrigue (against Britain), has little value to offer".⁵ Moreover, many who had visited Egypt (among them Mu'awiya Muhammad Nur, a bright young man who had a high reputation as a literary journalist in Lebanon and Egypt, where he was much encouraged and admired by the eminent writer

¹ *El Fajr* No. 18, 1st April 1935, pp. 857-64. Also his rejoinder on correspondence on the subject in *El Fajr* No. 22, 16th June 1935, pp. 1040-5.

² *El Haraka el Fikriyya fil Sudan : Ila Aina Yajib ann Tattajih* (Khartoum, 1941).

³ Memorandum on the Attitudes of the Sudanese Towards Egypt, 1905-32 (No. 222.36/6/21). Khartoum, 10th September 1932. Durham.

⁴ *Ibid.*

⁵ *Ibid.*

'Abbas Mahmud el 'Aggad, and who was also associated with *El Fajr* group in the Sudan) had had unpleasant personal experiences there and were no longer enthusiastic about the Sudan having close political relations with Egypt.¹

Nevertheless, as long as Britain remained in control of the Sudan and, for reasons of its own, continued to favour the policy of the Sudan for the Sudanese (which for the bulk of the educated Sudanese at that time meant: the Sudan nominally for the Sudanese but actually under British control and without interference from Egypt or the outside world) the call for independence, despite the obvious sincerity and logical consistency of Mahjub and his friends, was bound to have a limited appeal outside the circle of the Ansar and a few educated men. Besides, the educated class as a whole, including Mahjub and others who shared his views with regard to the future of the Sudan, had many grievances against the British administration of the Sudan and, for most of them, these more or less automatically offset any possible disadvantages of alliance with Egypt. Egypt, after all, was a neighbour and a Muslim-Arab country which, despite its nominal independence since 1922, was, like the Sudan, still under the effective (and humiliating) control of British Imperialism. It was, therefore, a natural ally against the common enemy; it was, in fact, the only possible ally with whom the Sudanese nationalists could associate themselves with any hope of effective support.

The grievances which the nationalists held against the regime could not publicly be ventilated in the Sudan at that time, and were only obliquely referred to in, for example, *El Hadara*, *El Nahda* and *El Fajr*, at any rate until the end of 1934 when a newly appointed Governor General, considering amongst other things the impact of the mounting Nazi-Fascist campaign to woo the colonial peoples of the British and French empires on the growing nationalism of the Sudanese, decided that it was expedient to reduce pressure. In about April of the following year the editor of *El Fajr* was informed that censorship on journals and newspapers had ceased to exist and that editors could publish whatever they wished on their own responsibility.² Accordingly the editorial issue of 1st May 1935 announced that *El Fajr* was, from then onwards, making "a called-for departure in objectives and subject matter". Whereas it had previously been devoted to the arts and literature *El Fajr* was to be "mainly concerned with the social and political life of the country". The editorial which was entitled "Our Policy", then continued: "Obviously we are not entirely satisfied with the present run of things, and we definitely wish to stand for a new order of intelligent reform, and a steady progressive life, along our own lines. . . . We wish to see the young enlightened generation taking an active part in the affairs of this country, certainly not in the notorious, facile, negative and irresponsible way; but in a truly civic temper and with real responsibility. . . . We ought to have a share in the moulding of our destinies. This is a task, we are sufficiently aware, that is neither easy nor smooth,

¹ "Political History of the Sudan, 1924-31" (Public Security). Archives, Khartoum.

² Mahjub and 'Abd el Halim, p. 146. They record that people were so unaccustomed to criticism of the government and the public expression of nationalist demands at that time that some suspected that *El Fajr* published such articles with the consent, or even the backing, of the government. Since the government did not look with disfavour upon "The Sudan for the Sudanese" as opposed to the Unity of the Nile Valley—a similar position to that of *El Fajr*—it is not unlikely there was some truth in the allegation. As a unionist Ahmed Kheir makes some critical remarks about *El Fajr* group for associating with Edward Atiyah of the Intelligence Department in social and cultural matters (*Kifah Jil*, p. 45).

nor clear. It needs to be all that. And in this precisely lies our duty, our hope and our policy".¹

The article then goes on to say that *El Fajr* did not identify itself with any existing group or class of people—be it religious, political or social. It was certainly not the mouthpiece of the Effendiya (i.e. Sudanese government officials) but stood "for the whole people of the Sudan", especially "the toiling millions of the land".²

A month later the government was reminded of its responsibility for training the Sudanese people for self government. "We demand the second place in office, next to the senior British officials in order that we might get in direct contact with the difficult problems of the government and have a share in moulding our destiny. . . . The following question may be asked: 'Is not native administration the right basis for self government?' But our answer to that is that native administration is liable to be a failure so long as it is in the hands of the ignorant, whereas we see in it but a counterfeit of the Feudal System. If native administration is to survive, it must be in the hands of the educated generation".³ As it was then practised, moreover, native administration based on tribalism had tended to create a form of religious sectarianism which was as pregnant with dangers as was the situation in India. The educated class could not, on principle, be reconciled to it.⁴

The same point was repeated a fortnight later when, under the title "Give Us Education", the government was also attacked for the steady reduction of intake at the Gordon College, especially as from 1932, "because the government offices need no more officials"; for altering the curriculum so that it was now limited to "a short study of commerce and business correspondence"; and for discontinuing the practice of sending selected teachers to Beirut which was the only source of giving higher education to the nation, though "limited to a certain class". The article then continues to warn that "once education is started in a country it must be continued and developed; failing this the people will cry and ask for more education, because it becomes to them as essential as food, water and light. Mr J. H. Oldham, as quoted by Professor Julian Huxley in his book *African View*, says that the fundamental business of Governments in Africa is education. Our Government is surely in favour of such a saying and would not fail to carry out its fundamental business. . . . 'Give us education and leave us alone' is our slogan!"⁵

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Whatever their feelings about the regime or their views on the tactics and strategy of the nationalist movement however, the Sudanese did not, from 1924, attempt to organize themselves on any sort of nation-wide political basis until after 1936. The nearest they came to this during the intervening twelve or thirteen years was in 1931 when, still in the grip of the Great Depression, the Sudan Government introduced a retrenchment scheme in accordance with which the salaries of the graduates of the Gordon College, who were employed in the Government Departments, were reduced from £8 to £5½ per month—a cut of 30 per cent. But the

¹ *El Fajr* No. 19, 1st May 1935, pp. 925–6. From this issue onwards the editorial article was always translated into English and published at the back of the journal. The above quotation is from the published translation.

² *Ibid.*

³ *El Fajr* No. 21, 1st June 1935, p. 1018.

⁴ *Ibid.*

⁵ *El Fajr*, No. 22, 16th June 1935, pp. 1065–6.

starting salaries of British and other non-Sudanese staff were not touched by the retrenchments though salaries above the starting rates were to a lesser extent affected. The students of the Gordon College feeling that the Government's decision was both severe and unfair decided to strike in protest. The general effects of the Depression, the fact that the Government was, by far, the most important employer of "graduates", and the existence of the extended family system—which meant that many more people were directly affected by the retrenchments than the graduates themselves and their immediate relations—helped to win the sympathy of the general public for the students' point of view. The graduates suspected that this decision had not been dictated by purely administrative considerations but was also aimed at reducing their status in relation to the tribal sheikhs and chiefs who were then being built up by the Government in the execution of its new policy of native administration. Since they were the leaders of the nationalist movement, the graduates also felt that the Government's retrenchments scheme was a blow to Sudanese nationalism in general. Thus what started as a relatively minor issue soon became a political question of national importance. Sayed 'Abd el Rahman el Mahdi, among others, tried to persuade the students to end the strike and return to their classrooms. But they refused to accept what was, in their view, a defeatist suggestion. A "committee of ten" was then formed from among the graduates in order to mediate between the Government and the students. Negotiations eventually led to the acceptance of a compromise solution whereby the starting salary of graduates newly appointed in Government Departments was to be £6½ instead of £5½ per month.

While the dispute was still unsettled and negotiations were in progress "the committee of ten" was viewed by the graduates as their representative body and thus became an important focus of national sentiment. The class of educated Sudanese rediscovered the importance of unity and organized action. But the fact that the solution accepted by the committee was a compromise solution, coupled with the use by the committee of what appeared to some graduates as "devious methods" involving the humiliation of "begging" the Government to change its decision,¹ paved the way for the first serious split within the ranks of the graduates. There is no evidence to suggest that either of the two camps which emerged had any particular political programme or that the split was basically anything more than a clash of personalities which had been augmented by the failure, in the eyes of some graduates, of the committee of ten. But it is known that the Filists and the Shawgists (so called after their leaders: Sheikh Ahmed el Sayed el Fil and Muhammad Effendi 'Ali Shawgi) tended to identify themselves with Sayed 'Ali el Mirghani and Sayed 'Abd el Rahman el Mahdi respectively. This, apart from its obvious sectarian significance, implied a certain division over the question of co-operation with Egypt and Britain. But no proper parties were established and no political programmes were formulated. Matters were simply allowed to drift and get lost in the cross currents of endless rivalry and competition between the *tarigas*. As has already been suggested, however, some graduates, mostly from the post-1924 generation, turned their backs on the sterile feuds of these factions, and coalesced around one or other of the journals which appeared in the early and mid thirties and continued to attack sectarianism and

¹ Mahjub and 'Abd el Halim, pp. 108-10, also Ahmed Kheir, *Kifah Jil*, p. 42. Formal expressions such as "we beg to" and "your obedient servant" when translated into Arabic do sound somewhat submissive.

division, concentrating their efforts on advocating the cause of national unity. From the point of view of direct and organized political action, however, the period from 1924 to 1936 was mainly sterile. The bulk of the older generation had either been disillusioned by the turn of events in 1924 or subsequently cowed by the Government's reactions to the mutiny. The younger generation was still fumbling in its attempts to restore confidence and give an effective lead to the masses. The Government was, as yet, not prepared to allow an adequate measure of freedom of expression and political action except to the leaders of *tarigas* and favourable opinion. But these only helped to split the graduates and reduce their already limited chances of effective action. Finally, the international scene, though becoming increasingly pregnant with possibilities for growing national movements, had not yet had any direct effect on the local conditions of the Sudan.

The turning point was the signing of the Anglo-Egyptian Treaty of 1936. The negotiations which led to the conclusion of the treaty were keenly followed by the politically conscious public in the Sudan. The resultant Treaty was disappointing both to the pro-Egyptian Sudanese and to their opponents. The former were dismayed to see the Egyptian (Wafd) Government endorse the Condominium Agreement of 1899 and publicly announce their approval of the existing regime in the Sudan. Still more disappointing to them was the fact that Egypt—far from behaving like an ally against the common British enemy—was only too pleased to be readmitted as a nominal co-ruler of the Sudan and, to that end, sent a token force to be stationed there.¹ The protagonists of the Sudan for the Sudanese, especially the Ansar, were perturbed by the fact that, according to the provisions of the Treaty, the all-important question of sovereignty over the Sudan was to be shelved for twenty years. For the Ansar and their political allies this implied that Egypt could—in theory at any rate—still claim to be legally sovereign over the Sudan. Hoping to obtain the reassurance of the British Government on this question Sayed 'Abd el Rahman el Mahdi made another journey to London, but did not get a satisfactory response.² For the politically conscious Sudanese in general, irrespective of political or sectarian considerations, the 1936 Treaty appeared offensive not only because they had not been consulted—a fact which was greatly resented—but also because the only reference made to the future of the Sudan and its people in the Treaty was that “the primary aim of the administration in the country must be the welfare of the Sudanese”. In the eyes of the nationalists this was a most obtuse affront because it appeared to treat them as less than human and certainly not as responsible adults.³

These feelings of resentment and discontent however were mixed with a certain delight in the relative freedom and increased opportunities which followed the restoration of Egypt's position in the country and the return of the old competition between Egypt and the British Sudan Government to win the sympathy

¹ Ahmed Kheir, pp. 46–50 and 72.

² 'Abd el Rahman 'Ali Taha: *Al Sudan lil Sudaniyyin*, p. 30. The author who was a confidant of Sayed 'Abd el Rahman says that when the Sayed questioned the British Government about sovereignty he received the usual evasive answers: “sovereignty over the Sudan is represented by the two flags” and “it is described in the Condominium Agreement”.

³ In the summer of 1960 I interviewed about twelve outstanding Sudanese political leaders—including the first two ex-prime ministers—representing different shades of opinion. They invariably singled out this clause for special condemnation. The notion that “Animals may aspire to, and be content with, so-called welfare, but free men will not be satisfied with less than freedom” was uniformly expressed by almost each one of them.

and support of the Sudanese. Thus commenting on the fraternization which took place between the Egyptians and the Sudanese during the first year of the "New Era", the Director of Intelligence wrote: "The Egyptians (chiefly in the persons of Nahas and 'Omar Toussoun) have seized every opportunity not only for entertaining, but for honouring and flattering the Sudanese in a manner which, in English eyes at least, must seem crudely fulsome. I refer particularly to the treatment accorded to the party sent to Cairo to attend King Farouk's Accession celebrations, and more still to the entertainment by the Egyptian Government of the London Coronation party on their way back through Egypt". The director's assessment of the situation and his further comments on it are interesting: "Our surest way of nullifying any harm that might be done by this Egyptian flattery of the Sudanese is to give the Sudanese frequent opportunities of visiting and forming contacts with England. In Egypt the Sudanese are overwhelmed with flattery, but they see very little in Egyptian life that impresses them. They enjoy themselves; some of them may even have their heads turned: they may feel really grateful to their hosts; and one or two may get excited over 'the common bonds of religion and language'. But I have not yet seen a single Sudanese return from Egypt with anything like admiration of the Egyptians, or a desire to emulate them.

"With regard to England, it is quite different. The results of the Coronation party's visit to England were most gratifying. The members of this party were profoundly impressed by England and the English people; they were impressed not only by the outward manifestations of material progress, but also, and more deeply, by the moral qualities which they were able to see behind this progress. They came back feeling both grateful for what had been done for them, and convinced that they had a lot to learn from the English people. . . . This, of course, should not blind us to the generally still considerable pull of Egyptian influence over the Sudanese, but it would seem that in this genuine appreciation shown by the Sudanese visitors to England this summer, of the values of English life and culture, we have a new force which, if skilfully developed and canalised, might exercise a powerful check on the hitherto unchallenged operation of Egyptian influence".¹

Being fully aware of the advantages of the new situation, the Sudanese tried, with varying degrees of subtlety and success, to play off Egypt and the Sudan Government against one another. Thus in a leading article dated 19th October 1937 and headed "The Need for Sending Educational Missions Abroad", the acting editor of *El Sudan* eulogized the Egyptian Government for accepting forty-four Sudanese students free in its schools and then went on to say that the Sudanese hoped that England, as the other partner in the Condominium, would do something similar for the Sudan. The Gordon College was no doubt a useful institution but unless Sudanese students were given a chance of receiving higher education in England itself their theoretical priority for Government employment given them in the Treaty would not be realized.

In its issue of 5th October 1937, *El Nil* carried an article pointing out that "England has already raised several monuments in the Sudan. . . . The Gordon

¹ Sudan Monthly Intelligence Summary No. 43 for August 1937, Appendix (b): Notes on the Near East. Archives, Khartoum.

College, the Kitchener Medical School, the Stack Laboratories . . . from all of which a large number of trained Sudanese leave every year to serve the country". Egypt, of course, had done a lot, but mostly of a general and transient nature. "The Egyptians should also raise in the Sudan a permanent visible monument ; a Farouk Institute, a Nahas College, a Toussoun Orphanage".¹

Under these conditions of more or less open rivalry between Egypt and the Sudan Government (and at a time when the axis powers were intensifying their efforts to woo the Muslim subjects of the British Empire) it was natural that the British administration of the Sudan should change some of its established practices. In the field of education for instance flogging was abolished—a "reform" which was warmly commended by *El Nil* in an article headed "A New Spirit in Education".² More importantly the Gordon College, which had so far been a secondary school, was—on the recommendation of the De La Warr Commission on Education in the Sudan and 'Ali Bey el Garim on the teaching of Arabic and the training of Arabic teachers in the Sudan³—transformed into a group of "higher schools" which, among other things, taught Law for the first time in the Sudan. Elementary education was expanded and the intermediate and secondary system was improved. The publication of the three Local Government (Municipalities, Townships and Rural Areas) Ordinances 1937 showed that Native Administration was no longer the dogma that it had become since 1924. The creation of the post of Assistant District Commissioner especially for the Sudanese, showed (though the A.D.C. was strictly an executive officer who did not share in the political duties of his seniors) that the Government was, slowly, beginning to move from traditional "paternalism" to the more flexible and fashionable idea of "partnership" in colonial rule.

But these improvements, significant though they might have been when viewed against the background of the previous thirteen years, fell far short of the growing expectations of the forward looking nationalists. As might have been expected they were impressed, not so much by what had been done, but by what had not been done. Particularly shocking in their view was the fact that far from changing its policies in the southern provinces, the Government openly declared that its aim was to create two entities in the Sudan : one northern, the other southern.⁴ In the eyes of the nationalists, furthermore, the necessarily limited gains which accrued to them were merely the windfall of Anglo-Egyptian (or Anglo-Nazi) rivalry, and though they were no doubt willing and determined to use to the full those opportunities which were thereby bestowed upon them, the nationalists were equally convinced that their ultimate salvation lay in their own

¹ Quoted in Sudan Monthly Intelligence Summary, No. 45, for October 1947. Archives, Khartoum.

² Ibid.

³ The reports of 'Ali Bey el Garim (of the Egyptian Ministry of Education) and the De La Warr Commission were published on 29th December 1937.

⁴ "Note on Administration Purposes in the Anglo-Egyptian Sudan, Appendix IV to the Annual Report of 1937" (Sudan No. 1 (1938), Cmd. 5895). For Sudanese reactions : Mahjub and 'Abd el Halim, pp. 152-3. The editor of *El Sudan* published an article on 25th December 1936 headed "Religious Freedom : The Necessity of Removing the Restrictions on Islam in the Southern Sudan" which strongly criticized the Government for subsidizing the Christian Missions in the southern provinces while putting restrictions on the propagation of Islam in that part of the country. The article was widely publicized by the Egyptian press and, for a while, created a considerable wave of agitation, especially on the part of students of El Azhar University in Cairo.

hands, and that they needed to organize themselves to achieve that end.¹ Accordingly a number of suggestions, all aimed at the creation of some national body which would act as a spokesman for the Sudanese people, were put forward during 1937—each version electing the attitudes of a particular strand of political opinion in the country. Thus Sayed 'Abd el Rahman el-Mahdi, arguing that Egyptian propaganda was turning the heads of the Sudanese and that it was, therefore, imperative that something should be done to preserve the separate political identity of the Sudan, suggested that an Advisory Council of representative Sudanese should be established in order to define the position and aspirations of the Sudanese under the new regime.² In a leading article entitled "The Enlightened Class and the Prosperity of the Sudan" which appeared in the issue of 16th August, the editor of *El Fajr* said that the 1936 Treaty left the Sudan in the same state of poverty and misery that resulted from the Condominium Agreement. In spite of British assurances that they would take every opportunity of promoting the welfare of the Sudanese, and in spite of the Egyptians' delight that they and the Sudanese would one day govern the Nile Valley together, the position of the Sudanese was still unsatisfactory and could not be improved unless the needs and demands of the Sudanese were ascertained. This could only be done through the enlightened class. The editorial then appealed to all graduates to join the Sudan Schools Club (i.e. the Graduates Club, Omdurman), call a graduates congress, and form a united front for the formulation and enforcement of a progressive programme. "Thus the natural guardians of the interests of the Sudanese will form a united, authoritative body and will be the link between the Government and the people". It was correctly understood in Government circles that the object of *El Fajr* and the class for whom it spoke was "*inter alia*, to oppose to Sayed 'Abd el-Rahman an organised and independent body of graduates as leaders and representatives of the Sudanese people".³ A few weeks later Sherif Yusuf el Hindi suggested a compromise. He proposed that "a council should be formed of ten persons, including the two Sayeds, the Mufti, Sheikh el-'Ulema, and six members to be elected by the graduates, to co-operate with the British government in working for the good of the country both internally and outside the Sudan, especially with Egypt, whose assistance we expect".⁴ In the meantime, however, the graduates,

¹ Summing up Sudanese reactions to the return of Egyptian troops to the Sudan in 1937, the Director of Intelligence wrote: "The masses were mildly excited over an unusual event, involving what is always popular with the crowd, a military display. The *muwalladin* (i.e. Egypto-Sudanese) expressed a natural sentimental pleasure. Retail merchants and petty tradesmen welcomed the troops as a new source of revenues, but the intelligentsia were, on the whole, unsympathetic. Many of them particularly the young, looked upon the returning troops as another *alien* army of occupation, whose arrival stressed the subjection of the Sudanese to foreign dominion. The explanation of this attitude is that Sudanese nationalism has really divorced itself from Egypt and developed an autonomous identity of its own. "We are pleased say the intelligentsia leaders, 'that England and Egypt have become friends, and above all that they have pledged themselves to work together for the good of the Sudanese. If we welcome the Egyptian troops, it is because their return symbolizes the new era from which we hope to get certain benefits, and not because we regard it as in itself an occasion for Sudanese national rejoicing'". *Sudan Monthly Intelligence Summary No. 47* for December 1937, para. 1180. Archives, Khartoum.

² *Sudan Monthly Intelligence Summary No. 43* for August 1937, para. 1059. Archives, Khartoum.

³ *Ibid.* The Club had previously declined to accept an offer of financial help which had been made by Sayed 'Abd el Rahman el Mahdi, and rather than lose their independence by accepting such offers the promoters of *El Fajr* (Mahjub and 'Abd el Halim, after the death of Arafat) preferred to run their journal at a loss met from their own private pockets and then chose to close it down altogether towards the end of 1937 (*loc. cit.*).

⁴ *Ibid.*

"particularly members of the Sudan Schools Club, Omdurman, led by Isma'il el Azhari and Mekki Shibeika" (both graduates of the American University of Beirut and, at the time, teachers at the Gordon College) were actively pursuing their own independent path.¹ The upshot of their collective efforts and deliberations was the foundation of the Graduates General Congress in February 1938² and the opening of a new phase in the history of Sudanese nationalism.

¹ *Sudan Monthly Intelligence Summary No. 43* for August 1937, para. 1059. Archives, Khartoum.

² The idea of a Graduates General Congress was first explicitly formulated by the Wad Medani Literary Society, one of the study groups which flourished in the twenties and thirties. Ahmed Kheir, p. 59, and Mahjub and 'Abd el Halim, pp.159-60 and 174-5.

A LAYMAN'S GUIDE TO THE LANGUAGES OF THE SUDAN REPUBLIC

by
P. E. H. HAIR

The present paper is a contribution to Sudan linguistics only inasmuch as it offers a brief guide to the most general aspects of the work already done during 150 years of increasingly systematic research. It is intended for those who, like the writer, have no expertise in African languages or in general linguistics, but who find themselves, in the course of their study or interests, confronted by the rich pattern of languages in the Sudan, and would like some assistance, particularly bibliographical, in traversing a corner of the field.

The number of distinct languages spoken in the Sudan (by permanent communities, ignoring immigrant groups) cannot be much less than 100.¹ Uncertainty about the exact number arises partly because new languages are occasionally still found and partly because so little is known about some of the languages generally listed that it cannot be ascertained whether they are distinct languages or only dialects. A few of the languages of the Sudan are spoken only in the Sudan (perhaps about a dozen): the remainder are shared only with immediately neighbouring territories—with the exception of course of Arabic, which has by far the widest dispersal of any language of the Sudan. Because all the languages except Arabic and Nubian are spoken only in the Sudan or in neighbouring territories of Middle Africa, they were unknown outside this region and had to be “discovered” by the scholars of linguistic science, almost all after 1800 and many after 1850. Thus Sudan linguistics is a science only a century or so old, and the many gaps in knowledge that still exist can be explained by the short period of study as well as by the small number of scholars who have chosen to undertake this study. Virtually all these scholars have been non-Sudanese (and non-African). It will no doubt be a point of honour for the independent Sudan to keep in step with other Afro-Asian nations by training up a generation of impatriate scholars to study the languages of the motherland, and to organize that intensive collection of linguistic material which a handful of foreign scholars could never achieve.

The early history of the study

The history of the general study of Sudan languages has not yet been written, but recently sections of the field have been dealt with very effectively. Köhler has listed and discussed all writings on Nilotic languages, Stevenson has published articles on the study of the Nuba Hills languages (and has appealed for historical studies of other languages). Apart from these, the introductions to some of the linguistic texts provide brief discussions of the earlier work, e.g. Armbruster on Nubian.

The oldest records of a Sudanese language are the inscriptions on Meroitic monuments dating from c. 200 B.C. to c. A.D. 300, in a language not yet decisively related to any later language. (The trend of the evidence suggests, however, that it will turn out to be related to a group of languages now found throughout the

¹ The list of “languages, sub-languages and dialects” employed in the Census of 1955–6 can be found in *First population census: Methods report*, II, pp. 277–87.

Sudan, one of whose members is Nubian.¹) Egyptian and Graeco-Roman sources record odd words—mainly toponyms and personal names—in languages which are probably older forms of Bedawiye and Nubian.² Apart from the Merōitic inscriptions, the earliest extant Sudanese literature is in Medieval Nubian and consists of Christian literature, mainly translations from Greek or Coptic, some of it discovered in archaeological excavations. Produced between A.D. 500 and 1300, this material has been the subject of linguistic study only during the last hundred years.³ A dictionary of Modern Nubian was compiled by an Italian missionary about 1650, and this can be considered as the initial step in the modern systematic study of Sudan languages.⁴ The earliest work on languages of the Northern Sudan other than Nubian dates only from the early nineteenth century. Salt, an English diplomat in Ethiopia, collected brief vocabularies, not only of languages of Western Ethiopia, but also of the Sudan languages Gumuz (from the Ethiopian borderland) and Fur (of Darfur). Rüppell, the German traveller who visited Nubia and Darfur in 1824, collected vocabularies of Fur, Funj, Shilluk, Dinka and two languages of the Nuba Hills, which he published in 1829, thus revealing something of the riches of linguistic variety in the Sudan. Lepsius, the German Egyptologist, made a detailed study of Nubian after his visit to Meroe in the early 1840s, though his Nubian grammar and translations were not published until 1880.⁵ The most detailed work on Sudan languages published before 1850 came, however, from a scholar who had never set foot in Africa. A German prince visiting Egypt bought four African boys in Cairo slave market and took them back with him to Germany. The tutor to the princely family, Carl Tutschek, was given the task of looking after the boys, and in carrying this out he collected from them information about their homelands and languages. Tutschek, with assistance from his brother Lorenz, then compiled a grammar and vocabulary of the Ethiopian language Galla, and papers on three Sudan languages—Berta (from the Ethiopian borderland), Fur, and Tumale (from the Nuba Hills). Tragically, neither Tutschek nor his African informants lived to see these works published. The chills of a tutorial apartment in a German ducal palace no doubt contributed to their early deaths. Lorenz Tutschek published some of the material around 1850, but the remainder had to wait nearly a century before it was rediscovered and put into print.⁶ Meanwhile, on languages south of the Nuba hills, the earliest detailed work was done on Bari,

¹ G. B. Trigger, "Meroitic and Eastern Sudanic: a linguistic relationship?", *Kush*, xii (1962), pp. 188–94. This article reviews earlier work.

² e.g. A. J. Arkell, *A History of the Sudan to 1821*, 2nd edition (1961), pp. 153–6, 177–9.

³ F. L. Griffith, *The Nubian Texts of the Christian period* (1913).

⁴ K. V. Zettersteen, "The oldest dictionary of the Nubian language", *Monde Orientale*, i (1906), pp. 227–40.

⁵ For the writings of Salt, Rüppell and Lepsius, see Tucker and Bryan (1956).

⁶ C. Tutschek, *Grammar and Dictionary of Galla* (1845); L. Tutschek, "Über die Tumale-Sprache", *Bull. Kgl. Akad. Wiss.*, München (1848), and "A vocabulary of the Fazoglo language", *Proceedings of the Philological Society* (1850); C. Meinhof and E. Zyhlarz, "Sprachproben von der Sprache in Darfur: aus Tutscheks Nachlass", *Zeitschrift für Eingeborenen-Sprachen* (1921–2, 1925–6, 1929–30, 1941–2); M. Heepe, "Tutschekiana", *Mitteilungen des Seminars für Orientalische Sprachen* (1928–9). (Fuller references in Tucker and Bryan.) Tutschek's work is of some general interest because it represented an early attempt to study African languages in Europe, using informants brought from Africa and without visiting the homeland of the language. Lodolf had employed this method to study Ethiopic two centuries earlier, but between 1750 and 1850 most of the research carried out on African languages was done by persons living in Africa. After Tutschek, the use of informants brought to Europe spread, and a large part of our modern knowledge of African languages has been gained by this method of inquiry.

by Roman Catholic missionaries in the early 1850s: some was published, some still remains in MS.

The later history of the study of Sudan languages is too complex to detail here. But references to some of the turning points, and to some of the major works produced, will be found in sections below, particularly in the section on language policy. In general, the picture is simple enough—more and more languages have been discovered, their relationships have been explored, and a few of them have been investigated in greater and greater depth.

Languages by size and groupings

One of the interests of the earlier records is the light they throw on the changing pattern of languages in the Sudan during recent centuries. For instance, they testify to the advance of what is probably the “youngest” of Sudanese languages, Arabic, at the expense of “older” languages, particularly in the North and North-East of the country. To-day, 51 per cent of the population of the Sudan state that Arabic is their mother-tongue, but since only 39 per cent claim Arab ancestors, the Census Commissioner suggests that these figures “may be taken in a way as a measure of the expanding influence of Arabic culture”.¹ Unfortunately, very little appears to be known about the process of conversion to Arabic (or Arabization in general), now or in the past. The popular view in Arabophone circles that it is only a question of time before only Arabic is spoken throughout the country may be countered, however, by the historical observation that the Beja, the first people to meet the incoming Arabs, though Islamized, have successfully resisted conversion to Arabic. Since the percentage of the population who do not speak Arabic as a mother-tongue includes that section whose growth-rate is officially stated to be the highest, and in view of the delicate political and cultural considerations involved in the present situation, it would be unwise to offer any prediction as to future language trends.

However, Arabic is today the giant among Sudan languages with its 5.2 million speakers.² Following a considerable distance behind are Dinka with 1.1 million, and Nuer and Beja (Bedawiye) with almost .5 million each. Six other languages—Zande, Shilluk, Fur, Nubian, Bari, and Lotuxo—have the respectable number of between 100,000 and 250,000 speakers each. But these last nine languages have *between them* only 60 per cent of the number of speakers that Arabic has. At the other end of the scale are the languages of pygmy size, so small that the Census did not trouble to count them separately—Eliri with reputedly 100 taxpayers (probably less than 500 speakers), Njalgulgule with 219 taxpayers, Talodi with 305, etc.³ Those named seem to be at the very bottom, but there are probably about thirty languages with less than 10,000 speakers each. (If any languages remain to be listed, they must surely belong to this pygmy end of the scale.)

It is only in this century that the hundred or more languages of the Sudan have been systematically listed, and their classification, or arrangement into language groupings,⁴ has been systematically attempted only within the last few decades,

¹ J. K. Krotki, *21 Facts about the Sudanese* (1958), p. 26.

² This and the following figures are taken from the Census.

³ Figures from Tucker and Bryan.

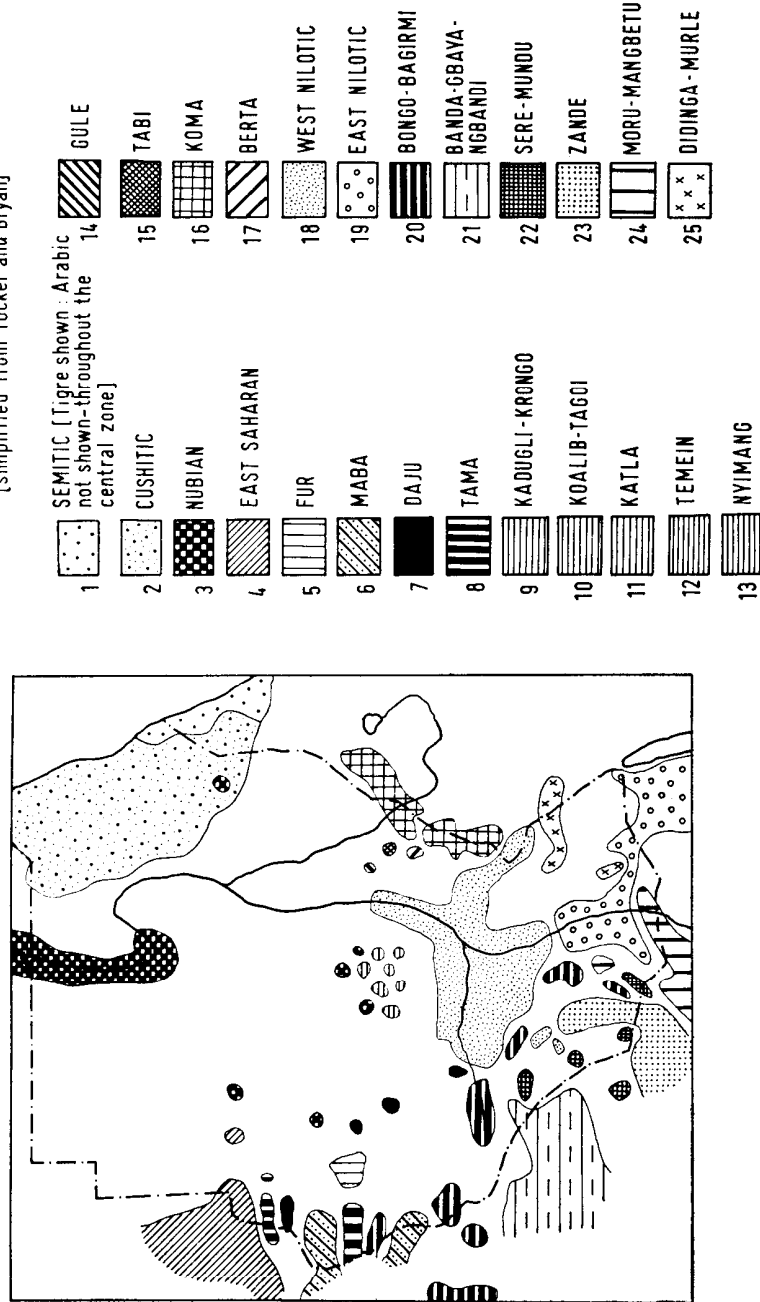
⁴ Since the term “language group” has a special meaning in linguistic literature, being applied to one stage of classification only, the term “grouping” has been used in this paper to cover all the units produced by classification, some technically “groups”, some not.

and is still under active discussion. Classification is much more than a linguistic exercise since it suggests historical links and throws light on cultural relationships. Classification reduces the hundred or more languages to some twenty-five groupings, at most: the claim by Greenberg that these twenty-five groupings can be further arranged, first into about ten larger groupings, and then into four cross-continental groupings, has not won general acceptance outside the U.S.A., though some of his larger units have been conceded.

Only one African country (Somalia) has a population with a single mother-tongue. Only two African countries (Somalia and Mozambique) have a population speaking African languages belonging to a single language grouping. Each of the "Arab" countries of North Africa has a non-Arab-speaking minority (not counting immigrant communities) speaking one or two languages (Berber, Kanuri, Nubian). Further south, almost every country of Middle Africa has a population speaking many languages belonging to several language groupings. Thus, the Sudan is a typical African country in that its population is polyglot, and a typical Middle African country in that it is richly polyglot. However, while the Sudan has for its size only a fairly typical number of languages (Tanganyika though much smaller has about 50, Nigeria though rather smaller has well over 100), its languages belong to an unusually large number of language groupings. In terms of the scheme of classification which awards 25 language groupings to the Sudan, then the total number of groupings throughout Africa is only between 40 and 50. The high proportion of groupings in the Sudan arises because several pygmy-size groupings are found entirely within this territory. But if we accept Greenberg's scheme of classification—and here the pygmy groupings are swept up into cross-continental groupings—then the results are even more surprising; of his four African groupings, three are represented in the Sudan. Clearly, the Sudan is a splendid linguistic laboratory, and a great opportunity will be missed if Khartoum is not made a centre for African language studies.

As elsewhere in Middle Africa, except in modern urban areas there is little intermingling of languages. Each language is normally the sole language of a particular area, however small that area may be, sometimes only a single village or group of villages. If other languages are spoken within that area they are either not spoken as mother-tongues or they are spoken by incomers who are recognized as "strangers". (Reports of single communities speaking two languages, allegedly as mother-tongues, have been made with reference particularly to some nomads, the implication apparently being that they speak the neighbourhood language at each end of the seasonal trail: the phenomenon deserves investigation.) But fragmentation of language areas is a feature of the South-West and South-East border regions of the Sudan—a feature uncommon in other parts of Africa, at least to this extent. Languages are found not in a single discrete area, but instead occupy many "islands" dispersed either through areas of other languages or through non-populated areas. In some of the latter areas, archipelagos of population contain islands of various languages. All this would seem to be the result of the reduction and scattering of population, before and during the nineteenth century, by tribal clashes and slave-raiding from the North. When to this fragmentation of language areas is added the penetration of the border areas of the Sudan by a large number of languages and language groupings whose main weight lies in neighbouring territories, it will be understood that the linguistic map of the Sudan is necessarily complex in detail. The full picture is given on a map measuring

LANGUAGE GROUPINGS OF THE SUDAN
[simplified from Tucker and Bryan]



48 inches by 36 inches, in the standard work by Tucker and Bryan. The sketch showing language groupings only, which accompanies this article, is diagrammatic, and the pattern of language grouping areas is simplified to facilitate reference.¹

The table of language groupings below is based, with only slight modifications, on the list in Tucker and Bryan. The order is a geographical one, moving from North to South in rows which run West to East, as far as is possible. The number of speakers refers to speakers in the Sudan only.

Language Groupings of the Sudan

1. SEMITIC family: in Sudan two languages, *Arabic* (also in Middle East, etc.), and *Tigre* in E. Sudan (but mainly in Eritrea) — other languages of this family in Israel, Ethiopia, etc.: respectively 5.2 million and ? 20,000 speakers.
2. CUSHITIC larger unit of HAMITIC family: in Sudan one language *Bedawiye* (dialect cluster) in E. Sudan (also in Eritrea) — other languages of this unit in Ethiopia, Somalia: 400,000 speakers.
3. NUBIAN group: a few languages or dialects, especially *Dongola* or *River Nubian*, and *Hill Nubian*, in Nubia and the Nuba Hills, i.e. all in the Sudan except for a small part of the former in Egypt: 220,000 speakers.
4. EAST SAHARAN larger unit: in Sudan one language *Zaghawa* (dialect cluster) in Darfur (also in Chad) — other languages of this unit in Chad, Nigeria, Niger: ? 50,000 speakers.
5. FUR isolated language: almost entirely in W. Sudan (slightly in Chad): ? 250,000 speakers.
6. MABA ? group: in Sudan, in W., one language *Masalit* (dialect cluster) (also in Chad) — other languages of this tentative group in Chad: ? 80,000 speakers.
7. DAJU group: in Sudan a few languages or dialects, especially *Daju* in W. — other languages of this group in Chad: ? 25,000 speakers.
8. TAMA ? group: in Sudan a few languages, especially *Tama* and *Mararit* (dialect clusters) in W. (both also in Chad) — other languages of this tentative group in Chad: total ? 60,000 speakers.
9. KADUGLI-KRONGO group: entirely in Sudan, in Nuba Hills, several languages: 125,000 speakers.
10. KOALIB-TAGOI larger unit: entirely in Sudan, in Nuba Hills, several language groups and about twenty languages, especially *Heiban*, *Talodi*, *Tegali*: 210,000 speakers.
11. KATLA group: entirely in Sudan, in Nuba Hills, two languages: 16,000 speakers.
12. TEMEIN group: entirely in Sudan, in Nuba Hills, two languages: 14,000 speakers.
13. NYIMANG group: entirely in Sudan, in Nuba Hills, two languages: 45,000 speakers.
14. "GULE" ? isolated language: in E. Sudan: ? 2,000 speakers.
15. TABI ? isolated language: in E. Sudan: ? 20,000 speakers.
16. KOMA ? group: in Sudan several languages, especially *Koma* (also in Ethiopia) — other languages of this group in Ethiopia: 25,000 speakers.
17. BERTA ? isolated language (? dialect cluster): in Sudan (and Ethiopia): 50,000 speakers.

¹ Initial and final versions of this map were kindly prepared by Ustaz Osman Satti (Department of Geography, University of Khartoum) and Mr A. G. Hodgkiss (Department of Geography, Liverpool University).

18. WEST NILOTIC ("Nilotic") larger unit : in Sudan, entirely in S., almost the whole of two groups and one unit and part of remaining group (a small part of the larger unit extends into Ethiopia, Kenya, Uganda and the Congo) : languages include *Dinka* (in Sudan only, 1.1 million speakers), *Nuer* (extending slightly into Ethiopia, 460,000 speakers), *Shilluk* (in Sudan only, ? 150,000 speakers) : total 1.8 million speakers.
19. EAST NILOTIC ("Nilo-Hamitic") larger unit : in Sudan, entirely in S., two units and part of one group (the larger part of the whole unit is in Kenya, Uganda, Tanganyika) : languages include *Bari* (in Sudan only, 170,000 speakers), *Lotuxo* (in Sudan only, 110,000 speakers), *Toposa* : total 450,000 speakers.
20. BONGO-BAGIRMI larger unit : in Sudan, in S.W., parts of two groups and one unit (the larger part of the whole unit is in Congo, C.A.R., and Chad) : languages include *Bongo* and *Kresh* : total ? 100,000 speakers.
21. BANDA-GBAYA-NGBANDI larger unit : in Sudan, in S.W., only part of one group (the whole unit mainly in C.A.R., Congo, Cameroons), especially *Golo* language : ? 20,000 speakers.
22. SERE-MUNDU larger unit : in Sudan, in S.W., one whole group, part of one unit and small part of another group (remainder in Congo) : languages include *Ndogo-Sere* (dialect cluster), *Feroqe* : 50,000 speakers.
23. ZANDE ? larger unit : in Sudan, in S.W., small part (larger in Congo, C.A.R.), mainly small part of *Zande* language (larger in Congo) : 220,000 speakers.
24. MORU-MANGBETU larger unit : in Sudan, in S., part of one group (whole mainly in Uganda, Congo), especially *Moru* (dialect cluster) : 100,000 speakers.
25. DIDINGA-MURLE group : in Sudan, in S.E., several of the languages wholly, especially *Didinga*, *Murle* — the remainder in Ethiopia : ? 50,000 speakers.

Greenberg's Scheme

Greenberg's classificatory scheme, though not generally accepted *in toto* by linguists, is often quoted by non-linguists; undeniably it presents in its final stage a simple neat division of Sudan languages. We follow the revised scheme of 1963, and show the stages by which Greenberg converts the 25 groupings we have just listed into three.

- i. 2 Nilotics (i.e. 18 and 19 above) + 2 Nuba Hills (12 Temein, 13 Nyimang) + 2 East borders (15 Tabi, 25 Didinga-Murle) + 2 West borders (7 Daju, 8 Tama) + Nubian (3) + (one Ethiopian language) = *Eastern Sudanic*.
 2 South-west borders (20 Bongo-Bagirmi, 24 Moru-Mangbetu) = *Central Sudanic*.
Eastern Sudanic + *Central Sudanic* + Berta (17) + (one Ethiopian language) = *CHARI-NILE*.
CHARI-NILE + East Saharan (4) + 4 scattered Sudan languages (5 Fur, 6 Maba, 14 Guli, 16 Koma) + (one West African language) = **NILO-SAHARAN**.
- ii. 3 South-west borders (21 Banda-Gbaya-Ngbandi, 22 Sere-Mundu, 23 Zande) + (Bantu and most of the languages of West Africa) = *NIGER-CONGO*.
 3 Nuba Hills (9 Kadugli-Krongo, 10 Koalib-Tagoi, 11 Katla) = *KORDO-FANIAN*.
NIGER-CONGO + *KORDOFANIAN* = **NIGER-KORDOFANIAN**
- iii. Semitic (1) + Cushitic (2) = **AFRO-ASIATIC**

Perhaps the most interesting point in the scheme is the formation of "Eastern Sudanic" from languages of the North, South, East, West and Central Sudan: if this grouping could be confirmed, it might provide evidence of a cultural unity among the inhabitants of the territory at an earlier date than has previously been suspected. Of the final cross-continental groupings, it must be said that, even if accepted, they imply relationships between sub-groups often no more than extremely distant, and sometimes so distant that explanations other than genetic might seem adequate to explain the limited correspondences.¹

Language Studies

Studies of Sudan languages have been listed in bibliographies moderately completely. The standard bibliographies of the Sudan, by Hill (1939) and Nasri (1962) give only a limited selection, but they include Arabic. On African languages only, Tucker and Bryan (1956) give "complete" lists of works for some of the little known language groupings, and "select" lists for all the others, usually concentrating on the more recent works. The lists in Jones (1959) are generally not as full as those in Tucker and Bryan, but occasionally they contain additional items. On Nilotic languages, Köhler (1955) aimed to list all works. Since a large proportion of the work on Southern languages has been carried out by the Verona Fathers of the Roman Catholic Mission, the bibliography of their writings by Santandrea (1948) is useful. Languages shared with the Congo, Uganda and Kenya, appear in the linguistic bibliographies by van Bulck on the Congo (1948) and by Whiteley and Gutkind on East Africa (revised edition 1958). Starting with these bibliographies, it is usually possible to discover recent works on particular languages which contain fuller bibliographies of the earlier works, e.g. Armbruster on Nubian (1960) refers to bibliographies of earlier work by Schäfer (1917) and Murray (1923), and Spagnolo on Bari (1933) lists earlier writings. For writings on African languages since the publication of the general bibliographies, it is necessary to turn to the periodical literature. Reviews of books on Sudan languages appear in *Africa*, *Sudan Notes and Records*, *Bulletin of the School of Oriental and African Studies*, *Language*, and in some non-English-language journals. Since 1956, *African Abstracts* has provided summaries of all relevant articles.

A curious feature of Sudan language studies is the large amount of recent material unpublished (though much of it is usefully listed in Tucker and Bryan). The most detailed comparative work published to date is Tucker's *Eastern Sudanic languages* (1940) but the second volume of this, though referred to in Tucker's later writings, remains in MS. The linguistic analyses "which provide the basis and justification for the classification adopted" in Tucker and Bryan (1956) and whose separate publication was then announced are only now (1965) in press. Santandrea and other Roman Catholic missionaries have work unpublished, and Stevenson has in MS. a very large quantity of recent material on many of the less well-known languages. While some of this unpublished material may only be in the form of research notes, one gathers that much of it is in a form suitable for publication. Unpublished material inspected in the Library of the Khartoum University was prepared by government officials in the early decades of the century: though some of it is now outdated, and much of it displays little linguistic expertise, a few items represent information nowhere else available. No doubt it used to be difficult

¹ An important critique of Greenberg's classification of certain Sudanese languages has recently appeared—R. C. Stevenson, "Linguistic research in the Nuba Mountains—II", *Sudan Notes and Records*, XLV (1964), pp. 79–102 at pp. 98–102.

to find journals which would accept material on Sudan languages, particularly if it was in the "raw" form of vocabularies or vernacular texts. The very recent establishment of journals such as *African Language Studies* and the *Journal of African Languages* may help to cure this situation, and the example of the *Journal of West African Languages* which caters especially for "raw" material might be profitably followed in North-east Africa. Meanwhile, the unpublished material seems to be mainly available in London, which partly for this reason remains the centre of Sudan language studies.

Assessment of the condition of Sudan language studies, difficult enough for the layman, is not made easier by the amount of unpublished material which he has not seen. However, as far as can be judged from the published material, Sudan language studies are not advancing as fast as those of languages in other regions of Africa. The departure from the Sudan in the last ten years of the European administrators and missionaries who provided the bulk of the amateur work, has not been compensated for, either by a growth of local amateur studies, or more important, by an increase in the amount of professional research. The number of professional linguists engaged in all studies of Sudan languages, even including Sudanese Arabic, Old Nubian and Meroitic, appears to be under ten.

As in other parts of Middle Africa, some of the languages of the Sudan are known only from vocabularies, and probably less than half have been given any detailed grammatical study. About twenty (including Sudanese Arabic) have available printed grammars and vocabularies of a kind which enable foreigners to acquire a reasonable working knowledge of the language: these are written mostly in English. However—and this is where Sudan linguistics lags—very few of these works give the detailed information (e.g. on tone) which a professional linguist of the present generation expects to find in a description of a language and which he needs, for instance, for systematic comparisons. In other words, very little of the published work on Sudan languages has been produced by persons, "amateur" or professional, trained in modern methods of linguistic analysis: and as evidence of this, it may be noted that most of the grammars mentioned appeared more than a quarter of a century ago. Leslau, reviewing linguistic knowledge of a geographically neighbouring field, that of Ethiopian Semitic languages,¹ has bluntly described most of the earlier and many of the more recent writings as "unscientific": by this rigorous standard of appraisal, Sudan linguistics in 1965 is scientific only in small patches. Comparing the situation with that in other parts of Middle Africa, the conclusion cannot be avoided that part of the blame lies with successive governments of the Sudan. Since the 1940s, there has been a failure to carry out what elsewhere in Middle Africa has been considered one of the main functions of colonial and post-colonial governments professing a predominant interest in African cultural welfare—the encouragement and development of earlier interests in linguistic studies, by providing grants to research institutes and facilities to scholars, and in general by the expression of concern about the publication of vernacular literature. Thus the University of Khartoum is probably the only university in Middle Africa in which no provision is made for the study or teaching of African languages. Against this background, we must be grateful for the continuing interest in Sudan languages of such foreign scholars as Professor Tucker and Miss Bryan of London University and Professor Köhler of Cologne.

¹ W. Leslau, "The present state of Ethiopic linguistics", *Journal of Near Eastern Studies*, vol. 5 (1946), pp. 215–29.

Literature in Sudan Languages

To an Arabic-speaking Sudanese, the literature of the whole Arabic-speaking world is open. Or more exactly, it is open to him provided that as a result of acquaintance, through the written or the spoken word, with classical Arabic literature—which includes the Koran—he can move from his own dialect of colloquial Sudanese Arabic to the “dialect” of classical literary Arabic¹. How many Sudanese are excluded by this proviso is uncertain since it is a matter of prestige, individually and communally, to assert a minimum of dialect difficulties within Arabic². A modest part of the literature of the Arabic world has been produced by Sudanese. The earliest documents in Arabic from the Sudan are deeds allegedly of the early eighteenth century, and a few pieces of literature, mainly family histories, which only survive in eighteenth or nineteenth century copies but which possibly date back to the sixteenth or seventeenth centuries. There can be little doubt that Arabic literature developed in a substantial form later in the Nilotic than in the West or Central Sudanic regions of Africa.

From the mid-nineteenth century on, there is an unbroken and swelling stream of Arabic publications by Sudanese writers, although even in the mid-twentieth century the greater part of it is made up of ephemeral literature, newspapers and pamphlets. (This material is more than usually ephemeral in the Sudan, since no repository in the country or outside has yet undertaken systematic collection—a curious omission, it must be said, in the policy of the University Library, which still fails to collect the national press.) A proportion of the pamphlet literature appears to be traditional in content, in the sense that it consists largely of religious and devotional literature, some of it not very original. However, the last half-century has seen the development of a limited flow of imaginative literature, poetry and short stories in the main. In the traditional centres of Arabic literature these appear to have been regarded at first as provincial curiosities, but latterly they have been taken increasingly seriously, so that “Sudanese literature” has become the subject of an amount of critical study in Arabic, by Sudanese and non-Sudanese writers. Several of these critical works are listed in Hill and Nasri. Comment in European languages is naturally more difficult to trace, but two articles (Saad and Jargy 1960) translated from Arabic into French present a politically-centred critique, while a very recent article by Shoush (1963) examines, from a more literary angle, some features of Sudanese Arabic poetry since the Mahdiya.

Other writings by Sudanese in Arabic include works of scholarship (in general, see Nasri: on history in particular, see Sanderson 1964), an important autobiography by Sheikh Babikr Badri the educationalist (1961), and of course a plethora of political writing. But surprisingly little has yet been written about popular life in the Northern Sudan: the few Sudanese who have written about traditional customs and domestic life have generally written in English. The acknowledged emphases on the classical language, on religious ideals, and on political aspirations, give a foreigner the impression that Sudanese Arabic literature *in print* tends to

¹ On Sudanese Arabic and its dialects, see S. Hillelson, *Sudan Arabic: English Arabic Vocabulary* (1925), p. xiii ff. This author asserts that “though surrounded on all sides by African languages, Sudanese Arabic has remained remarkably free from corruption” (p. xxi). Use of the term “corruption” suggests some bias: in view of this, it would be interesting to see an objective study of Sudanese Arabic borrowings from other languages. It may be suspected that these have been most frequent from Nubian.

² e.g. “The Sudanese colloquial language preserved to a great extent its classical origin”. M. I. el Shoush, *Sudan Notes and Records*, XLIV (1963), pp. 21–42.

be rather urbane and cerebral; and for vulgar and rural interests one must turn instead to the collections of oral traditions, oral verse and general folk-literature made mainly by Europeans, especially by Hillelson (1918, 1929, 1935).

The non-Arabic literature of the Sudan is strikingly under-represented in the bibliographies of the Sudan and of African linguistics cited above, since these more often than not ignore texts in the vernacular. This deficiency arises because these texts are almost exclusively translations by foreign Christian missionaries of either religious works or elementary schoolbooks, and as such have not been considered worthy of notice, for purely linguistic purposes, by the majority of linguists. The same deficiency, for the same reason, is found in the bibliographies of most other Middle African territories. The recent pronouncement by a UNESCO "expert"—"the tribal languages of the South have no script of their own and even if the Latin alphabet is used for the different languages, there is no literature worth speaking of, which can be read with pleasure and profit"¹—can be most charitably interpreted in terms of this background.

I hope to remedy the deficiency by producing a bibliography of Sudan African language material. Meanwhile this must be said. Throughout Middle Africa, outside the Sudan, the task of furthering the development of literatures in African languages, previously carried through in the main by private agencies and personal enthusiasm, in the last decade has been taken up with some fervour by national academic bodies, by African governments and even by UNESCO. Almost all literatures in African languages began in the same way, with translations by foreign missionaries, and in ephemeral publications. On these foundations a few languages have, in less than a century, built up a respectable body of creative literature written by speakers of the language. If only a few of the very many languages found in Africa have yet reached this level of distinction, a large number (perhaps 50–60) are moving towards this position: they possess a literature with scores and occasionally hundreds of titles, some of them selling in editions of 100,000 or more copies. Preliminary inspection suggests that the state of African language literatures in the Sudan is rather below the average state of development in other countries of Middle Africa but not hopelessly so. No African language in the Sudan has a literature comparable in creative and communicative value with the most developed in Nigeria (Yoruba, Hausa), Ghana (Twi), Uganda (Luganda), Kenya (Kikuyu), Tanzania (Swahili), Rhodesia (Shona), or South Africa (Xosa, Sotho); but the most developed in the Sudan are roughly comparable with the most developed in the other territories (e.g. Mende in Sierra Leone, Fula in Guinea) and of course with many less developed in the countries already named. About a dozen languages in the Sudan have an embryonic printed literature which could, if reasonably fostered, develop in a few decades into a creative and nationally enriching activity. In Bari and Dinka, about fifty items have been produced since the languages were first studied in the 1850s; in Lotuxo and Zande, about the same number have been produced since 1900. (These figures can be compared with about 100 items produced in Mende since 1840.) While the numbers are tiny compared with the number of items in regional or world languages, running into hundreds of thousands in Arabic, for instance, it must be remembered that they relate to that noble first period in the history of a written literature in which the technical difficulties of

¹ *Education in the Sudan*, Eleventh annual conference of the Philosophical Society of the Sudan (1963), p. 3, in a paper by S. V. Rao on "Adult education in the Sudan".

transmuting oral communication into the written word are being tackled and overcome. In the case of African languages these technical difficulties are often very great, and hence it must be recognized that in the early decades of their literatures, the number of items does not adequately reflect the intensity of thought being applied to the production, or the enthusiasm of their reception by the first readers.

Though the earliest literature is thus very limited in scope (and sometimes even in accurate representation of the language), nevertheless only the most perverse judgment could imagine that the vernacular reader obtains nowhere "pleasure or profit" from his mother-tongue in print. The earliest literature in all Sudanese languages (including Arabic) has been religious in tone, didactic and educational in intent. Older Nubian and the languages of the South began with Christian literature: though the whole Bible is not yet available in any of these languages, the New Testament is available in about a dozen, and in some cases has been for several decades.¹ Schoolbooks sufficient for elementary instruction are similarly available in about a dozen languages. Texts have been collected by scholars in most of the larger languages, but having been published only in learned journals, have not yet contributed to the amount of literature available to the normal mother-tongue speaker. All the material mentioned is in Roman script. An attempt has been made in the last few years to transcribe a small part of the educational material into Arabic script, in response to the policy of Arabicizing introduced by the central government.

Language Policy and Related Problems

In the Arabophone part of the Sudan, the major problem is the extent to which the classical and literary language is to make concessions to the colloquial dialects. Thirty years ago Hillelson wrote of Egypt—"The language of the capital has gained a complete ascendancy over the provincial dialects, and all the linguistic conditions are present which would favour the growth of a literature in Egyptian Arabic, were it not for the fact that such a development is repugnant to the taste and to the habits of the educated class. In these circumstances the literary use of the vernacular is confined to popular verse, the comic press, and the occasional experiments of daring innovators."² Since 1950 two developments in Egypt, the wide use of radio and the political appeal to the masses, have reduced somewhat the hostility to a vernacular literature, but in the Sudan the position today seems to be more like that in Egypt in the 1930s. However, wide varieties of opinion can be heard on this subject, and not surprisingly, since many deep-seated emotions are involved. It must, therefore, merely be concluded that a new and detailed discussion of the topic, on an academic and historical level, by a Sudanese scholar, would be very welcome.

The other major problem of linguistic policy in the Sudan has been that of the place of the majority language, Arabic, in national life. Here again current discussion involves deep-seated emotions, as well as startlingly conflicting interpretations of the past history. However, in fairness to public confusion, it may be noted that no independent scholarly study of language policy in the past, set

¹ The New Testament is available in the following languages of the Sudan—Krongo (language grouping 9), Moro, Heiban and Nyirere (all 10), Uduk (16), Bor Dinka and Padang Dinka (18), Bari (19), Zande (23) and Moru (24). The Four Gospels have been also translated into Nubian (3) and Shilluk (18).

² S. Hillelson, *Sudan Arabic Texts* (1935), p. xi.

against the background of general African trends, has yet been attempted. Thus at the moment there is agreement only on some of the documents which should be consulted. The published report of the Rejaf conference of 1926, which discussed the policy to be adopted by government (and *mutatis mutandis* by other cultural agencies) in the South Sudan is clearly a most important document, though the text suggests that the participants possessed only a very limited understanding of the historical currents around them, currents which it has been assumed they meant to regulate. The unpublished report of 1935 on the introduction of Arabic into education in the Nuba Hills is another important document.¹ General comments on linguistic policy have appeared in many government statements and "plans" of later date. Unfortunately these have often revealed ignorance of the elementary facts of scientific linguistics. At the very end of the colonial era, an "International Education Commission" containing a high proportion of eminent British educationists, based some of its recommendations on the following information: "The vocabularies of these languages (*sc.* of the South) are reported to be very limited, so much so that most of them do not have more than about 300 words."² A coherent and acceptable linguistic policy cannot be based on such gross misunderstandings. One cause of these misunderstandings has been the failure to carry out research and instruction in Sudanese languages in Sudan's university: it is to be hoped that this will soon be remedied.

The rich pattern of languages in the Sudan is one of the country's inheritances from the past. The languages display the wit and wisdom of ancestral generations, as they testify to the history of bygone centuries. The language of a people has been poetically described as the soul of that people: without doubt, men think of their language in terms which are not those of mere material expediency.³ As the history of other lands shows, there is no surer way of fomenting disorder and disunity than the pursuit of a national linguistic policy which ignores this basic consideration.

I am much indebted to Dr R. C. Stevenson of Omdurman, not only for information on a number of points in this essay (and particularly for estimates of the population of those smaller linguistic units not distinguished in the Census), but also for the stimulus afforded by frequent discussions with him, during 1964-5, on topics related to his many years' experience of research in Sudan linguistics.

¹ A copy of this report exists among the uncatalogued MSS in the Sudan Collection of the University Library.

² *Report of the International Education Commission on Secondary Education* (1955), p. 52.

³ Half a century ago, a West African wrote as follows: "All tribes and all languages should be allowed or encouraged to live until the world has heard what is buried in their bosom. . . . The Vais may have a song to sing, a parable to utter, a prayer to offer or a law to interpret—all of which may be necessary elements in the progress of the enlightenment of mankind. To suffer a single language to die therefore—language through the medium of which alone the soul of humanity is reached—is to rob the world of one of its brilliant jewels". (M. Massaquoi, "The Vai people and their syllabic writing", *Journal of the African Society*, x (1910-11), pp. 459-66 at p. 466). This impassioned appeal was in reaction to the attitude of the Americo-Liberian ruling group in Liberia, who scorned African languages and endeavoured to impose their own non-African language, English, on the tribes they ruled, in the name of national unity.

A NOTE ON THE HISTORY OF THE KABABISH TRIBE

by
TALAL ASAD

I

It has long been recognized that none of the Arab tribes of the Northern Sudan is ethnically homogeneous, and that each of them contains elements of diverse origin. But in accounts of the historical fusion of such tribal elements little attention has been paid to the social and political significance of this process. Instead, the emphasis has been on a search for the ancestry of the various subdivisions that make up a given tribe today.¹ In the following brief sketch of the early history of the Kababish tribe I have attempted a summary of what is known of their political structure during the 18th and 19th centuries.

The present political structure of the Kababish is a comparatively recent one. It was largely built up by the astute Shaykh 'Ali el Tom, the first Nazir of the Kababish after the Anglo-Egyptian reconquest in 1898. The information I have put together in this note, mainly from the writings of European travellers, is unavoidably scanty. But there is, I think, sufficient evidence to indicate that the political system was very different before that date.

The Kababish are pastoral nomads who today inhabit the semi-desert region in Northern Kordofan that lies on the fringes of the Libyan Desert. This region is coterminous with the territorial unit known as Dar Kababish Rural District which is administered by Dar Kababish Rural Council.² The Kababish share this territory with a number of smaller tribes,³ some nomadic and others sedentary. Each of these tribes has its own traditional head, known as Nazir or Omda, but the chief of the Kababish, known as Nazir Umum, is head of the tribal administration of all the tribes in Dar Kababish. Thus the Nazir Umum is ex-officio Deputy-Chairman of the local Rural Council (the Chairman being the Local Government Inspector, Northern Kordofan), as well as President of the highest Native Court within the District.

The paramountcy of the Nazir Umum (confirmed in the 1953 High Court Award following the dispute between the Kababish and the Hawawir)⁴ rests on the recognition by the Administration that Dar Kababish "belongs" to the Kababish tribe, although certain other tribes have what amount to traditional rights of usufruct in parts of the area. To symbolize his paramountcy the Nazir Umum keeps a set of copper drums, known as *el nahas*, which is beaten on ceremonial occasions.

¹ A good example of such a study is H. A. MacMichael's "The Kababish: some Remarks on the Ethnology of a Sudan Arab Tribe", in *Journ. Roy. Anthropol. Inst.* (1910). The paper is concerned to demonstrate the different origins of Kababish tribal sections primarily on the basis of connections between their names and those of tribes that had or still have their home in the Arabian peninsula.

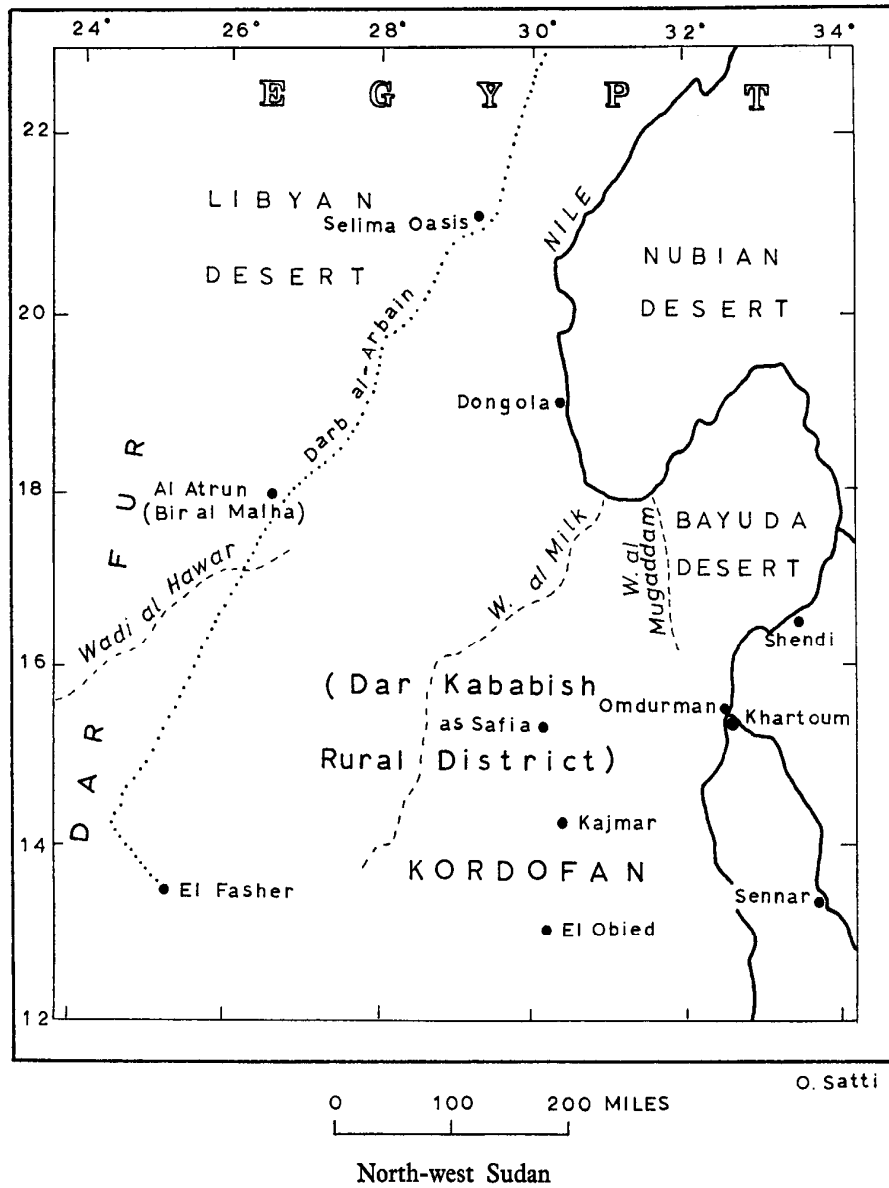
² In fact the Kababish utilize a much greater area during their annual movements. See my "Seasonal Movements of the Kababish Arabs of Northern Kordofan" in *Sudan Notes and Records* (1964).

³ These tribes are: Kawahla, Hawawir, Bani Jarrar and Duwayh (nomadic); Kaja, Katul, Zaghawa, Nuba-Haraza, Nuba-Abu Hadid and Nuba-Um Daraj (sedentary). The population of the Kababish is a little larger than that of all the other tribes combined.

⁴ See "'Dar Rights' Among the Nomads: an Arbitral Award", in *Sudan Law Journal and Reports* (1960).

BIBLIOGRAPHY

- ARMBRUSTER, C. H. (1960). *Dongolese Nubian : a Grammar*.
 BABIKR BADRI (1961). *Ta'rikh Hayāti*, 3 vols., Khartoum.
 GREENBERG, J. H. (1963). *The languages of Africa*.
 HILL, R. L. (1939). *A bibliography of the Anglo-Egyptian Sudan*.
 HILLELSON, S. (1918). "Arabic nursery rhymes", *SNR*, I, pp. 25-9.
 — (1920). "Historical poems and traditions of the Shukriya", *SNR*, III, pp. 33-75.
 — (1925). *Sudan Arabic : English-Arabic Vocabulary*.
 — (1929). "Songs of the Baggara", *SNR*, XII, pp. 73-83.
 — (1935). *Sudan Arabic Texts*.
 — (1938). "Sūdān", in *Encyclopaedia of Islam*, Supplement.
 JONES, R. (1959). *Africa bibliography series : North-East Africa*.
 KÖHLER, O. (1955). *Geschichte der Erforschung der nilotischen Sprachen*.
 MURRAY, G. W. (1923). "An English-Nubian Comparative Dictionary". *Harvard African Studies*, IV.
 NASRI, A. R. EL (1962). *A Bibliography of the Sudan, 1938-58*.
 REJAF LANGUAGE CONFERENCE (1928). *Report of proceedings*.
 SAAD, A. A. and JARGY, S. (1960). "Poésie et poètes Soudanais" and "Les jeunes poètes Soudanais", *Orient*, IV, pp. 95-122, 129-38.
 SANDERSON, G. N. (1964). "The modern Sudan, 1820-1956 : the present position of historical studies", *Journal of African History*, pp. 435-61.
 SANTANDREA, S. (1948). *Bibliografia di studi africani della Missione dell' Africa centrale*, Verona.
 SCHÄFER, H. (1917). *Nubische Texte im Dialekte der Kumtzi* (Abh. der königl. preuss. Akademie der Wiss.), Berlin.
 SHOUSH, M. I. EL (1963). "Some background notes on modern Sudanese poetry", *SNR*, XLIV, pp. 21-42.
 SPAGNOLO, L. M. (1933). *Bari Grammar*, Verona.
 STEVENSON, R. C. (1962, 1964). "Linguistic research in the Nuba Mountains", *SNR*, XLIII, pp. 118-30 ; XLV, pp. 79-102.
 TUCKER, A. N. (1940). *The Eastern Sudanic languages*, I.
 TUCKER, A. N. and BRYAN, M. A. (1956). *Handbook of African languages : Part III, The non-Bantu languages of North-Eastern Africa*.
 VAN BULCK, G. (1948). *Les recherches linguistiques au Congo Belge*.
 WHITELEY, W. H. and GUTKIND, A. E. (1958). *A Linguistic Bibliography of East Africa*, revised edition, Kampala.



At present the Kababish are divided into about 18 major sections:¹ Nurab, Awlad 'Ugba, 'Aṭawiya, Kibayshab, Huwarab, Ribaygat, Sirajab, Awlad 'On, Barara, El Ṭawal, 'Awayda, Ḥamdab, Ghalayan, Awlad Hawal, Awlad Sulayman, Awlad Ṭarayf, Rawahla, and Ḥammadab. But none of these sections possesses any corporate identity except the Nurab to which the Nazir belongs. All the sections are scattered and intermingled throughout the district, and rights to water and grazing are exercised by virtue of membership in the tribe as a whole. The primary economic units within the tribe are elementary families, linked together by varying ties of kinship and co-operation, and engaged in the herding of individually owned livestock. Virtually all effective authority within the tribe, including judicial authority, is vested in persons who belong to the Awlad Faḍlallah subsection of the Nurab. Section shaykhs have no political authority whatever other than that of collecting Animal Tax. But individuals who, for one reason or another, do not wish to hand over their tax to their section shaykh may approach the Nazir or one of his senior assistants directly.

Thus although membership in the section has little or no importance for the Kababish, the tribe as a whole with its highly centralized power structure has today a clearly defined political identity, which is legally underlined by the recognition of collective rights to grazing and water in Dar Kababish, under the Nazir Umum. The unity of the Kababish tribe, and their unswerving loyalty to the Nazir who represents them, is frequently stressed by Nurabi leaders. In relation to other tribes and to the Government, they say, "the Kababish stand as one man".

II

The earliest published reference to the Kababish that I have been able to discover occurs in Bruce's *Travels*. Bruce was in Sennar, capital of the Funj kingdom, in 1772, where he was told that the Kababish, together with the Bani Jarrar and the Bani Fazara, were to be found in the Bayuda desert: "The way through this desert . . . is now rendered impassable . . . by the Beni Faisara, Beni Gerar, and Cubba-beesh Arabs, three powerful clans, which come from the westward near Kordofan . . ., and which have taken possession of all the wells in the desert, so that it is impossible to avoid them".² He goes on to report that the Kababish "are very numerous, and extend far into the great desert Selima and to the frontiers of Egypt".³

About twenty years later, Browne mentions that the Kababish were to be found in the vicinity of Bir el Malha (El 'Atrun), where they plundered such caravans as they were able.⁴

It is clear from these references that as early as the 18th century the Kababish straddled the three major caravan routes from Egypt to Darfur and the West: the Darb el Arba'in, Wadi el Milk, and Wadi el Mugaddam. Traffic along these routes was considerable, and Browne as well as later travellers describe in some detail the great range and quantity of merchandise carried along them. The Kababish, because of their strategic position, were able to benefit from the existence

¹ I say "about 18" because there is some confusion as to whether some of the names relate to separate sections or subdivisions of a single section. But since these possible alternatives make no practical difference to the people concerned the confusion remains unresolved.

² J. Bruce, *Travels to Discover the Source of the Nile*, v (1799), p. 282.

³ Ibid.

⁴ W. G. Browne, *Travels in Africa, Egypt and Syria* (1790), p. 188.

of this trade not only by plundering caravans whenever possible, but also by the hire of pack-animals and guides. It is also very probable that they were engaged in a certain amount of trade on their own, transporting natron from El 'Atrun oasis and slaves from Darfur to the markets in Dongola province.

But the Kababish were not undisputed masters of their desert tract. Apart from the fact that first Sennar, then the kingdom of Kordofan under Hashim el Musabba'awi, and finally the Sultanate of Darfur, claimed sovereignty over at least part of the territory which the Kababish occupied, the latter had also to reckon with other nomads. Of these the most famous were the Bani Jarrar, for long traditional enemies of the Kababish.

According to an oral account by the Mak of the Jammu'ia tribe, recorded by Jackson,¹ when the Kababish were being hard-pressed by the Bani Jarrar in the middle of the 18th century, they sought the help of the Jammu'ia against the latter. The chief of the Jammu'ia at that time was Abu Lakailak who won Kordofan for the kingdom of Sennar (circa 1747), and it is probable that the entry of at least part of the Kababish into what now constitutes Northern Kordofan coincided with the conquest of Kordofan by Sennar. One of the few oral histories I myself was able to collect in Dar Kababish seems to support this conclusion: "The Kababish were in Dongola, and Bani Jarrar were in Kordofan near El Obeid. This was at the time of the Sultanate of Zarga (Sennar). Then Bani Jarrar invaded Dongola, and the Kababish retreated upstream along the Nile as far as the Jammu'ia, and they agreed with them that they should not flee any further. So they burnt the ships and took to their camels, and they fought Bani Jarrar and the Musabba'ia at el Hinayk which lies north-west of Jabal Aulia. They were victorious, and after the battle they advanced westward following Wadi Majarr and Wadi Um Sidr. Later the Kababish moved to El Safia and Kajmar and Jabrat el Shaykh and other watering places in the west".

Towards the end of the 18th century, with the decline of the kingdom of Sennar, Northern Kordofan fell under the sway of Hashim el Musabba'awi. It appears that in his conflict with Darfur, which led finally to his overthrow, Hashim was supported by some Kababish.² After that we hear no more of the Kababish until the Turco-Egyptian invasion in 1821, except for a brief reference in Burckhardt's *Travels*³ to the effect that they were involved in the slave-trade between Darfur and Dongola.

III

The first mention of the Kababish after the Turco-Egyptian conquest of the Sudan appears in Cailliaud's *Voyage*. The Kababish, he writes, submitted voluntarily to the invading army, but ceased to pay any tribute as soon as they returned to their desert.⁴ Whether for this reason, or because they were actively hostile to the Turco-Egyptian authorities, in 1822 Mahu Bey received orders from the viceroy to attack the Kababish and the Hassaniya in the Bayuda desert.⁵ It seems that it

¹ H. C. Jackson, *Tooth of Fire; being some account of the ancient kingdom of Sennar* (1912), p. 51.

² See El-Tounsy, *Voyage au Darfour* (1845), p. 67.

³ J. L. Burckhardt, *Travels in Nubia* (1819), p. 67.

⁴ Cailliaud, *Voyage à Méroé*, II (1826-7), Chapter xxix, p. 123.

⁵ See R. Hill, *Egypt in the Sudan* (1959), p. 15.

was the Hammadab section of the Kababish that was directly involved, for at precisely this time Linant de Bellefonds, who was then at Shendi, reports that Mahu Bey arrived back from a punitive expedition against the Hammadab.¹

Ignatius Pallme, who was in Kordofan during 1837-8, devotes a short chapter to the Kababish in his *Travels in Kordofan*.² He speaks of them as being a small, poor, nomadic tribe inhabiting an area west of the White Nile, and mentions in passing that they are allied to tribes in the Bayuda desert. The Kababish, observes Pallme, engage in the carrying trade, but breed very few camels themselves, obtaining most of the animals they ply for hire from the neighbouring Hamar tribe. As carriers and guides, he says, the Kababish are "invaluable to the government . . ., and to the caravans passing through the country in general they are almost indispensable".

Gum arabic from Kordofan, a State monopoly, was one of the most important items transported by the Kababish from El Obeid to Dongola. Pallme describes in some detail the way in which the Government managed continuously to defraud the unfortunate gum carriers of most of their earnings. The resentment this occasioned, Pallme records, led to the emigration of a small section to Darfur in 1838 where it hoped to settle. But it seems that this group was not welcomed by the Sultan of Darfur who had them hunted back again over the border.

However, when the Egyptian viceroy, Muhammad Ali, visited Khartoum in 1838, he appears to have made some effort to placate the Kababish. Pallme states that Muhammad Ali "summoned Salé (Salim?), the great Sheikh of the Kubbabeesh, into his presence, and flattered him in every possible manner in order to win him over; he even did him the extraordinary honour of allowing him to sit on his right hand, and after having convinced himself of the injustice under which his people groaned, promised to take the measures necessary for their relief". The viceroy apparently appreciated the importance of conciliating the Kababish in order to secure transport facilities in the area, and also to ensure the safety of the route between El Obeid and Dongola.

In fact this particular route was not always safe. Mansfield Parkyns, who visited the area sometime between 1844 and 1850, writes that "formerly" the Bani Jarrar used to raid caravans between Kordofan and Dongola, so the Government had appointed certain sections of the Kababish to keep watch against the raiders: "The desert is now continually watched by scouts mounted on dromedaries and horses, who follow the traces of these Darfur Arabs, the government having given them the right of attacking any hostile tribes that may appear in the desert, a fourth part of the plunder being given up to the diwan or government treasury".³ Thus the traditional hostility between the Kababish and the Bani Jarrar was turned to the mutual advantage of both the Government and the Kababish.

There is an interesting oral account among the Kababish today which describes what followed when they drove the Bani Jarrar from Kordofan into Darfur some time during the second half of the 19th century: "In Darfur Bani Jarrar once attacked a caravan that belonged to the Sultan of Darfur, grandfather of 'Ali Dinar. The caravan was on its way to Dongola. When the Sultan heard of this, he sent

¹ Linant de Bellefonds, *Journal d'un Voyage à Meroé*, ed. Margaret Shinnie (1958), p. 136.

² I. Pallme, *Travels in Kordofan* (1844), Chapter vii.

³ M. Parkyns, "The Kubbabish Arabs between Dongola and Kordofan", in *Journ. Roy. Geog. Soc.* (1851).

an army and drove Bani Jarrar back to El Safia (Kordofan). This took place during the period of Faḍlallah Bey Salim (head of the Kababish). So he took them as part of the tribe, and it (the Kababish) became one big tribe until Faḍlallah Bey died, and that was sixteen years before the Mahdiya".

Apart from Pallme, the only extended account of the condition of the Kababish in the middle of the 19th century is contained in the article by Mansfield Parkyns to which reference has already been made. Parkyns claims that he stayed for a long time "in the most intimate acquaintance with this tribe" and is therefore able to correct certain errors in Pallme's book.

According to Parkyns the Kababish as a whole might be divided into three groups: those who spent all the year in the desert, making only occasional visits to the permanently settled areas to buy grain; those who spent the dry season in the permanently settled tracts and the rainy season in the desert; and finally those who were virtually sedentary, owning cattle but engaged mainly in agriculture. The first two groups, contrary to what Pallme states, possess and breed large numbers of camels. Parkyns lists 32 sections (or tribes, as he calls them) and gives the location of each. It is clear from this that when he speaks of "the desert" he includes the uncultivated semi-desert region which is now part of Dar Kababish Rural District. About half of these sections can be identified as sections of the present-day Kababish, while most of the remainder are the names of what are today quite distinct tribes or sub-tribes. A few of the present-day Kababish sections are not mentioned at all.

"Their chiefs", writes Parkyns, "are not at all feared by them. The great chief alone oppresses them, but this he is enabled to do from his influence with the Turks. The others are respected from their origin or character, and although any Arab would express his opinion with the greatest freedom in the presence of the chief, no one would infringe the little points of etiquette established by their ancestors. . .". The "great chief" in this passage presumably refers to Faḍlallah wad Salim who was head of all Kababish sections, save for a few in Dongola province which were under Ḥakim wad el Dib. It is not clear from Parkyns's account what the formal relationship was between the ordinary chiefs (presumably section shaykhs) and the great chief, or what their powers and duties consisted of.¹

However, it is evident from Parkyns's detailed description of the annual migration that a certain degree of co-ordination seems to have existed at the sectional level. This is also reflected in another oral account I recorded in Dar Kababish: "People say that in the days before the Mahdiya the Nurab as a whole moved and settled together. The *nuggara* (tribal drum) was beaten while on the march and on setting up or dismantling camp. Each type of beat had its own meaning. Each group had its appointed place while on the move as well as in the camp. Armed men guarded the people when they were moving. This was because there were many wars between the tribe at that time. Now there is peace and people can move anywhere without fear, and there are many watering places. . . . I don't know whether other sections were the same as the Nurab in this or not".

¹ It is possible that an investigation of the Egyptian archives may shed some light on this matter. Thus Hill in *Egypt in the Sudan*, drawing on these sources, makes the interesting statement that in 1854 the Government undertook a punitive expedition against some Kababish shaykhs of Northern Kordofan, but that "The *shaikh al-mashayikh* of the Kababish, Faḍl Allah wad Salim, does not seem to have been involved in this affair" (p. 103, footnote.)

Not only their migrations, but also their encampments were more regular than they are today. Parkyns informs us that "the camp is built very regularly in lines, with spaces between each line: the lines run E. and W., facing S., and the flocks are penned between the lines. The chief's house is at the W. end of the central line; that of the 'rain-guide' is alone, and in front of all. Each line has openings E. and W. in the outer fence, which are closed with thorns in the evening, after entry of the cattle". Whether each section had a single organized camp or several is not clear from Parkyns. But it seems reasonable to assume that such a camp, of which there may have been one or more to each section, depending partly on the size of the section concerned, was a fundamental unit of Kababish society, possessing a measure of solidarity and autonomy.

It is fairly certain that the Kababish as a whole rarely, if ever, acted as a unified group. They were spread over too large an area for their unity to have had any great political significance. This emerges from the description that Parkyns gives of an incident in which some Kababish were engaged in a local conflict with the Bani Jarrar: it appears that they debated whether or not to call the assistance of some friendly sections, but decided against this on the grounds that "strangers who fought without common interest would be the first to fly and put a fresh panic among the rest".

In the second half of the 19th century there were a large number of travellers who encountered the Kababish and mentioned them in their writings, but with two minor exceptions, none of them reports anything which we do not know already from Pallme and Parkyns. The first of these, Le Comte d'Escayrac de Lauture, lists 24 sections of the Kababish in his book *Le Désert et Le Soudan*.¹ Some of these sections do not appear in Parkyns's list, but may be identified as present-day sections. The other traveller is Colston who accompanied Prout on his official expedition to Kordofan in the early 1870s. Colston published an article entitled "Notes sur les Tribus de Bédouins du Soudan et du Kordofan"² in which he describes in very general terms the Kababish to the west of the Nile, and the Ababda and Bisharin to the east. The interest of this article lies in the curious statement that the Kababish speak the same language as the Ababda and the Bisharin, namely Te Bedawi. It is unlikely that Colston was completely mistaken on this point for he seems to have met some groups claiming to be Kababish in Dongola province. Yet none of the Kababish today speak anything but Arabic, and they have no tradition of having spoken anything but Arabic in the past.

IV

Information about the Kababish during the Mahdiya is confined largely to the unsuccessful struggle of this tribe (in particular the Nurab section) against the Khalifa Abdullahi. The events are well-known from the accounts by Ohrwalder,³ Slatin,⁴ Neufeld⁵ and Rosignoli⁶, and a fairly full summary is contained in Holt's

¹ Le Comte d'Escayrac de Lauture, *Le Désert et Le Soudan* (1853), p. 260.

² Colston, "Notes sur les tribus Bédouins du Soudan et du Kordofan", in *Bull. Soc. Khéd. Géog.* (1876).

³ *Ten Years' Captivity in the Mahdi's Camp* (1892).

⁴ *Fire and Sword in the Sudan* (1896).

⁵ *A Prisoner of the Khalifa* (1899).

⁶ *I miei dodici anni di prigionia in mezzo ai Dervisci del Sudan* (1898). I am indebted to Mr Farnham Rehfisch for this last reference and also for translations of the relevant passages from the French sources.

The Mahdist State in the Sudan.¹ We need note only that very early in the conflict a number of sections went over to the Khalifa and accepted his authority. A Nurabi informant summed up the history of this struggle for me in the following way: "When El Tom was beheaded by the Mahdi in El Obeid, and war commenced between the Kababish and the Mahdiya, the Mahdi declared the Kababish tribe *ghanima* (free booty). And so a number of Kababish sections began to claim in public that they were not Kababish. These included the Kawahla, the Awayda, the Juhayna and several others. The Kababish lost everything they had at the time, and they were scattered or brought to Omdurman".

After the subjugation of the Kababish by the Khalifa, the tribe consisted of two groups: the Dongola Kababish and the Omdurman Kababish.² The latter, by far the largest, was subdivided into three "large tribes": Nurab, under two shaykhs, and Awlad 'Ugba and Sirajab each under a single shaykh. All of them eventually took part in opposing the Anglo-Egyptian advance, and at the Battle of Omdurman (1898) the Kababish contributed over 700 men to the Khalifa's army.³

V

The evidence of European travellers, exiguous though it is, suggests that "the Kababish" was the name of a loose confederation of tribes who lived in the north-western region of the Sudan. There does not appear to have been any precise political boundary which marked off a given number of sections as belonging permanently to "the Kababish", or defined a certain area as being exclusively "Kababish country". Tribes joined and left the confederation at different periods, or emigrated from one locality to another. These tribes may have included one or more Te Bedawi-speaking groups on the banks of the Nile near Dongola. They certainly included the Kawahla at one time, although now the Kawahla of Northern Kordofan is a separate tribe which claims that it has always been separate from the Kababish. Even the Bani Jarrar, or a part of it, appears to have belonged to this confederation during the latter half of the 19th century, together with such distinct present-day tribes as the Batahin and the Hawawir.

By about the middle of the 19th century we hear of "the Kababish" being divided into two groups (the Dongola group and the Kordofan group) of which by far the largest and most widespread was the Kordofan group, with its *shaykh el mashayikh* or Paramount Shaykh. This was, of course, during the Turco-Egyptian period when it is likely that the Government re-enforced the power of one shaykh for its own purposes. It was during this period, at any rate, that the Government awarded the title of Bey to Shaykh Faḍlallah Salim and presented him with the set of copper drums as a symbol of his authority. But unfortunately, as I have already stated, we know very little about the power of the Paramount Shaykh and how it was wielded. The Government seems never to have defined his authority for it made no attempt to administer the nomadic tribes: it was enough if order was maintained in the strategic areas and tribute delivered regularly. How far the Paramount Shaykh was able to satisfy the Government in these matters must have depended in great measure on his powers of persuasion and intimidation over the different tribes in the confederation.

¹ P. M. Holt, *The Mahdist State in the Sudan* (1958), pp. 135-6.

² *Intelligence Report, Egypt, No. 50* (1898) (in the Sudan Collection, Khartoum Univ. Library).

³ *Intelligence Report, Egypt, No. 60* (1896) (in the Sudan Collection, Khartoum Univ. Library).

I have suggested that belonging to the confederation did not imply effective over-all political unity. There was neither occasion nor opportunity for all the tribes to act together. And the power of the Paramount Shaykh to keep all the tribes within the confederation must have varied from one period to another, while the benefits to the different tribes of membership in "the Kababish" were doubtless also very variable.

One of the interesting facts about the Kababish today is their almost complete unconcern about their own tribal history: the golden age for most Kabbashis is the period when Shaykh 'Ali "el karim" (the generous) was Nazir, in the first four decades of this century. This is partly understandable given their recent experience of disaster under the Mahdiya and the subsequent rise in fortune of the tribe as a whole under the Condominium. But I believe this explanation is not enough.

I suggest that in a very important sense the Kababish tribe emerged only after the Mahdiya under the Nazirate of Shaykh 'Ali el Tom. The identity of the Kababish, with its distinct territorial rights and tax obligations, gradually formed itself around the unassailable power and authority of the Nazir Umum, backed by the British Administration. The concessions that 'Ali el Tom obtained from the Government—grazing lands, watering points, and protection from the restrictive demands of bureaucratic administration—were available to the Kababish tribe as a whole. But as Shaykh 'Ali gathered the scattered remnants of the old Kababish sections together, he set about eliminating with great thoroughness the political identity of these sections. All the rights that the tribesman now possessed came to him by virtue of his membership in the Kababish tribe: membership in the section gave him nothing.

This may also provide us with a possible clue to the reason for the absence of any genealogy for the Kababish tribe as a whole. Many other tribes in Kordofan—the Kawahla, Dar Hamid and Humr, for example—do have tribal genealogies but the Kababish do not. The reason for this, I believe, is quite simply that because the Kababish do not have politically significant lineage units, there is no need for justifying the unity of such subdivisions within the tribe as a whole in genealogical terms. The identity of the Kababish tribe does not depend on the union of politically distinguishable sections but on the monopoly of tribal authority vested in the office of Nazir. The period of Shaykh 'Ali's rule was indeed the golden age, for it was under him that the Kababish "tribe" came into existence as a specially favoured unit in the British system of Indirect Rule in the Sudan.

PATTERNS OF SETTLEMENT IN THE MANAQIL EXTENSION TO THE SUDAN GEZIRA SCHEME

by

JOHN R. RANDELL

Note.—The Manaqil Extension, as hereby defined, includes the four phases originally designated for development when the scheme was initially planned. The field work in advance of development and as implementation of the scheme progressed was confined to this area. Subsequently, additional lands north of the original scheme and referred to as Part I, Phase V have been developed and work is under way to extend the irrigated area still further.

Introduction

The Gezira Scheme of the Sudan has attracted much attention from writers on African economic development and agriculture so it is assumed that the reader is familiar with the broad outlines of the scheme and its physical setting.¹ As its first major development project after independence the Sudan undertook implementation of the Manaqil Extension of the Gezira Scheme and subsequently the project has been incorporated into the country's ten year plan.² Since 1956 when the Manaqil area was still unaffected by development plans the opportunity has been taken of following the transformation of settlement and rural economy as implementation of the scheme progressed.³

The first four phases of the Manaqil Extension were completed in July 1962 when a gross irrigated area of 788,754 feddans was added to the 937,567 feddans of the Gezira Scheme.⁴ The significance of the extension to the economy of the Sudan may be gauged from the fact that, owing to the introduction of a tighter crop rotation, it more than doubles the area devoted to cotton in the Gezira. While there have been many difficulties to overcome during implementation of the scheme, some of which have not yet been satisfactorily solved, the overall achievements have been impressive; the extension being largely responsible for increasing the country's

¹ See, for example: W. N. Allan, "Irrigation in the Sudan," in J. D. Tothill (ed.), *Agriculture in the Sudan* (London, 1954); A. Gaitskell, *Gezira, A Story of Development in the Sudan* (London, 1959); W. A. Hance, "The Gezira Scheme in the Sudan," *Annals of the Association of American Geographers*, vol. 43 (1953), "The Gezira," *Geographical Review*, vol. 44 (1954) and "The Gezira Scheme," in *African Economic Development* (New York, 1958); H. L. van der Laan, "The Gezira Scheme, Results of an Irrigation Project in the Sudan," *Tijdschrift voor Economische en Sociale Geografie*, vol. 48 (1957); J. A. Lambert, "The Sudan Gezira, the Land and the People," *Geographical Magazine*, vol. 9 (1939); E. Mackinnon, "Blue Nile Province," in Tothill (1954); J. Phillips, *Agriculture and Ecology in Africa* (London, 1959).

² Republic of the Sudan, *Ten Year Plan of Economic and Social Development, 1961/62-1970/71* (Khartoum, 1962).

³ J. R. Randell, "Land Use on the Arid Margin of the Clays in Blue Nile and Kassala Provinces," *Proceedings of the 9th Annual Conference of the Philosophical Society of the Sudan* (Khartoum, 1963); "The Manaqil Extension to the Sudan Gezira Scheme," paper presented at the 20th International Geographical Congress held in the United Kingdom, 1964: abstract published in *Abstracts of Papers* (London, 1964).

⁴ Personal communication from the Managing Director of the Sudan Gezira Board, Sayed Mirghani el Amin el Hag, dated 29.2.64. A *feddan* equals 4,200 square metres or 1.038 acres.

output of seed cotton from an average of 1,765,000 kantars for the period 1951/2–1955/6 to 4,642,000 kantars for the seasons 1961/2–1964/5.¹

The success of the project is related to several favourable factors including the long history of the Gezira Scheme and the accumulated experience and technical knowledge thus made available as well as the ease of extending gravity irrigation over a gently sloping clay plain. But perhaps the principal asset of the development scheme was the prior existence of a semi-sedentary population practising rainland agriculture, pasturing livestock and participating in the irrigated agriculture of the Gezira Scheme as seasonal labourers; for while their traditional way of life was austere and demanding their involvement with the Gezira Scheme as outsiders provided a powerful incentive to become tenants on irrigated land themselves.

It is with the factors influencing the distribution of this population, its nature and composition both before and after implementation of the project that the present paper is concerned.²

Historical Background

The antiquity of settlement in the Manaqil area has been alluded to already and the significance of Jebel Wad el Maturi in this connection described.³ It must remain for archaeological investigations to correlate the evidence there and reach the relevant conclusions. Suffice it to say here that the inferences are similar to those which have been drawn from the Jebel Moya excavations; namely that the area was inhabited in the pre-Christian period by a people having Negroid racial characteristics.

The history of the central Gezira is less well described than its margins. The rivers are the natural routeways but the passage from Kordofan to Gedaref, Kassala and Suakin which passed through the Manaqil area gave prominence to several centres which appear in the literature. The two most important of these are 'Abud and Ma'tuq. According to Jackson,⁴ the former was founded at the beginning of the 18th century by one Feki 'Abudi from Um Duwana near Hassaheissa but it is more than likely that this site has been long settled. It lies at the northernmost tip of the Manaqil Ridge closest to the line of the pilgrimage route which must cross the Blue Nile at Abu Haraz.⁵ The site advantages of the ridge are discussed below; in addition are the agricultural potentialities deriving from the sandier, better drained soils of the ridge to the south and the heavier-textured cotton clays of the Gezira plain to the north. Here the production of a wide range of crops is possible including *sesame* (*Sesamum orientale* L.), *dukhn* (*Pennisetum typhoideum* (Burm.) Stapf and Hubbard) and watermelons on the

¹ Republic of the Sudan, *Economic Survey* (Ministry of Finance and Economics, Khartoum, 1960 and 1963). Bank of Sudan: *Economic and Financial Bulletin*, April–June, 1965 (Khartoum, 1965). A *kantar* equals 141.52 kilograms or 311.34 pounds.

² A study of the social and economic aspects of the project is the subject of a separate paper and no attempt is made to deal with these topics here.

³ Randell (1963), *op. cit.*, p. 71.

⁴ H. C. Jackson, "Two Gezira Families," *SNR*, III (1920), pp. 94–109. The village is mentioned also in H. A. Macmichael, *A History of the Arabs in the Sudan*, II (Cambridge, 1922), p. 371. The date is not given in the relevant paragraph but the account, in the form of an historical narrative, is bracketed by the dates 1785 and 1787 and suggests that the village was a well-established settlement at this time. In 1822 it figured briefly in an uprising against the Turko-Egyptian regime and was sacked: Richard Hill, *Egypt in the Sudan, 1820–1881* (London, 1959), p. 18, and P. M. Holt, *A Modern History of the Sudan* (London, 1961), p. 45.

⁵ O. G. S. Crawford, *The Fung Kingdom of Sennar* (Gloucester, 1951), pp. 73–4.

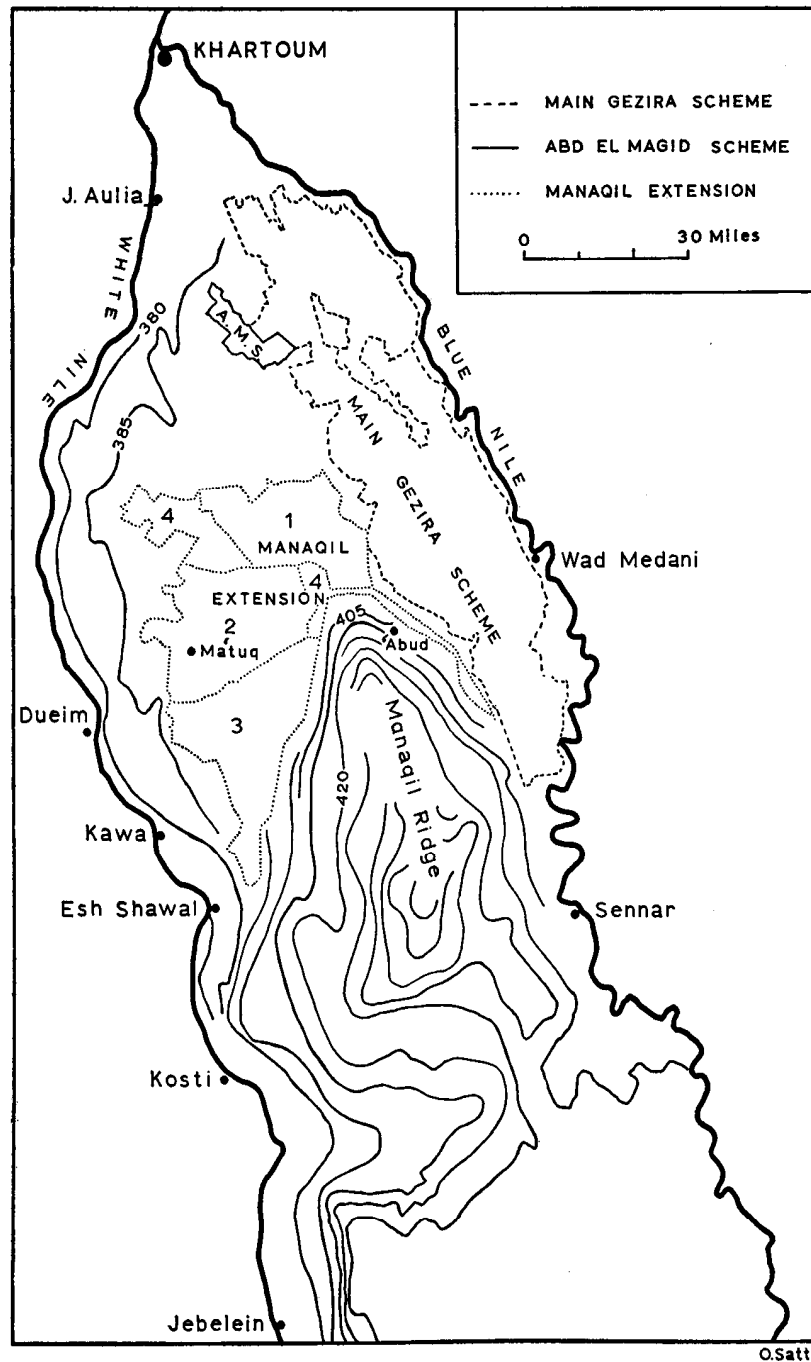


FIGURE 1
Location Map

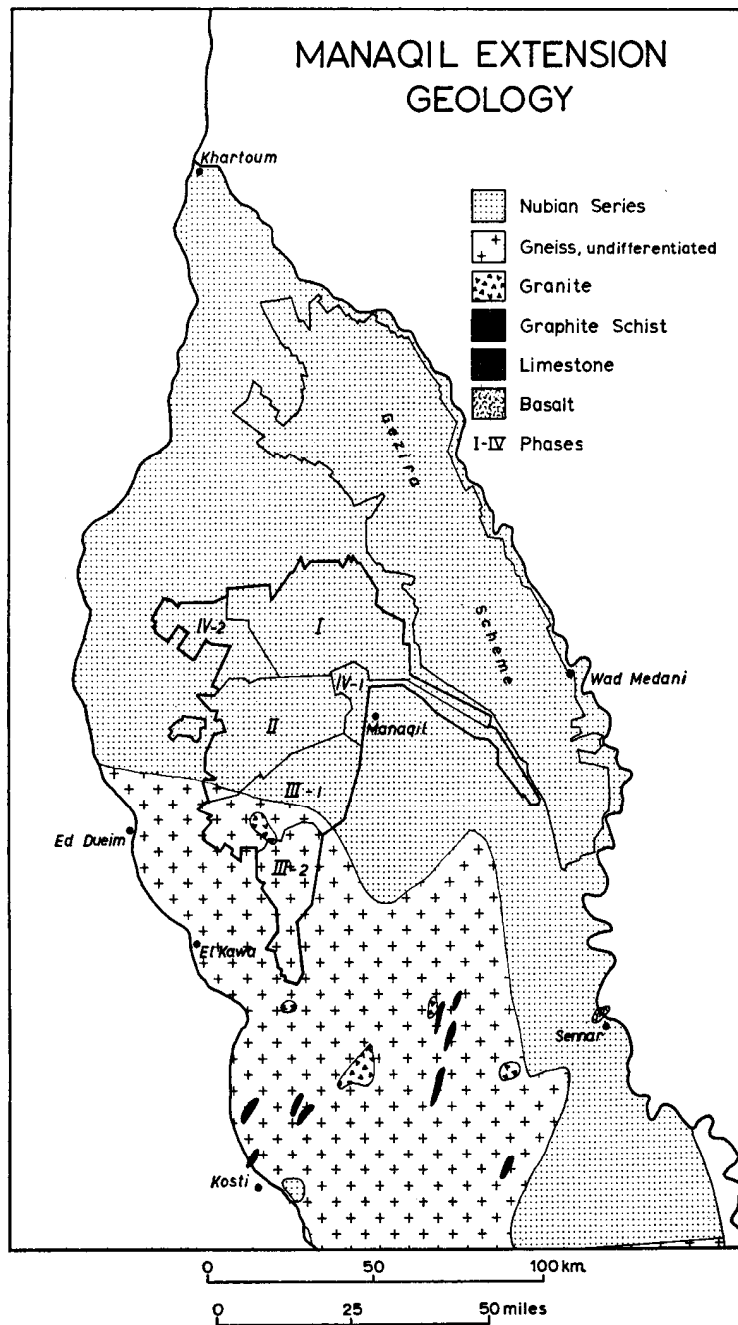


FIG. 2

sands, *dura* (*Sorghum vulgare* Pers.) and cotton on the clay. Ma'tuq is mentioned by Holt as a centre in the eastern Gezira in 1883¹ but the local inhabitants refer to an earlier occupation of the area which has good water from shallow wells. During the Fung Kingdom, the Arakiyin displaced the Towal from the wells and by 1830 Ma'tuq had become a market centre.

As the land is eminently suitable for the production of rainland *dura* by *teras* cultivation it served, along with what is now the southern part of the Gezira Scheme as an important granary of the Sudan during the period of Fung rule and subsequently.

Composition of the Population

The composition of the population of the Manaqil area is extremely varied in terms of tribal affiliations. The Manaqil Census Area which, although not entirely coincident with the extension, may be considered representative in terms of population composition, contains twenty-seven different tribal groups some of which, such as the Guhayna and Ga'aliyin, include elements of many separate tribes. Out of a total population of 98,199 in the census area, the overwhelming majority, 90,767, were classified as Arab but there were important minorities including 2,759 Westerners, 1,861 Beja, 1,225 Southerners and 1,038 Nuba.²

Such diversity in population is closely related to the geographical position of the Manaqil area. On the one hand, it became the ultimate destination of many tribal groups in their migrations from an original home in the Arabian Peninsula, through Egypt and southwards into the Sudan.³ On the other, the area lies athwart the main transcontinental pilgrimage routeway between West Africa and Arabia. It has been customary for generations of pilgrims to interrupt their journey to or from Mecca at various points along the way and the Manaqil area, offering the opportunity of employment in the nearby Gezira, is one such place of sojourn.

This diversity in the population has significance in terms of traditional attitudes and motivations with respect to livestock in particular; some tribes being more attached to small livestock, others to cattle and still others to camels. Since livestock provided the main source of capital during the period of transition, tribal background influenced notably the relative ability of different groups to adjust to a new way of life as the scheme was implemented. It also complicated the problem of resettlement when it became necessary to combine the inhabitants of several small villages or hamlets with different tribal loyalties into one larger community.

A comparison with census areas in the Gezira Scheme indicates that the composition of the population is likely to become more diverse as the growing prosperity of the newly irrigated area attracts immigrants from elsewhere in the Sudan.

Original Settlement Pattern

Before irrigation the distribution of population in the Manaqil area was closely adjusted to the physical geography of the Gezira; in particular to the geology of groundwater, micro-relief and soils and to a lesser extent to climate and vegetation.

¹ P. M. Holt, *The Mahdist State in the Sudan, 1881-1898* (Oxford, 1958), p. 60.

² Republic of Sudan, *First Population Census of Sudan, 1955/56*, Fifth Interim Report, Ministry for Social Affairs (Khartoum, 1957), Table 7. It is significant that out of a total of 33,579 gainfully employed persons in the census area, only 479 were classified as nomadic animal owners or shepherds; the vast majority, 31,753, were farmers, hunters or fishermen, the first of which would account for almost the entire number.

³ See for example: H. A. Macmichael, *A History of the Arab in the Sudan*, I (Cambridge, 1922), pp. 241, 243 and II, pp. 215 ff. H. C. Jackson, "The Khawalda Tribe," *SNR*, I (1918), pp. 167-74.

The solid geology comprises two contrasting rock types, the Nubian Series and the Basement complex, the former assumed to be of Cretaceous age and the latter Pre-Cambrian.¹ In parts of the development area, notably in the east, the Nubian Series has served as an important aquifer. Throughout most areas, however, it lies at too great a depth to be reached by hand-dug wells. The Basement Complex, composed of igneous and metamorphic rocks yields little water. It is bounded on the north by a submerged granite ridge which traverses the Gezira just south of the boundary between Phases II and III. This ridge separates two types of alluvial strata above the solid rocks. To the north are alternating layers of clays and sands and gravels believed to have been laid down by the Blue Nile as it swung from side to side gradually migrating northwards to its present junction with the White Nile at Khartoum. South of the ridge the sediments consist of clays only.² The contrast explains the absence of permanent settlement in Part II, Phase III and the extremely low density of population in Part I since it is the sand and gravel beds, in subterranean connection with the Blue Nile, which have provided the reliable underground water supplies required for settlement in the centre of the Gezira. Phases I, II and IV were fairly generally settled in response to this factor; the main exceptions being in the south-west of Phase II, the north of Phase I and the west of Part II, Phase IV where there are saline or sandy soils. The comparatively high density of settlement north of the Manaqil Extension, in spite of poor soils in the immediate vicinity, is explicable in physical terms only by reference to a greater degree of slope and the availability of well-drained building sites.³

Apart from the low Manaqil Ridge in the east and one or two *jebels* within the boundaries of the scheme, relief in the area is slight. The average slope from east to west is about 1 in 5,000. The contour map reveals low ridges and depressions, however, and in a few instances spurs have been cut off to form isolated mounds in the plain.⁴ The clays of the Gezira are virtually impermeable and grain crops are traditionally stored underground so that elevated sites for building are essential. Over a period of many generations the most suitable sites have been selected for settlement and continuous occupation has elevated them further as mud houses have collapsed in the rains.

Climatically the Manaqil area is marginal for unirrigated, arable agriculture. Total annual rainfall averages between 275 millimetres in the north and 400 millimetres in the south but evaporation exceeds precipitation for eight months of the

¹ See map *Manaqil Extension Geology* (Figure 2).

² Sudan Gezira Board, *Water Supply, Manaqil Extension*, unpublished typescript dated 5.9.1959. See also *Manaqil Extension Borehole Data* (Figure 3). The profiles plotted in Figure 3 are a simplified representation of borehole logs. The interpretation of data is complicated by the absence in the records of a precise boundary between superficial deposits and solid rocks. The clay includes a wide range of fine-textured materials ranging from true clays to mudstones at depth while the sand beds include sands and gravels above and sandstones below. The intention is merely to indicate the depths and distribution of aquifers which are related to the sands, gravels and sandstones. In most of the boreholes shown the boundary between alluvium and rock lies below 200 feet and the aquifer is in the alluvial sand beds. In borehole No. 860 no Nubian is found to 285 feet but water was struck before the bore reached 180 feet; and similarly in No. 836 water was found at 145 feet but no Nubian encountered to 229 feet. In places, however, the Nubian sandstone lies closer to the surface as in No. 857, for example, where it yields water at 150 feet. I am indebted to Prof. A. J. Whiteman and Yassin Abdel Salam for some of the information in this footnote. See also *Reports of the Geological Survey of the Sudan* for the years 1930 onwards especially 1950-2, 1953-5, 1955-7 (Khartoum).

³ See map *Settlement Before Irrigation* (Figure 4).

⁴ *Ibid.*

year ; for five months there is complete absence of rain and so little for another three that in practical terms drought prevails from October to May inclusive.¹ Climatic differences within the development area would tend to favour settlement in the south but, as already noted, other considerations preclude this. So that throughout the areas of Phases I, II and IV where wide contrasts in climate are not experienced the main influence of this factor is to bring about a degree of dispersal among basically nucleated settlement forms owing to the necessity of practising an extensive type of dry farming in which rain falling on a given area of ground is utilized to water crops grown on the lower portion of it only.²

This dispersal could take place only under conditions of political security as the numerous Arabic speaking tribes which comprise the population were subject to feuds and mutual raiding as well as incursions from outside the area up until the end of the 19th century.³ Subsequently, dispersion resulted also from social forces operating in the settlements themselves. Within a village under the leadership of one sheikh disputes frequently develop and factions arise. Eventually a petty sheikh emerges with his small band of followers which then splits off to form a separate village some distance away. Thus, for example, the original village of Meheiriba becomes also Meheiriba Faki 'Omar, Meheiriba Wad Dakin and Meheiriba Shotlab. Individual villages thus display large differences in size. The largest settlement in the area was the village of El Kereimet which had 4,256 inhabitants before irrigation, exceeding the population even of Manaquil Town itself which numbered only 3,615. There were well over a dozen villages exceeding 1,000 inhabitants but the large majority were in the range of 300–600 persons while a few hamlets had populations of less than 100.⁴

Several areas of settlement outside the boundaries of the extension itself deserve mention since tenants were obtained from them to supply the deficiency within Phase III. These include the eastern bank of the White Nile immediately upstream of the Jebel Aulia dam and in the vicinity of Kawa and of El Shuwal ; the Abdel Magid Scheme and the western side of the Manaquil Ridge. When the Jebel Aulia dam was built in 1937, riverain land of villages upstream as far as Jebelein was inundated. Alternative livelihood schemes were established including the Abdel Magid Scheme and several pump schemes of smaller proportions on the White Nile.⁵ In addition, private pump schemes absorbed numbers of the affected cultivators as tenants but there remained inhabitants of many villages whose riverain lands were lost and who failed to obtain irrigated land to replace it. To these people, growing rainland *dura* and working as hired labour in the pump schemes, the offer of tenancies in Phase III was a very attractive proposition. Some 2,000 inhabitants of villages in the vicinity of the dam and the margins of the Abdel Magid Scheme as well as surplus populations from within the scheme itself were thus moved to Part II, Phase III of the Manaquil Extension. From the White Nile at Kawa and El Shuwal tenants were obtained to fill blocks in the southern part of Part II,

¹ Sudan Meteorological Service, *Climatological Normals, 1921–50* (Khartoum) ; see also map *Rainfall in the Gezira* (Figure 5) which is adapted from J. R. Randell, "A Rainfall Map of the Sudan Gezira," *SNR*, XLII (1961), p. 30.

² J. R. Randell, "El Gedid, a Blue Nile Gezira Village", *SNR*, XXXIX (1958); and op. cit. (1963).

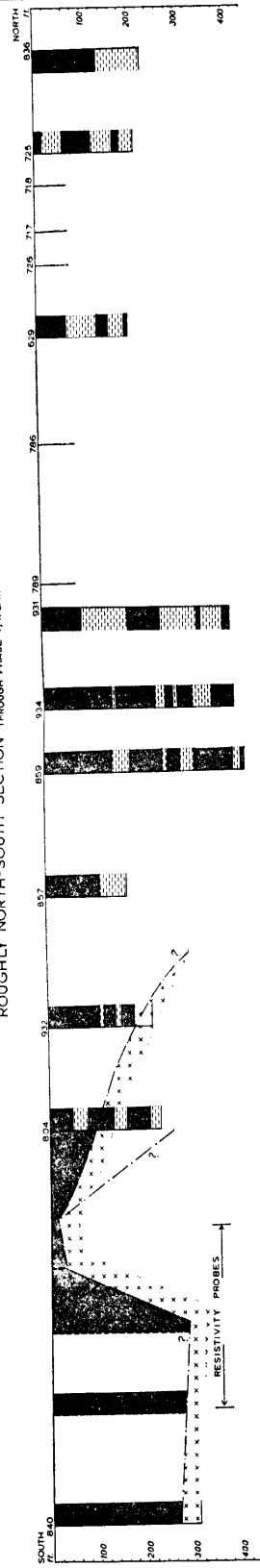
³ P. M. Holt, *The Mahdist State in the Sudan, 1881–1898* (London, 1958); and *A Modern History of the Sudan* (London, 1961).

⁴ Population statistics are based on the returns of the *First Population Census of the Sudan, 1955/56* (Khartoum, 1957).

⁵ E. Mackinnon, op. cit. (1954).

MANAQIL EXTENSION BOREHOLE DATA

ROUGHLY NORTH-SOUTH SECTION THROUGH PHASE I, II & III



ROUGHLY EAST-WEST SECTION THROUGH PHASE II

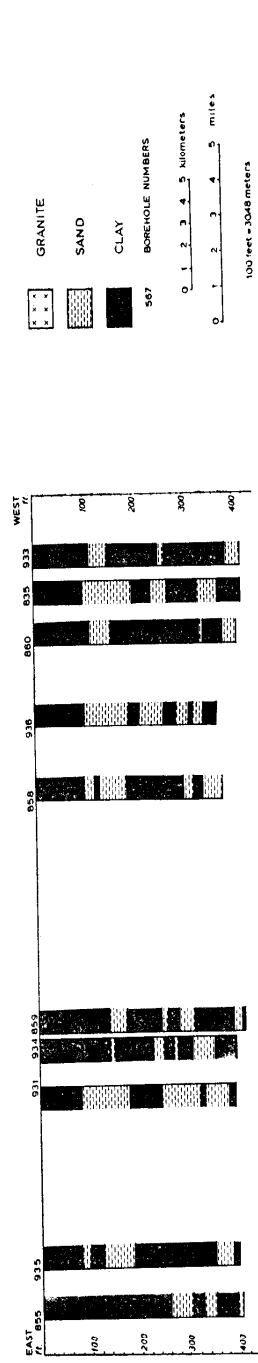


FIG. 3

facing p. 94

Phase III while the north-east of Part II and the east of Part I, Phase III were settled with populations from villages on the western edge of the Manaqil Ridge. The importance of the Manaqil Ridge as a single major source of tenants for Phase III is thus considerable; its density of settlement being related to the reliable underground water supply of the Nubian Sandstone which is very much closer to the surface beneath the ridge than elsewhere in the Manaqil area, also to the proximity of rainlands in the eastern part of the plain and finally to elevation and the desirable building sites associated with good drainage.

House Types

Houses are traditionally built of sun-dried bricks or solid clay walls plastered on the outside with a mixture of mud and animal manure to resist rain damage. Windows are seldom provided; instead small ventilating apertures about 6-8 inches square are built into the walls just above bed level and the houses are so orientated that these open north-south to allow passage of the prevailing winds. Doors, as a rule, face east and are often protected with an overhanging roof so as to provide shade in the afternoon and early evening at the entrance to the house where the men-folk gather to discuss the events of the day. Roofs conform to one of two prevalent designs; conical thatched in the case of round-walled huts and gently sloping flat roofs made very often of date-palm or bamboo rods supported by beams of *sidr* (*Ziziphus spinachristi* Lam.) or *ban*, the willow tree (*Salix aegyptiaca* Forsk.) and covered with *maharib*, the tussock grass (*Cymbopogon proximus* Stapf.) or *nal*, the thatching grass (*Cymbopogon nervatus* Chiov.), and mud-dung plaster above. All building materials are locally available with the exception of date-palm and bamboo rods which can be bought in the village markets.

House design exemplifies a high degree of adaptation to environmental conditions; in particular, the combination of mud and thatch in flat-roofed houses and thick clay walls provides maximum insulation from the heat of high summer when mean maximum temperatures reach 45°C. (113°F.). At the same time, costs of construction are low and the average one-roomed house probably costs less than £20 initially to build.

Water Supply

The provision of an adequate water supply is one of the most persistent problems of the development area. The initial sources were clearly inadequate. Many of the hand-dug wells contained brackish water suitable only for live-stock while in others the supply was insufficient for the expanding populations dependent upon them. In areas of shallow wells dug in sandy surface deposits the sides would cave in frequently and the wells had to be re-dug; while the labour expended in drawing water from deep wells, some of them over 150 feet deep, was enormous. It was common for villages to obtain their domestic water from wells several miles distant, transporting it in goat-skins by camel or donkey. The problems of obtaining water in the central Gezira were a constant preoccupation of the population prior to development.

When work commenced on the scheme in 1957 one of the first tasks was the establishment of permanent accommodation for the Gezira Board staff who were to supervise the new tenants. As the land had to be prepared for irrigation before canal water was available other sources of supply had to be sought. The solution was found through a geophysical survey which located large underground reserves in

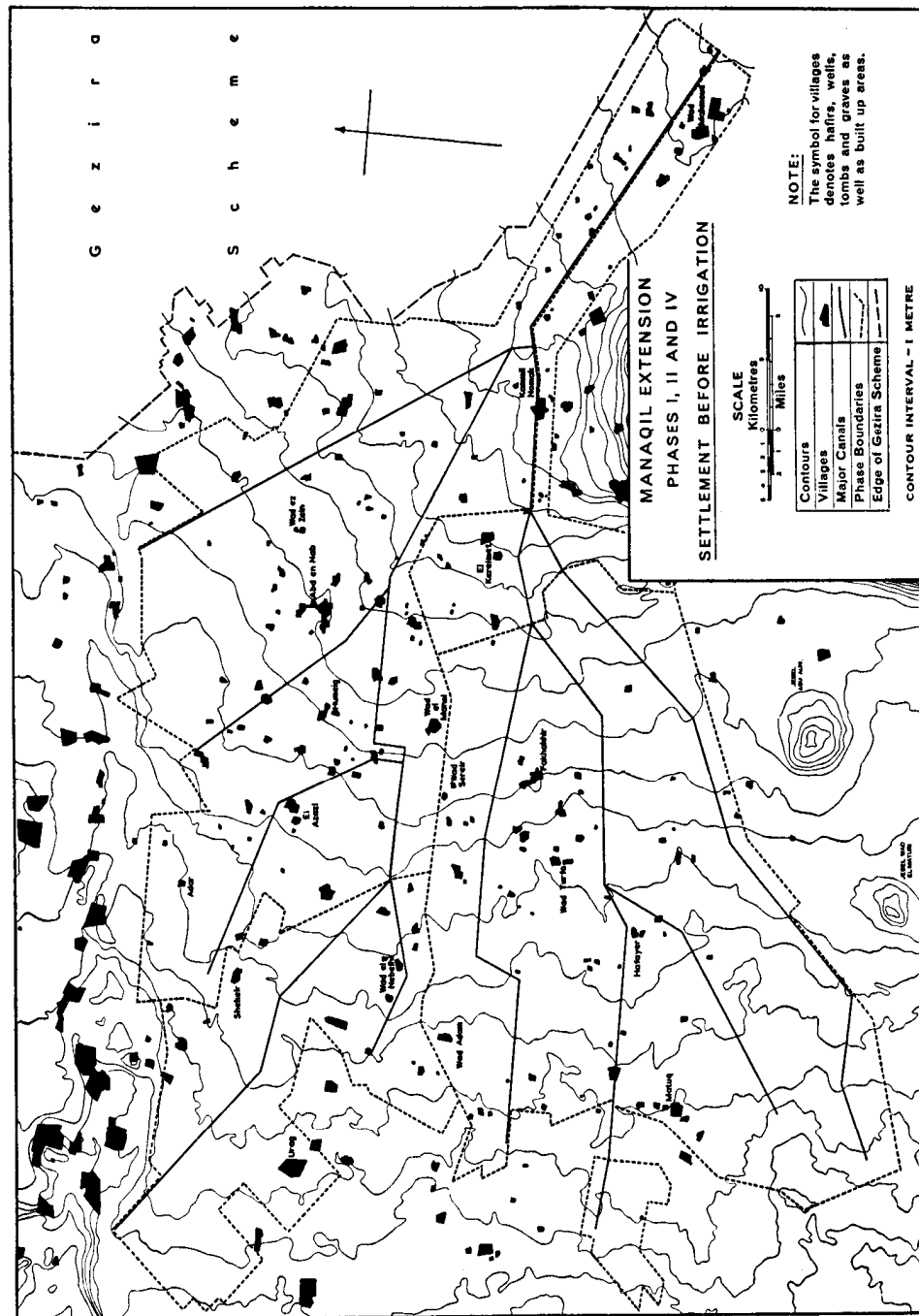


FIG. 4

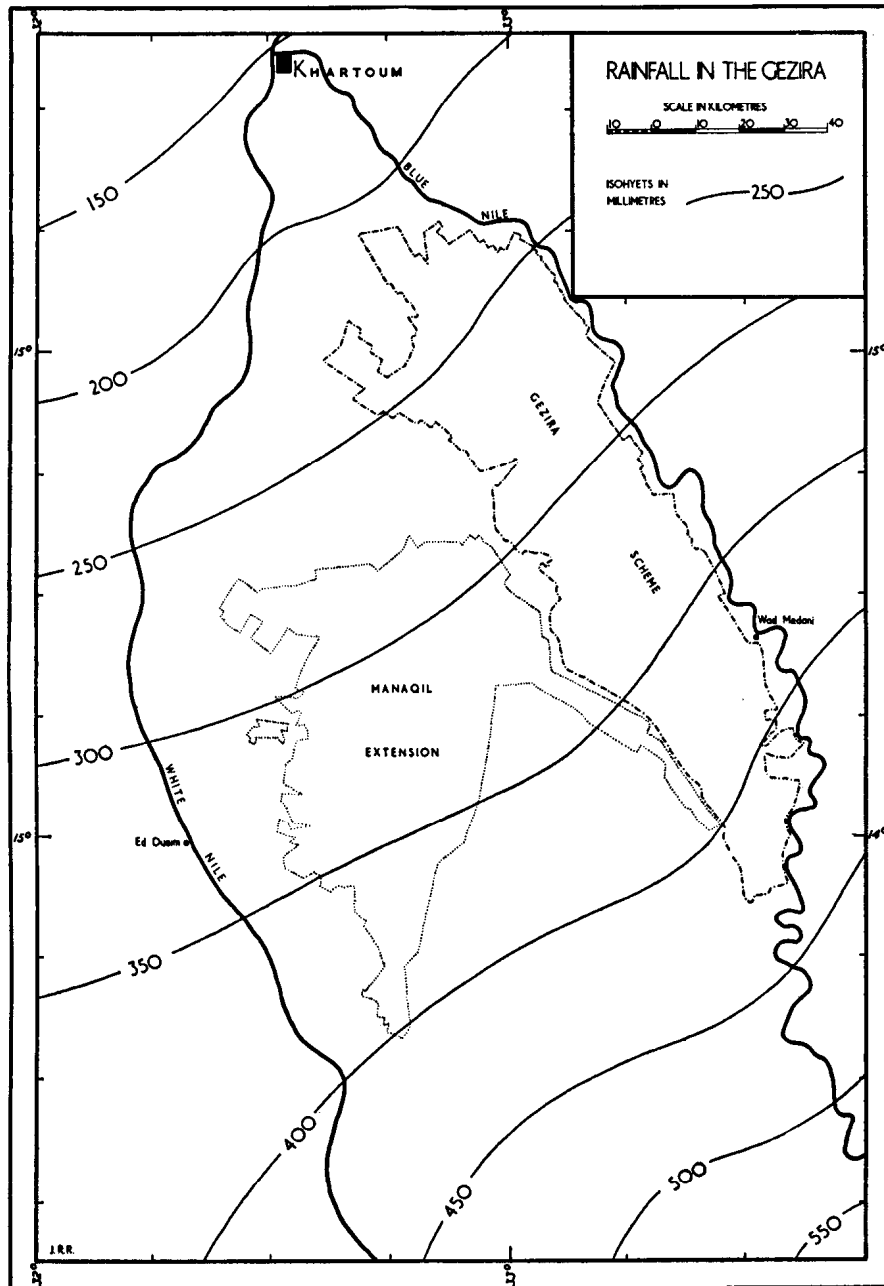


FIG. 5

the alluvial beds above the solid rocks ; the same reserves, in fact, which were being exploited by the hand-dug wells of the local population although these were too shallow to tap them adequately. It was thought that a programme of deep bore-hole drilling would provide the initial water supply needed in advance of development and at the same time might solve the water problem on a permanent basis except in the south where no underground supplies were available. Accordingly some thirty-six bore-holes were sunk throughout the areas of Phases I and II and although not always suitable for domestic use the supplies obtained satisfied the needs for construction purposes.

As the land was taken up and canal water reached the fields the village inhabitants resorted to this supply for their own needs and those of their livestock. However, in spite of attempts by the Gezira Board at controlling the spread of bilharzia through the canal system this disease had become endemic in the Gezira and it was therefore desirable to provide alternative sources of domestic water. Several methods of treating canal water were tried out and eventually a filterwell was adopted by which the water was run through a series of gravel and sand filter beds and then pumped to an overhead storage tank. These filterwells or, where satisfactory, deep bores, were provided in all community centres and as funds become available are being established in other villages throughout the scheme.

Recent Settlement Pattern

Irrigation of the Manaqil area has brought about fundamental changes in the distribution of population and the settlement pattern. The most important change has been the expansion of settlement into the previously unpopulated southern part of the area now occupied by Phase III. In Part II, Phase III some fifteen major villages with a total population of 20,600 persons have been established in an area hitherto completely devoid of settlement and in Part I, Phase III twenty-one major villages now exist where before there were only six settlements of any importance. In many respects this was the most difficult part of the development programme as it involved occupying an extremely unattractive and inhospitable area before any of the amenities subsequently provided could serve as inducements to take up tenancies. Several hundred Nubians displaced from the Wadi Halfa area by the Aswan High Dam in Egypt were offered tenancies in this part of the Manaqil Extension. After a brief examination of the settlement sites all but a few of them declined the offer.

During the planning stage it became apparent that the layout of major canals along the crests of low ridges was coincident with the elevated sites of many established villages in Phases I, II and IV. In addition to the settlements thus directly affected others would have to be moved at least 300 metres from the canal bank for reasons of hygiene. From the map of *Settlement Before Irrigation* (Figure 4), which shows only major canals, it can be seen that a large number of villages was involved in this phase of re-siting. When it is remembered that in addition to the majors, minor canals are spaced about every kilometre and a half, the magnitude of the resettlement programme is seen to be considerable.

The decision was taken at an early stage to distribute population in such a way that tenants would not need to travel more than 5 kilometres from village to tenancy. This has resulted in a more even distribution of settlement as a comparison of Figures 4 and 6 will reveal. At the same time consolidation of a multitude of small villages was desirable in order to facilitate the provision of social services. In most instances, the larger existing villages were chosen as community centres but

facilities such as deep bores or filter-wells for domestic water were extended to other villages also.

In all, some thirty-four community centres have been established within the areas of Phases I to IV.¹ These are designed to provide services such as medical and veterinary dispensaries, elementary schools and police posts as well as halls for village meetings and sites for rural markets. Not every community centre possesses all the amenities available; the map of *Community Centres* (Figure 7) shows the distribution at the time of writing. Furthermore, it has not been possible to obtain an adequate number of qualified personnel to staff the centres fully as there is a reluctance to serve in remote settlements. However, it is anticipated that eventually all villages in the scheme will be within easy reach of medical attention at least. As the level of income rises among the population generally these community centres will inevitably assume greater importance than their civic amenities alone would warrant since the services they provide rapidly promote the growth of markets as well.

A comparison of the size and distribution of new villages in Phases I and II on the one hand and III and IV on the other reveals a change of settlement policy during the course of implementation of the scheme. Whereas in the former parts there had been some degree of integration of the old settlement pattern with the new, the absence of villages in Phase III permitted a completely fresh layout and the individual units are thus larger and less numerous. This approach has been carried further in Phase IV in spite of the density of population in some parts prior to irrigation.² Many village sites were thus levelled and incorporated into the rotation. However, as a reflection of the greater concentration of settlement initially in the area of Phase I and the absence of villages in Phase III there is still a higher density of population in the north and east than in the west and south.

In the planning of new villages a minimum area of 400 square metres has been allocated for each household in order to prevent congestion, the individual tenant then has the responsibility of providing housing for his family within his means. Traditional building methods and designs are employed and it is expected that standards of housing will steadily improve as capital is accumulated.³

Administration and Urban Development

For purposes of administration the scheme is divided into Groups and Blocks. There are six Groups with between six and eight Blocks in each; a total of forty-three Blocks altogether. The villages which range in size from less than one hundred inhabitants to over 5,500 average about five in each Block but with such a wide difference in village size the total population per Block varies considerably. The smallest contains only 1,573 inhabitants while the largest has a population of 10,220 which includes the Central Headquarters. For the Manaqil Extension as a whole including Manaqil Town the total population is almost 215,000.

Each Block and each Group has its own headquarters for the offices and dwellings of Gezira Board staff. The distribution of these settlements is determined

¹ See map of *Community Centres* (Figure 7).

² See maps of *Settlement After Irrigation* (Figure 6) and *Settlement Phase III* (Figure 8).

³ For an excellent account of settlement morphology, architecture, building materials and costs in a Gezira Village near to the Manaqil Extension see *El Kereiba Village 1962*. A study prepared by the Department of Architecture, University of Khartoum and published by the university in March 1963. See also: *Bashaqra Area Settlements 1963* (University of Khartoum, 1964).

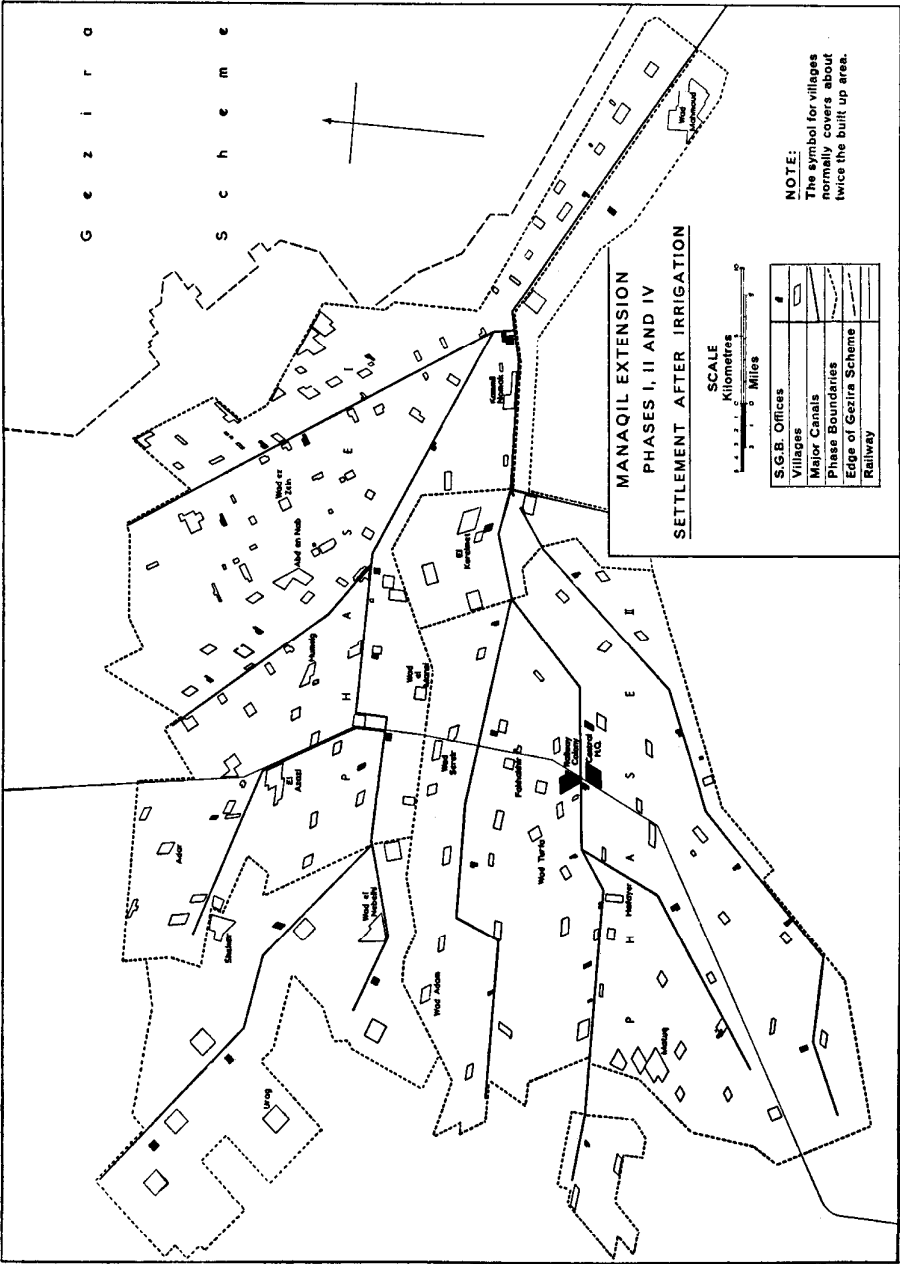


FIG. 6

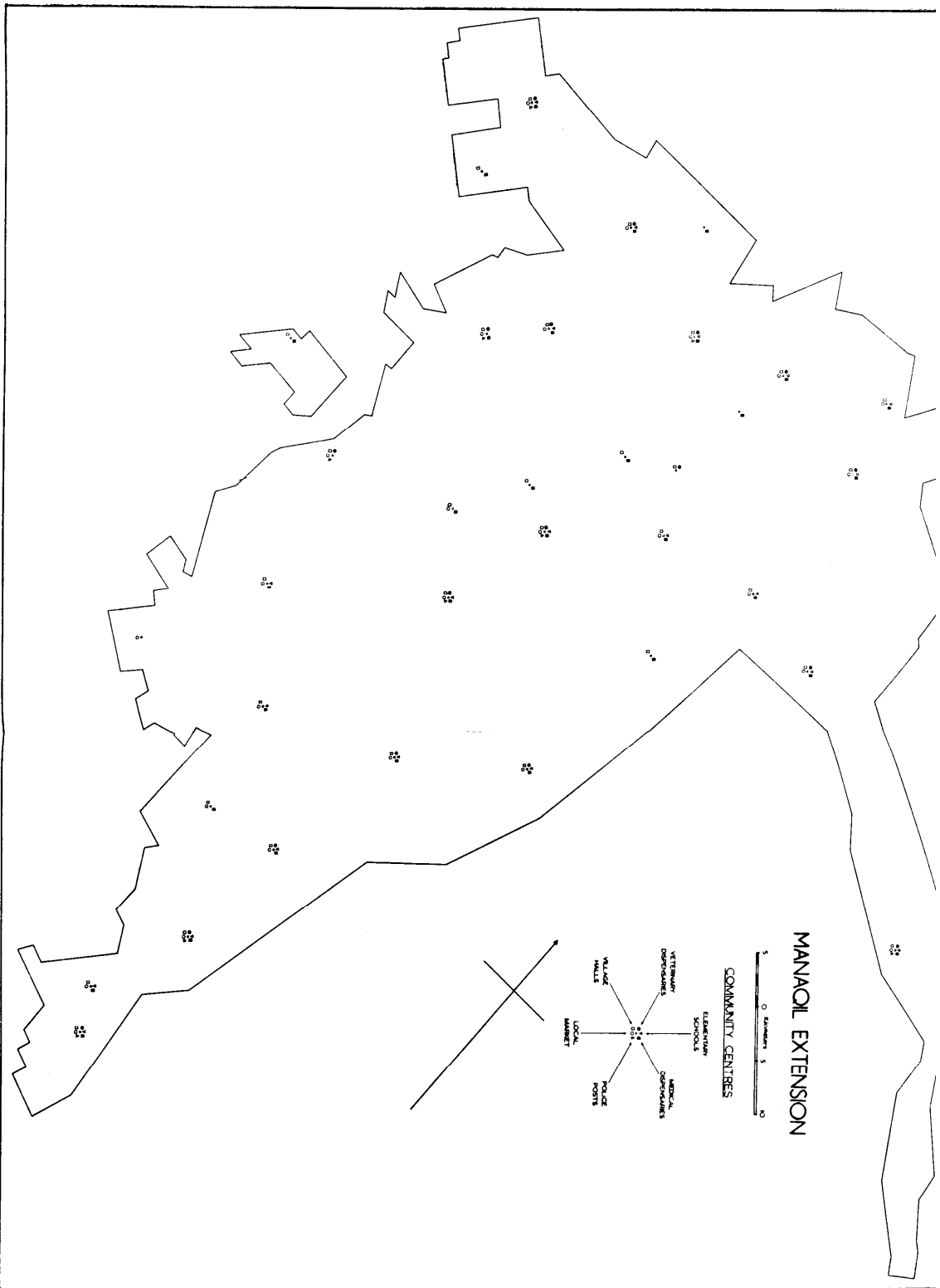


FIG. 7

facing p. 100

by the needs of efficient supervision of tenants and for this reason they are usually but not always sited beside the major canals along which the main roads within the scheme are maintained. Minor canals leading off from the majors carry subsidiary roads so that a canal-bank location facilitates rapid movement within the irrigated area of each Block. The Group Headquarters serve not only to coordinate the work of the Block staff but also to provide social and recreational facilities for all Gezira Board personnel within the Group. In form, these administrative centres are compact and functional with well designed buildings made from granite and kiln-dried brick. The standards of accommodation thus provided for Gezira Board staff in the field are sufficiently high to attract and hold well qualified and capable personnel. In size, the Block Headquarters range between about 50 to 150 inhabitants while the Group Headquarters normally contain from 250 to 1,500 persons.

Apart from the community centres which are emerging as micro-urban settlements there are two larger towns which merit attention. These are Qorashi (formerly Abboud), the Central Headquarters, where are located the main administrative offices of the Ministry of Irrigation and the Gezira Board for the Manaqil Extension, a Group Headquarters and Social Club, an Intermediate School, a hospital and a large market centre. The planned railway colony indicated on the map of *Settlement After Irrigation* (Figure 6) is at present occupied by the market as extension of the branch rail line has not yet been executed. Essentially, Qorashi is an administrative centre and this function is reflected in the formal, rectangular layout of buildings and roads. Granite from the *jebels* to the south has been widely used for construction purposes and the settlement has acquired something of the hard, intractable nature of the material from which it is built. With a present population of about 5,580, its nodal position and assured functional significance, Qorashi will expand in size and importance as the scheme develops.

Manaqil Town, on the other hand, was a village market long before the Gezira Scheme was contemplated and has only recently been planned as an urban centre.¹ For the most part it retains its original aspect of mud walls and thatched roofs with an increasing proportion of whitewashed brick representing the growing influence of government in a town which is primarily commercial in function. Government activities include local administration and policing, the operation of a fifty-bed hospital and medical dispensary, primary, intermediate and technical trade schools. As in the case of the community centres the presence of these public services in Manaqil has stimulated commercial activity and in this latter role the town serves as the main focus for the whole region. Bus and commercial lorry routes converge upon it from many directions and its zone of influence extends well into the Gezira Scheme proper.

The growth of Manaqil Town from a village market with a population of 3,615 in 1956 to a vigorous commercial, administrative and transportation centre with well over 10,000 inhabitants is one of the most spectacular consequences of the irrigation scheme. In addition to the thriving business section, town planning authorities have designated an industrial area on the edge of the urban settlement where light, consumer industries and machine maintenance works are establishing

¹ At the time of writing an aerial view of the town showed clearly the super-imposition of a grid pattern of roads upon the original, amorphous village layout of round, thatched huts. The adjacent village of Kashkosh, now being replanned, displays the usual rural settlement morphology.

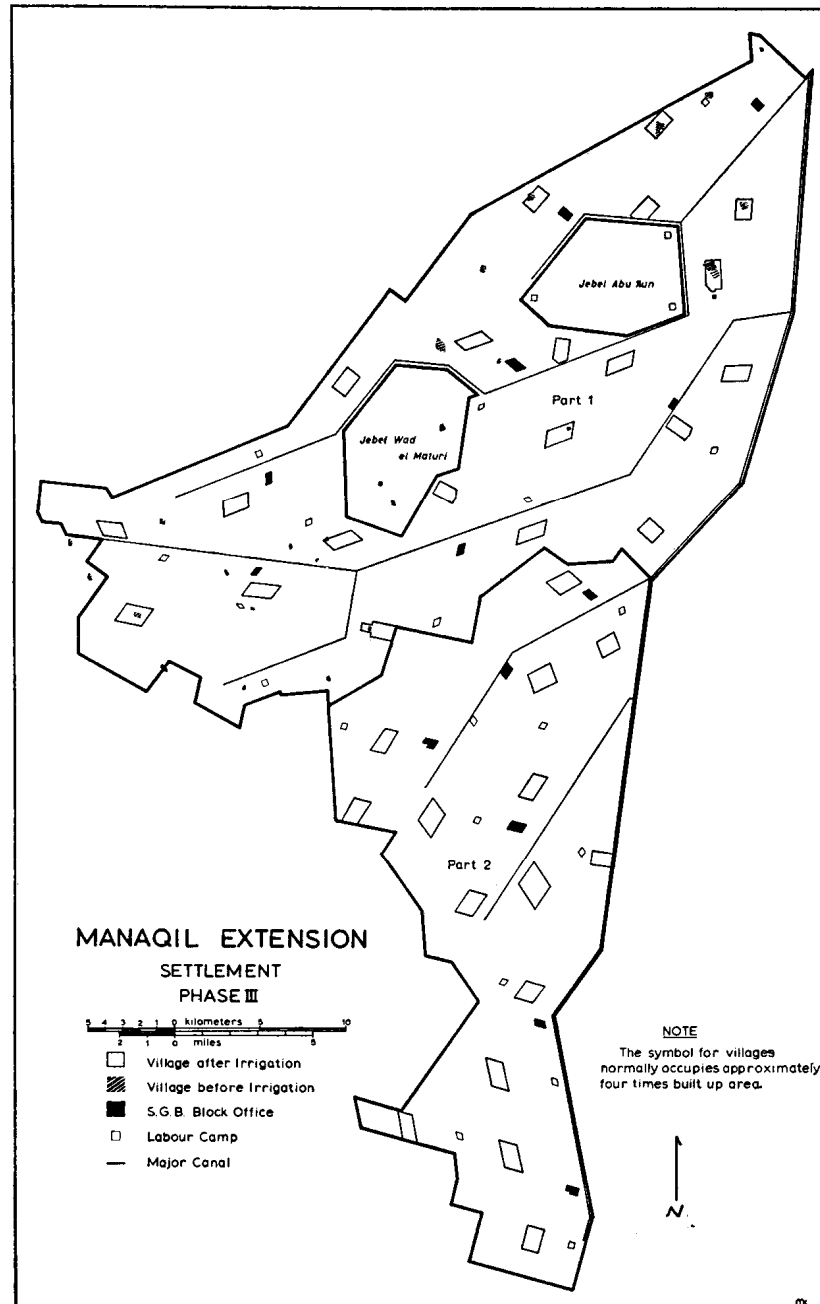


FIG. 8

themselves. In many respects the rapid expansion of the town and the diversification of its urban functions symbolizes the pace of economic development in the area as a whole. However, there is a basic qualitative difference in that the activity of the industrial area and the market place is essentially a manifestation of private enterprise. It is notable that within a vast publicly administered project such as the Manaqil Extension there is a recognized role for the individual exercising his initiative and specific abilities in the manner he considers most advantageous.

Acknowledgment

For much of the material in this article the writer is indebted to officials in Local Government and the Sudan Gezira Board whose ready assistance is hereby gratefully acknowledged. While it is impossible to mention individually all those who provided information the writer would like to thank particularly Sayed Fawzi Hassoun, Assistant Commissioner, Manaqil ; Sayed Ibrahim Mohammed Ibrahim, formerly Senior Development Officer, Sudan Gezira Board ; Sayed Yassin Hag el Khidir, formerly Deputy Agricultural Manager, Qorashi Headquarters, Manaqil Extension ; Sayed Mustafa Khogali, Group Inspector, Ma'tuq and Sayed Abbas el Sharif 'Omar, Block Inspector, Ras el Fil. I thank the Research Committee, University of Khartoum, for a grant towards the publication of maps accompanying this article.

ON THE DEVELOPMENT OF THE ANIMAL INDUSTRY UNDER GEZIRA CONDITIONS*

by

M. S. BAYOUMI

Neither the topic nor the material which I shall present tonight will be new to most of you. The topic is as old as the Gezira Scheme itself; and the discussion on problems relevant to our subject has been the concern of all people working in the Gezira as well as others from outside. What I shall do, therefore, is to put the relevant information together and refresh your minds on it.

The types of livestock met with in the Sudan and the density of the animal population correspond roughly to trends in rainfall and vegetation. In the north the animal population is very sparse indeed, and types are few, camels predominating. Towards the south the types and breeds become more numerous and varied, the animal population becomes more dense, and cattle predominate.

The short effective rainy season has forced a big section of the population whose main occupation is animal husbandry to undergo a nomadic existence, moving with their animals from one place to another after water and grass, in a systematic migration from north to south or from high land to low land and back according to the season of the year: a hard mode of life which has its effects on the people as well as the animals. Man and animal require enormous energy to lead such a life but they have adapted themselves to this form of existence.

It is estimated that about 68% of the total area of the Sudan is at present either uninhabited or uninhabitable and cannot be counted upon in agricultural development. This constitutes the Northern Desert, marginal land, and the ironstone country. The remaining 32% is the area potentially useful for development.

At present only 3% (about 6 million feddans) of this area is utilized for crop production, and all the rest (about 194 million feddans) is fully used as pasture land to support a total animal population of eight million head of cattle, eight million head of sheep, seven million head of goats, two million head of camels, twenty thousand head of horses, and ten to twelve million fowls.

In spite of this more emphasis is put on crop production in general and cotton production in particular. This is because of the following reasons: lack of good range management and good knowledge about how animals should be raised, fed and bred; poor animal marketing; no processing in animal products; the low standard of productivity of our types of livestock at the present time when compared with those of other countries; the fact that the bulk of the animal wealth is in the hands of nomads who lead a very unsettled life; the social habits and traditions connected with animal husbandry; and the very encouraging returns from crops specially from cotton.

Here one would ask whether such a state of affairs will continue for long? The answer I am glad to say is No. In other words, dependence on crop cultivation in general and on cotton alone in particular is a policy which must be changed as soon as possible for the following reasons: returns from cotton are not as good as they

* Presidential Address delivered to the Philosophical Society of the Sudan on Wednesday, 26th February 1964.

used to be ; most of the land is especially suited for animal production ; the rapidly increasing population means an increase in the number of stomachs to be fed and a great increase in the demand on animal proteins ; the Sudan so far is an agricultural country which should build her economy mainly from agricultural products. The mono-crop policy is risky. Animal wealth will be the alternative crop to give a strong support to cotton ; the potential of modern science for bettering the prevailing conditions as well as the types of livestock and their husbandry and management ; and finally the great advantages and uses in keeping animals on agricultural schemes.

At present animals in the Sudan are held under three main types of ownership : nomadic flocks or herds, village flocks or herds, and individual ownership on irrigated land.

The majority of the animal wealth of the country is in the hands of the nomads. Nomadism is so far an obligatory system of animal husbandry enforced by such variable conditions as rainfall, pasture quantity and quality, biting flies, prevailing diseases, and social and economic aspects of life. Such nomadism resulted in a care for quantity and not quality ; in over-stocking, leading to over-grazing and soil deterioration ; and in great losses in numbers in the frequent bad rainy seasons. On the other hand the good results of nomadism are : the creation of hardy animals which stand up to the conditions ; the utilization of areas at the time of the year when their grazing is at its best, and the fact that certain parts of the country, which would otherwise be wasted, are grazed. Moreover, when this system of nomadism is compared with the ranching system of South America we find that the same number of animals is kept per unit area of land under both systems. Modern ranching systems advocate costly fencing and costly water supply, expenses which are saved under a migratory system. It was also found that the soil deterioration caused by our migratory herds is almost the same as that caused by the rancher herds (Harrison, 1955).

I am by no means trying to deny that ranching has many advantages over nomadism. We are in fact trying to settle as many as possible of our nomadic tribes.

Livestock held under village conditions forms the second main part of our animal wealth particularly in the case of cattle. Quantity rather than quality is still the influential factor determining the breeding policy but selection is done in a more careful way. This system is also a more balanced one than the nomadic, and in spite of the density of animals there is less danger of soil deterioration.

On Sagias and other schemes cattle are working animals ; milk is a valuable food ; the manure is required for fertilizing the land ; the animals are sold at times of hardship ; the progeny is used for meat when not required for breeding or work. In other words the animals under this system of ownership are fully utilized and full economic value is obtained.

The majority of the people of the Sudan are dependent on animals to a lesser or greater extent. Where the people are so much attached to their animals any development in the livestock industry will imply social and economic progress, because it will lead to : a supply of foodstuffs of varying nutritional values, such as milk, meat, eggs, etc. ; a supply of energy in the form of working animals ; a supply of by-products such as bones, blood, hides, skins, wool, etc. ; utilization of crops which might otherwise be wasted ; utilization of marginal land not suitable for crop production ; giving back to the soil some of its lost fertility in the form of organic manure.

The degree to which these foods are available to Sudanese and utilized by them varies in the different communities and is governed by a variety of factors.

Among nomads with their large flocks of sheep, cattle, goats, and camels, availability is at its best, but utilization is limited.

Village communities are relatively poor in livestock and though some may own quite a number of sheep and goats and a few milch cows, so much of the surrounding land has to be used for food and cash-crop production that the available grazing has generally to be shared by too many animals. The result is that production in terms of meat and milk is extremely small. Many village communities therefore have to rely on supplies from pastoral areas and the extent to which they make use of such supplies depends primarily upon what they can afford to buy.

This state of affairs is even more pronounced in the urban areas, where generally speaking except for the products of the backyard goat all meat and milk supplies must be imported from the rural areas. Here again the extent of the demand is governed by the wealth of the urban community while the degree to which the demand can be met depends on the prosperity of the pastoral tribes and the efficiency of means of distribution from the pastoral to the urban areas. In most cases the means of distribution is lacking in organization and efficiency.

Numerous factors limit the development of the livestock industry. The most important are : (1) the characteristics of the general pasture : its nutritive value, carrying capacity, and the variability of grasses at the different seasons of the year ; (2) the lack of water supply both with regard to number of water points and their permanency ; (3) the presence of *Stomoxys* and other biting flies in higher rainfall areas ; (4) the prevailing diseases which, although largely brought under control, cause a considerable annual wastage ; (5) traditions and social life, particularly in the Southern Provinces ; (6) lack of ready means whereby stock owners will be offered a fair price for their surplus. The animal industry was handicapped during the pre-war years by the lack of a ready big economic outlet. The control of the epizootic diseases was consequently geared to the internal requirements of the country and the small export trade and also to prevent violent numerical fluctuations of livestock population. Diseases were used to prevent the number increasing to the detriment of the land.

Although this system of controlling the numbers was probably justified under the circumstances, it was clumsy, unscientific and uneconomical, since diseases attack the best stock as well as the poorest, and when it does not kill it produces a weakened community of stock.

During the post-war years the position has changed substantially. The internal demand for milk and meat and their by-products increased. A large economic outlet for surplus stock is being created. Our breeding policy and programmes should be made to meet with these new demands.

The present Ministry of Animal Resources has brought the diseases under control. The animal population is increasing very rapidly : the *survival stage* passed into the *quantitative stage*. The livestock population is approaching the maximum number which the country can carry (Evans 1953). Further growth in animal production can only take place through the improvement of the productive ability of the individual animals. This introduces the last stage of animal industry development namely the *qualitative stage*. On the other hand the Ministry of

Agriculture in increasing its agricultural activities has reduced and will continue to reduce animal grazing space of the country. In short the situation could be described in no better words than those of the Agricultural Advisory Committee as stated in their fourth meeting.

"At present the Ministry of Agriculture is responsible for crops and crop production and the Ministry of Animal Resources for animal production. This management resulted in insufficient attention paid to the common ground between these two branches of farming" (Agricultural Advisory Committee 1961).

I refer now to the conditions in the Gezira. There, the animal development problems really started with the beginning of the scheme in 1925 when no consideration was given to the introduction of livestock into the irrigated area, and little allowance was made for animal fodder within the rotation in spite of the fact that agricultural economists always consider any agricultural system without animals as an unbalanced system for agricultural production. This is specially so if such a system depends on one crop as is the case with the Gezira. Such a one-crop system will always be threatened by crisis whenever unfavourable factors for its production interfere. This will eventually result in a general economic crisis in the country when this single crop is the only source of revenue. The presence of animals in the agricultural system will therefore lessen the danger of such crises, even if it does not avoid them completely.

In 1951 Wad El Naim Experimental Station started with the following aims in mind (Mufti 1957) : to investigate the possibilities of wider farming practices in the eight-course rotation; to interest villagers in mixed farming by experiments and demonstration ; to convert the tenant from a purely cotton producer into a farmer ; to develop a form of agricultural economy which in the absence of cotton monoculture will maintain a satisfactory standard of life with the assumption that water will be no problem.

The gross area of the experiment was about 1800 feddans. By reducing the land expected to be left fallow in the experiment by 25% in 1957-8, about 370 head of cattle at different ages and types, over 900 head of sheep and goats, and about fifty donkeys, were able to live at a maintenance and production ratio.

It is also stated that due to the help of the animal manure which was put in the soil the feddan gave an additional yield of about one third over the normal; besides, the tenant made an extra gain through his animals' by-products of about £S60 per year.

The successful results of Wad El Naim experiment have laid the first foundations of serious thinking for the integration of animal industry in the Gezira. It is true that the limitation of water for irrigation as governed by the Nile water agreement was an obstacle in utilizing the plentiful fallow land in supporting livestock, but no use was made of the rainfall available in the area or the water available for the intensification. It is also true that the Gezira is not totally without livestock but most animals are not permanently accommodated in the area. They are allowed in after cotton picking is over. Only very small inferior village herds and a few thousands of Sudan Gezira Board working bulls are permanently accommodated.

The tenant of today has already started to see the importance of the animals to his family and his land. He has also realized that animals depend on land, the land relies on animals and man depends on both.

The Advisory Committee in their 4th meeting also discussed this new trend and recommended that new land and facilities should be made available for the study of growing and utilization of crops by animals in a system of farming which is to be integrated with cotton (Agricultural Advisory Committee 1961). The Gezira Board authorities have also accepted these new views and a programme has been drawn for the improvement of the livestock industry in the Gezira.

This problem of the integration of the livestock industry with the present organization of the Sudan Gezira Board, could be discussed under three headings : what animal industry is to be developed ; how the integration operation is to take place ; what such development will mean to the Gezira people.

Not knowing the plans drawn by the Gezira authorities, I shall keep to my own suggestions and I hope that they will not conflict very much with what the Gezira Board people have in mind.

There is no doubt that under the Gezira conditions even with the present regime the standards of feeding, management, transportation, etc. are much higher than anywhere else in the irrigated areas. Livestock improvement in general and successful cattle industry in particular can therefore be achieved.

Gezira conditions are very favourable to the dairy industry. But individuals or commercial concerns are reluctant to enter dairy farming because of the high capital expenditure involved and their lack of knowledge and experience of the industry under Sudan conditions as a whole. For some time to come it seems that the only way to promote it is for the government or its sponsored boards to take the responsibility. The Ministry of Animal Resources has realized this and has already started its own dairy farms all over the country, or have taken over established dairies run in the past by other government bodies.

The milk supply of the urban population is far from being satisfactory, and very many people have either to go without or to use imported tinned milk. (This is happening in Medani town itself.)

The increasing populations of places such as Medani, Khartoum and Omdurman have created a big demand for fresh milk which cannot be completely met at present. Therefore, a steady demand for fresh milk within reasonable transport range from the Gezira will be available to the producer.

Conditions being as they are, I can recommend without hesitation the establishment of a proper dairy industry in the Gezira, but it should be sponsored by the Gezira Board authorities at least at the beginning of the scheme of integration.

The system of cattle industry which could be integrated is the fattening of beef animals. This has already started under individual ownerships. But with a better organization the Gezira could be the fattening centre for the bulk of our internal and external trade.

Other types of livestock, namely sheep, goats, and poultry, can be integrated more simply than cattle because they are small in size and need much less room, they are hardier and less sensitive than high producing dairy cows, their repeatability is much quicker and therefore their distribution will also be quicker and easier. Culling could be done on a much larger scale, and feeding is less difficult than in the case of cattle.

At the beginning all products will be consumed locally, but soon afterwards the increase in production exportation to near-by markets, Khartoum, and Omdurman will take place.

Further surplus can be processed and sent to other internal or external markets ; the Roseires Dam will provide the power required for such industries.

The integration programmes should be initially a Sudan Gezira Board task, because only the Government could undertake such a big project. The programme would take account of the following considerations. (1) The necessity of feeding supplies programmes ; of growing more feeding stuffs and of concentrates for the high yielding cows such as cottonseed meal, groundnut cake, and dura. Dura if not made available locally can be imported from the dura cultivation areas. A high acreage of fallow land may be put under cover crop to be fed for livestock. (2) The animals should be of very high standard to be worthy of the very much improved environmental conditions. They can be brought from established breeding centres and from nomads by correct selection. Well known breeding males only to be allowed in the area, all others should be castrated so that they cause no damage to the breeding policy. Artificial insemination from first class bulls can be carried out without difficulty under Gezira conditions. (3) Importation of exotic types of stock could be thought of as well, but I recommend that this should come at a later stage when we guarantee that the people are becoming more animal-minded, and after being sure of a plentiful supply of fodder all year round.

The integration scheme should start with a very few carefully selected tenants, each of whom would have the loan of a number of mature selected animals. Such a tenant will be asked to make the necessary changes in his cropping programme without affecting cotton cultivation in such a way as to secure the production of the necessary fodder. He should be asked to provide the necessary labour. The tenant will also be asked in a written agreement to return that loan either in cash or in kind after a certain period. Such returned loans are given to some other selected tenants to start a new unit. Such a system should continue gradually until it proves to be a success, then it should be generalized.

The excess of fodder which will be produced immediately and before the completion of the scheme can be marketed outside the Gezira where there is an ever-ready market for it, especially when transportation facilities are made available, or can be processed as hay or silage to be used at times when green fodder is limited.

To the Gezira people, such a development will mean a good supply of milk, raising the nutritional level of the tenants and their workers ; a good supply of meat from all types of stock including poultry and a continuous supply of eggs. In the event of depression in the cotton trade it would tie the tenants to the land and keep them going until the cotton trade took an upward trend again. The animal manure could increase the yield of cotton/feddan as it was proved in the Wad el Naim experiment. It would give a weekly income to the tenants, and could give a certain amount of employment between the times of crops cultivation. It would supply working bulls which would be available on the spot.

The Roseires Dam will facilitate and hasten the integration of livestock in the Gezira on more proper lines of animal husbandry and on an economic basis for production. Because the Roseires Dam will mean more water to the Gezira it will mean more intensification. This means more crops and more crop residues. Other fodder crops will have to find their way within the Gezira rotation. Fallow land should be utilized to a certain extent by cover crops suitable for grazing and feed of the animals. By-products of other crops which are under consideration in the new rotation will form another source of animal food.

If such a change in the social and economic aspect of the Gezira tenants' life by integration of the animal industry is beneficial to the tenant (and I am sure it is) he will support it. The tenants are not getting much from cotton nowadays ; that is why they are losing interest in it and paying more attention to their dura crop.

Summary

The general situation of the animal industry in the country was discussed first. Animal development problems in the Gezira were then given special attention and were discussed in detail.

By solving such problems of animal development under Gezira conditions promotion of both the social and economic aspects of life of the Gezira people will take place, without upsetting the present regime of cotton production. The anticipated plans for such development can be very well fitted in the future intensification plans of the present Gezira rotation.

Advisory Committee Report (1961). *Report on the 4th Meeting of the Advisory Committee on Agricultural Research* (Working paper No. 10.2).

EVANS, J. T. R. (1953). *Report on the Animal Industry in the Sudan* (Departmental Report).

HARRISON, M. N. (1955). *Report on a Grazing Survey of the Sudan* (Mimeographed Report).

M. A. EL MUFTI (1957). *A Note on the Village Farming of Wad El Naim*.

LABOUR MARKET CONDITIONS AND WAGES IN THE GASH AND TOKAR DELTAS, 1900-1955

by

PETER F. M. McLOUGHLIN

Introduction

Previous articles have provided measurements and brief analyses of the economic profiles of the Gash and Tokar flood-irrigated deltas.¹ They described the general nature of the labour force, occupations, income, and income distribution, practically all measurements being extracted from the population census and national income accounts for 1955-6. This note presents information on labour markets and wages culled from official documents up to 1955.

I have written elsewhere on the problems involved in "translating" the comments and statistics presented by Sudan administrators.² References to wages and labour market activity in the deltas are spotty, incomplete, and, at times, contradictory; but it is still possible to throw light on the basic economic and other forces which condition Gash and Tokar output and welfare.

From the beginning of Anglo-Egyptian administration to World War I

The Gash river and delta had been used for cropping and grazing long before the Anglo-Egyptian occupation. The years of strife in the last third of the 19th century, however, had rendered the Gash area less productive, and had scattered a dwindling local population.³ One of the first tasks of the administration was to create conditions permissive to population increase in the Gash and Kassala. In addition the government established colonies of discharged troops.

It was anticipated that these colonies, as well as those of released slaves, would increase agriculture output, and provide a pool of labourers for public works projects. The colonists were reported to have settled satisfactorily by 1902, and that they were "eager to cultivate along the Gash," and had "a fair amount of rain crops." Labourers could always be obtained from amongst them.⁴

¹ See my "Population, Output and Expenditure in a Sudan Flood-Irrigated Region: The Gash-Tokar Deltas," *Indian Economic Journal*, x, 1 (1962), pp. 49-59; and "The Sudan's Gash-Tokar Economic Region: Some Aspects of its Labour Force and Income," *SNR*, XLVI (1965). The writer is grateful to the Department of Economics, University of Santa Clara, for assistance in the preparation of this article.

² See my "Using Administration Reports to Measure Rural Labour Markets; Darfur Sudan," *Bulletin of the Inter-African Labour Institute*, No. 1 (1963), pp. 15-27.

³ It was estimated in 1903, for example, that Kassala Province population prior to "Dervish" rule (say 1870) was some 500,000 persons. Over 300,000 people were thought to have died of disease, and 120,000 through warfare, during the next thirty years, leaving a 1903 population of some 80,000; see my "Economic Development and the Heritage of Slavery in the Sudan Republic," *Africa*, xxxii, 4 (1962), pp. 355-91; also "A Note on the Reliability of the Earliest Sudan Republic Population Estimates," *Population Review*, vii, 2 (1963), pp. 53-64.

⁴ *Egypt*—1902, Kassala Province, p. 85. There are two main sources for the early years. Those labelled "Wingate" refer to reports written by the Governor-General. Those labelled "Egypt" refer to reports written in Egypt by the British Consul-General, who normally incorporated the Memorandum from Wingate in his annual report to the Crown. Wingate's reports were published in Khartoum to 1907, in Cairo in 1908, and subsequently in London. The Egypt reports were published in Cairo and by H.M.S.O., London.

There were also immigrants from other parts of the Sudan coming to cultivate crops. The security and the guaranteed nature of the annual food supply were profound inducements. Many people immigrated from the western Sudan and from Suakin. The cheapness of grain and the prospects of wage labour from the Irrigation and the Public Works Departments were additional incentives.¹

The pattern of demand and supply which has persisted was already being established. During harvest time, the supply of labour becomes scarce and wages rise. As a rule wages doubled in the periods of labour scarcity. For unskilled agricultural labour it was reported in Kassala in 1905 that the highest rate was 5 piastres per day, and lowest 2½ piastres. Rates were much the same in 1906, being 5 and 3 piastres.²

Official reports do not mention Tokar wages until 1905, when ordinary Sudanese labourers received from 11 to 13 piastres a day and some food.³ In the preceding year wages were apparently even higher, and very high in relation to the rates in the rest of the Sudan. Wages were often higher in Tokar than elsewhere, and were about double those of the Gash. While this may in part be due to its lack of a permanently settled population, it might also result from its relative isolation.

From 1905 to about 1910 the seasonal immigrants to Tokar numbered 8,000, mainly Eritrean Habab and Sudanese Beja, while the permanent population was only 2,000, or about a fifth of the labour force required in busy seasons.⁴ A good number of the residents were Westerners, but for whom "the labour difficulty would exist here as elsewhere."⁵ Despite their indispensability, however, these workers were reported as being paid from 5 to 9 piastres when others were getting double. As Westerners normally earn higher wages than local Sudanese, one could wonder why the reverse was true here.

Concerning the Gash, a Col. Wilkinson informs us in 1906 that :

"The state of labour market is good, and no difficulty was experienced in obtaining all the labour required for . . . the irrigation works around Kassala. Large numbers of Beni Amer Arabs presented themselves for work. All labour was carried out on the system of piecework, and very little difficulty was, on the whole, experienced in making the men understand a system which had not existed previously."⁶

In 1907 the first large movement into the Gash of annual migrants, as well as of permanent settlers, was reported, and had their effect on wage rates. About 400 Abyssinians settled in Kassala in response to the expressed demand from the Public Works Department for labourers. An increasing number of Beni Amer tribesmen offered themselves. No difficulty was experienced in obtaining sufficient workers. The normal rate for unskilled labour was 3½ to 4 piastres, but during sowing and harvesting, 5 and 6 piastres were obtainable.⁷

Again in 1908, no difficulty was experienced. Arabs and Abyssinians from Eritrea and Sudanese from Gedaref moved into the Gash delta. Abyssinians were popular, because their stimulus to work and obtain money seemed greater than that

¹ Wingate—1906, Kassala Province Report, Immigration and Emigration, p. 630.

² Wingate, appendix B to 1906 annual report.

³ Wingate—1905, Red Sea Province, Labour Market, p. 353.

⁴ Egypt—1908, Red Sea Province, p. 73.

⁵ Wingate—1910, Red Sea Province, p. 368.

⁶ Egypt—1906, Kassala Province, Labour, p. 142.

⁷ Wingate—1907, Kassala Province, Labour, p. 270.

of the Sudanese. They were also reported to "feed themselves better than the Arab, or Black, eating more meat and drinking less marissa."¹

One measurement of prosperity used by British officials at this time was the number of so-called Westerners—Hausa, Tahruri and Fellata—who would stop on their way to Mecca to earn their travel. Many of these would settle as permanent farmers on their return. The number of Westerners in an area is probably still a good measurement of prosperity. 1908 was a good year in the Gash and "the crops were good and the flocks of the Nomad Arabs multiplied exceedingly."²

Abyssinians came again in 1909 to work for the Irrigation Department in the Gash and the Public Works Department in Kassala; they returned to Abyssinia as usual when the few months' work was over. As in the rest of the country, a registration of Sudanese labour was undertaken, but with a limited success:

"Owing to the absence of any large undertakings, the scheme cannot be said to have . . . served any useful purpose. At Kassala a few applied for registration under the impression that a railway line was about to be constructed, but as soon as this illusion had been dispelled, applications ceased altogether."³

In 1910 there was again no scarcity of labour in the Gash where Westerners were reported as being essential to the labour force. And registration was still not turning out as its planners envisaged:

"Practically everyone is a cultivator during rains and pays his taxes, though for the remainder of the year he may have no visible means of subsistence. The presence of a certain number of Abyssinians further complicates the question as the registration does not apply to them, and they are generally willing to underbid registered Sudanese when labour is required. Hence the latter, having bought registration books, feel aggrieved."⁴

In 1911, we find reported the first major official complaint on the competition which existed between sources of labour demand:

"The most noticeable feature in the labour market has been the high daily rate obtaining at Kassala during much of the summer. Owing to the exploitation of the dom nut industry by various Greek and Italian merchants, there was a great demand for casual labour from March onwards, with the result that cultivators found considerable difficulty in getting hired labour to weed and clean their land. Collecting and breaking dom nuts was an easy and profitable occupation and men could earn as much as pt. 10 a day or more. Hence the wages of agricultural labourers, which used to be piastres 4 or piastres 5 a day, rose to double that figure."⁵

Somalis and Abyssinians were welcome immigrants: the Abyssinians had an aptitude for canal cutting, earthwork, and bank construction (and the officials wanted to keep this in mind when it came time to build the Kassala railway); the Somalis were reported as excellent soldiers and servants.⁶

¹ *Wingate*—1908, Kassala Province, Labour, p. 540. "Black" usually refers, in these early reports at least, to Sudanese who were not Arabs.

² *Egypt*—1909, Kassala Province, Labour, p. 77.

³ *Wingate*—1909, Kassala Province, State of the Labour Market, p. 699.

⁴ *Wingate*—1910, Kassala Province, Labour, p. 276.

⁵ *Wingate*—1911, Kassala Province, Labour, p. 98.

⁶ *Wingate*, *ibid.* In 1912, Wingate reported that Somalis were drifting in, "and their numbers are said to be likely to increase as it is becoming known in their country that the Sudan offers a living for them under favourable conditions. Their advent can probably be accounted for by the fact that some fifty Somalis are now serving in the Arab Battalion." (Kassala Province, p. 97.)

Because of a reduction in both Irrigation Department and Public Works projects in the Gash, 1912 witnessed a general slackening of the rate of wages. The rate for agricultural labourers decreased to about 4 piastres, and many workers preferred collecting dom nuts on a contract basis to working in the fields.¹ By 1912 the West African population of Kassala had risen to 1,100.²

The slack period of government employment continued into 1913. This should have kept wages lower; however, 1913 had an exceptionally heavy flood. This was coupled with high rainfall, and practically the whole population, including people who ordinarily would become labourers, planted their own crops. The wealthier landlords and tenants had less labour available. Wages rose to 6 piastres for a half day's work and 10 piastres for a whole day. Even with these high wages labour was often hard to obtain.³ During 1914 the more normal conditions of 1912 seemed to apply, and the rate of non-busy season wages was as low as 2½ piastres a day, but it rose somewhat in the rains.⁴

The two sets of problems at Tokar which the administration attempted to face during the years prior to World War I were the "high" rate of wages, and the means of wage payment. Quotations sum them up.

"No one works for less than 6 piastres a day, and in the busiest season 10 piastres or even more is paid. For this the growers themselves are principally to blame, as they make no attempt to cooperate, and thereby regulate the rate of wages. During the last picking season the Inspector introduced a system of cooperation, with the result that the rate of pay was very much reduced. I believe the remedy to be in the hands of the employers of labour, as there is no scarcity in the number of workers available, unless possibly towards the end of the season."⁵

"Well organized cooperation would no doubt meet . . . these difficulties, but the wide extent of the cultivation, the strange mixture of races engaged, and the necessity for rapid picking make what would appear simple in theory, very difficult in practice."⁶

Policy seems to be quite clearly on the side of the employers of labour, and not the employees. This appears to be true in the Sudan over the entire period of Anglo-Egyptian administration.

Secondly the government did not want workers being paid in shares of the crop they picked. In 1911:

"The chief objection to payment in kind is that small quantities of cotton, varying in quality, are taken daily to dealers in the town by large numbers of pickers, and this cotton . . . lowers the general average. The advantage to the grower of this form of payment is obvious. It is easy for him to pay in cotton—it is often impossible for him to pay in cash. A further effort, however, will be made this season to find a solution for the difficulty. The mere issue of an order under the new Ordinance forbidding payment in kind would not meet the case."⁷

¹ *Wingate*—1912, Kassala Province, Labour, p. 102.

² *Wingate*—1912, Kassala Province, West Africans, p. 158.

³ *Wingate*—1913, Kassala Province, Labour, p. 104.

⁴ *Central Economic Board*, Annual Report of the Director for 1918.

⁵ *Wingate*—1911, Red Sea Province, p. 209.

⁶ *Ibid.*, 1912, p. 224.

⁷ *Ibid.*

A new system was inaugurated in 1913. Labourers had to be paid in cash at a rate of one millieme per rotl. This contract rate was ostensibly based on the assumption that an average labourer, assisted by his wife and children, picked from 100 to 150 rotls per day, the family thus earning from 10 to 15 piastres. A man by himself could cope with 40 to 50 rotls, and receive 4-5 piastres. A problem at the end of the first fixed-wage season was that wages fell to about half when cotton thinned out at the end of the picking, and a worker for the same effort could only pick 20-30 rotls. The workers who complained the loudest were the Fellata and the Tahruri, some 4,000 of whom were by now migrating seasonally to Tokar.¹

Another means adopted by the Tokar authorities was the direct importation of labour from elsewhere :

"After the sowing of the cotton is finished . . . there is always a sudden demand for labour to clean the land . . . and the rate of wages rises. . . . This year it reached 12 to 14 Pt. daily, and the local supply was insufficient to meet the demand ; it was accordingly thought advisable to apply to the Labour Bureau in Khartoum and a party of some 270 labourers was dispatched to Tokar. Unfortunately, the majority of these imported labourers . . . displayed neither the capacity nor the inclination to work. . . . The experiment achieved its object in one important particular, for the price of labour fell immediately after their arrival to 6 to 7 piastres a day."²

In summary several basic trends which still continue, were established. One is that wage rates will tend to increase during the busy periods. Also noticeable is the influx of people who believe employment in the delta to be more steady, secure or profitable than at their ordinary residence. This influx takes the form of not only permanent settlement but an annual movement of people for a few months' work.

Other factors are the importance of the energetic Westerners as a labour force in the area and the competition for the available labour supply. Other forms of industry (the dom-nut industry and government departments) can, depending on current wages and product prices, attract labour away from agriculture. Moreover, if the amount of land available for cultivation increases abnormally through favourable floods or rains, then potential labourers take up land themselves. This means that even in a good agricultural year wage rates might rise considerably. Also discernible during this earliest period is tribal specialization : Somalis and Eritreans in domestic service and the military ; Abyssinians on earth work ; Westerners and local people in agriculture.

World War I and the 1920s

No official documentation appears to be available on wage rates or labour in the deltas during the war itself. The first Gash record is in 1920 when the flood was good, and the high war-time cotton prices still obtained. Wages of up to 28 piastres per day were paid to labourers for sowing.³ The same situation seemed to apply in

¹ Ibid. ; and Ibid., 1913, Labour, pp. 236-7.

² Wingate—1913, Red Sea Province, Labour, p. 237. It was the Governor of Red Sea Province who asked that the 270 workers be sent. The Labour Bureau had been established several years earlier to try and register all landless males, including many ex-slaves who were drifting into the towns, so that government agencies needing workers would have a central and organized supply. But shipping workers to Tokar and the Gash, and later to the railway construction and dam sites, was another function of the Bureau.

³ Central Economic Board, Annual Report of the Director for 1920.

1921, when skilled labour rates remained relating higher than the unskilled. This difference would ordinarily be from 5 to 20%.¹ The 1922 Gash labour situation was considered "good" by the administration, with no shortages. Wages averaged 5 to 8 piastres a day.²

No official reporting on Tokar wage or labour problems appears to have been done during and immediately after World War I. It may be presumed, however, that the area experienced a shortage of workers, and that wages rose quickly. In 1921, for example, rates for sowing labour were 60–70 piastres a day, or 5–10 times as much as the pre-war rate.³ These wages were considered "extravagant," and served to attract labour from many other parts of the Sudan.⁴ The annual report of Dongola Province, for example, indicated that labour was in short supply "owing to the high wages paid at Tokar and Makwar."⁵

The early 1920s also witnessed either the beginnings of a Gash to Tokar labour shuttle, or the recognition of it. In November 1922 it was reported in the Gash that "Labour is sufficient at present with a slight surplus of Fellata which can go to Tokar later for cotton picking;"⁶ and in December in the Gash that labour was enough, but there was no excess "except some Fellata labour, which will be required at Tokar shortly."⁷

Although in 1923 and 1924 Tokar is reported to have had reduced flooding, it would appear that 1925 was a more favourable year as Tokar continued to attract workers from elsewhere, particularly the northern Nile. A September 1925 Dongola report complained that "the emigration of adult males to other parts of the country—Gezira, Tokar, etc.—has exceeded all past experience."⁸ The slump in 1926 saw government using the delta as a place to which to move the unemployed at government expense.⁹ Throughout the mid-twenties labour appears to have been sufficient, and one may assume that wages were comparatively low. In 1927 that the movement of Beni Amer into the delta became more pronounced.¹⁰

It was officially recognized in 1924 that there were four basic problems in the Gash and Kassala areas: (1) the development of the agricultural land; (2) the supply of labour; (3) the supply of water; (4) the maintenance of the grain supply¹¹—problems which have continued since. The labour supply problem was thought to be the most difficult, and in 1925 there was a proposal to form Fellata villages on the Atbara and possibly also on the upper Rahad.¹² This was a result of concern particularly over supplies in years of heavy rains or Gash floods when labour was inadequate.

¹ *Sudan*—1921, Kassala Province, p. 44. The Consul-General of the Sudan, in addition to Wingate, wrote an annual report, published in London. Though the title changes through the period, these annual reports from Khartoum are referred to as "Sudan".

² *Sudan*—1922, Kassala Province, p. 57.

³ *Sudan*—1921, Red Sea Province, p. 48.

⁴ *Central Economic Board*, Annual Report of the Secretary, 1921. The Board also prepared a *Monthly Economic Report*, published by the Commercial Intelligence Branch, and this *Report* has been used extensively to obtain Tokar information.

⁵ *Sudan*—1921, Dongola Province, p. 42.

⁶ *Monthly Economic Report*, Kassala Province, November, 1922.

⁷ *Ibid.*, December 1922.

⁸ *Ibid.*, Dongola Province, September 1925.

⁹ *Ibid.*, Red Sea Province, October 1926.

¹⁰ *Ibid.*, November 1927.

¹¹ *Sudan*—1924, Kassala Province, p. 25.

¹² *Sudan*—1925, Kassala Province, p. 63.

TABLE 1
KASSALA TOWN : DAILY WAGE RATES FOR SKILLED AND UNSKILLED LABOUR (IN PT.), BY
MONTH, 1922-1930

	J		F		M		A		M		J		J		A		S		O		N		D	
	S ^a	U ^b	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U	S	U
1922 ..											5	4½			5	4½	5½	5	5	6	5	5	-	-
1923 ..	6	5	6	5	-	-	-	-	6	5	6	5	6	5	6	5	6	5	6	8	5	5	5½	4½
1924 ..	-	-	5½	4½	5	4½	-	-	-	-	-	-	-	-	-	-	7½	5½	7½	5½	7½	5½	7½	5½
1925 ..	7½	5½	6	5	6	5	6	5	6	5	6	5	6	5	6	5	7	6	7	6	7	6	7	6
1926 ..	7	6	7	6	7	6	7	6	7	6	-	7	6	7	6	7	6	7	5	7	6	7	6	6
1927 ..	7	6	5	4	7	6	6	5	6	5	6	5	6	5	6	5	-	-	-	-	6	5	6	5
1928 ..	6	5	6	5	6	5	-	-	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5
1929 ..	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5
1930 ..	6	5	6	5	6	5	6	5	6	5	6	5	6	5	6	5								

a. = Skilled.

b. = Unskilled.

Source : Compiled from Sudan Economic Board, *Monthly Economic Report*, 1922-30.

During the late 1920s also the effect of the Gezira scheme was felt. If wage rates or the possibilities of steady employment were low in the Gash, agricultural labour would move to the Gezira. The same complaints about counter-attractions are available from the Bahr el Ghazal, Berber Province and Northern Sudan.¹

Table 1 shows daily rates by month, 1922-30, for skilled and unskilled labour in Kassala.

The first observation on Table 1 is that for any month the rate for unskilled labourers tends to vary more widely than the rate for skilled labourers. Unskilled labourers are primarily in agriculture or construction. Skilled labourers, as the word is used here, are masons, carpenters, etc., general craftsmen with some years of apprenticeship or supervised training. From August to October this range in wage rates tends to be at its extreme, above even the January-February picking season. The least variations occur in the middle of the year.

The average rate over the period of the 1920s does not seem to have increased. From 1925 to 1930 no variations in rates seem to have existed, and there is practically no change in the relationship between skilled and unskilled rates. This could of course be due to laziness on the part of the reporter.

It could also result from an inclination to report the most readily available rate—the official rate in government departments. This tends to be fixed for many months at a stretch, and would not apply necessarily to agricultural labour. At the end of 1922, as already mentioned, labour was sufficient with no excess “except some Fellata labour which will be required at Tokar shortly.”² If this is the case, and a 5-piastre unskilled labour rate in November 1922 reflects a sufficient supply, can it be assumed that for most of the period from 1922 to 1930 the labour supply was adequate since this wage rate has hardly changed?

Some of the exceptions to this would include 1924; early in the year unskilled wage rates were lower, and late in the year higher, than this average of 5 piastres. The same applies to 1925 when the latter part of the year witnessed wage rates averaging 1 piastre per day more than this average. The situation continued into 1927, but by April 6 piastres for skilled and 5 piastres for unskilled seemed to be the rate established for the next four-year period.

Several interesting comments on the Gash were made during 1923 in the official reports:

“Some difficulty has been experienced at Kassala in finding sufficient labour to get the two canals . . . completed in the short time available, but in spite of this and of the amount of money in everyone’s pockets, it has been possible to keep labour rates down to piastres 6 and piastres 5 in Kassala.”³

In June, the following month, this demand for excavating canals was met within Kassala town, which might partly explain why wage rates did not alter appreciably. The same report mentioned that piecework earnings in the Gash varied considerably between tribes and nationality groups from 5 to 8 piastres a day,⁴ so some people, probably Westerners, were making more money than shown in Table 1.

¹ *Monthly Economic Report*, Berber Province, December 1928.

² Westerners normally would (and do) move from the Gash to the Tokar, while local Arab and Beja workers normally would not.

³ *Monthly Economic Report*, Kassala Province, May 1923.

⁴ *Ibid.*, June 1923.

Wages were higher in the Tokar delta in the late 1920s, and in 1928 they were reported as 20 to 30 piastres a day in the last week of August. They attracted workers from nearby towns and outlying nomadic groups in Sudan and Eritrea. In spite of this enhanced supply wages were not expected to drop as low as in 1927.¹ Even in November 'Tokar cotton cultivation affords employment for all available natives.'²

The 1930s and World War II

The depression of the 1930s affected the deltas; cotton prices slumped, and with them tenant income and workers' wages. This does not mean that workers stopped coming for the deltas still produced the grain which the majority of nomads sought. Probably, however, the flow of Westerners and other more "economic-man" migrants from central Sudan lessened. Perhaps also the part of the wage packet in cash declined, and the part in goods went up.

During the early 1930s the Gash delta particularly was still a home for wandering and unemployed men from the riverain areas. The following is contained in the 1931 Berber Province report:

"Many young men migrated to the Gezira and Gash areas when money was plentiful there. . . . They found employment as small traders, motor drivers, servants, and so forth. A certain number of them are now being driven back to their homes in this province by the lack of money in the cotton areas."³

A similar comment is to be found in the 1931 Halfa Province Report, but there the process was more directed and coordinated by government. An attempt was being made to move to vacant areas in Kassala Province and the Gash, men considered surplus to the riverain area. But in the Gash itself hired labour in 1930 and 1931 seems to have been adequate.⁴

The governor of Sudan in 1931 commented on the behaviour of certain immigrants, particularly Abyssinians, in the irrigated cotton areas. This again is a recurrent theme in the Sudan.

"Riff-raff from Abyssinia were responsible for a certain amount of crime in Kassala and Gedaref. . . . Yet these same people, when employed with the bull teams which haul the road and reservoir gear, are invaluable, and their uncanny skill in training the bulls is not less astonishing than the humanity with which they treat them."⁵

But both the Gash and Kassala were suffering from the world-wide depression; crops could not be exported and prices were low. In the early 1930s this was coupled with poor crops, inadequate Gash floods and miserable rains:

"The agriculturalist, like other people, is suffering from hard times. . . . And yet, the struggle to turn Beja swords into ploughshares continues unabated. If the ploughshare would only prove but half as efficient an instrument as the sword in Hadendowa hands, the Gash Board might laugh at sedge, grass and weeds."⁶

¹ Ibid., August 1928.

² Ibid., November 1928.

³ *Sudan*—1931, Berber Province, p. 95.

⁴ Ibid., Kassala Province, p. 112.

⁵ Ibid., 1931, p. 118.

⁶ Ibid., 1932, p. 122.

But other forms of employment in the early 1930s did mitigate the situation somewhat. In spite of years of poor crops, considerable irrigation works in the Gash had been undertaken. According to the administration "... work has been, and is still, available for the asking, and there is no need for any able-bodied man or boy to go hungry."¹

TABLE 2
GASH DELTA: SCATTERED DAILY WAGE RATES (IN PT.), BY MONTH,
FOR UNSKILLED LABOUR, 1933-7

	J	F	M	A	M	J	J	A	S	O	N	D
1933 ..	9								7	5		
1934 ..							5½	10		10		
1935 ..											5½	
1936 ..						6	10	7	6½	5½	7	5
1937 ..			9	9	7	6	7½		6½		4¾	

Source: Compiled from Sudan Economic Board, *Monthly Economic Report*, 1933-7.

The scanty Gash information for the period 1933-7 (Table 2) would indicate wage behaviour and trends similar to those in the 1920s. In 1936 for example, the rate fell from 10 piastres in July to 5 piastres in December. The month that shows the greatest variation over the five-year period is October. In October 1933 the daily rate was 5 piastres, whereas only a year later it was 10 piastres.

In January 1933 no shortage was reported for picking, and contract rates were the same as in 1932, approximately one millieme per rotl.² By March labour supply seemed to have increased and there were sufficient labourers available for canal and irrigation work. By April 1933 the supply was plentiful. The daily wage in Kassala was 4 piastres for skilled and 3 piastres for unskilled labour.

But a crisis appeared in 1933 in the Gash of a recurring kind. The influx of Abyssinian and Eritrean workers is late in some years and the labour supply in the Gash experiences acute short-falls. There are several reasons for the fluctuations, including the quantity and timing of rainfall in the hills. In 1933, however, the competing labour market in Tessenei in Eritrea, was paying 8 piastres per day, and many regular Gash workers moved there. The shortage continued from August to October. Weeding prices went to "extravagant" figures, some £7 per plot, and the daily wage rose to 7 piastres. Most West African migrants who had settled in Kassala and Gash were cultivating their own allotments and could only enter the labour market to a limited extent. The relative scarcity of labour in September and October, and the increasing number of Beja attracted by the high wages and grain

¹ *Sudan*—1931, Kassala Province, p. 1232.

² Unless otherwise specified, the ensuing information is taken from *Monthly Economic Reports*. One reason why data are difficult to interpret is that we are not told whether day payment represents so many hours, or the average paid out to people working contract.

shortage at home, took effect, and by the second half of October the daily rate had fallen to 5 piastres. Although the shortage made the weeding late, there were few crop failures.

In 1934 Abyssinians and West Africans were more numerous in the Gash and the daily wage varied from 5 to 6 piastres. The labour force was also increased by riverain workers from as far away as Berber Province. But there were still not enough workers to reduce wages during busy periods to the more "normal" pre-1933 level, and contract weeding prices were as high as 60 piastres a feddan. By October the labour supply had increased but wages remained high.

There was a shortage of pickers in the Gash in the early part of 1935. In the autumn the competing labour markets in Abyssinia and Eritrea again made themselves felt.¹

In August the manager of the Gash Board could report that "cultivators are working with more than usual zeal and industry and this will offset the labour shortage resulting from the situation in Eritrea."² Many Abyssinians were present. But in November the labour supply was still reported as being "never plentiful," and 5 to 6 piastres was a typical wage. It was probably somewhat more around Kassala where labour was scarce.

Labour throughout 1936 in the Gash delta and Kassala was expensive and unreliable in its supply. In June Gash wages were 6 piastres and in July Kassala wages were about 10 piastres. The scarcity was due to the available labour, chiefly Ja'aliyin and Westerners, seeking the high wages paid to porters in Massawa and to road workers in the Agordat-Tessenei area. However, they returned later as a result of an active Italian recruiting campaign.

But the exodus to Eritrea had several effects. Gum sales in regions adjoining the Gash increased because men going to Eritrea and Ethiopia were employed *en route* as gum collectors. Also the workers who did remain in Kassala and the Gash became more bargain-minded.³ This combination of attitudes and limited supply "jeopardized the engineering programme in connection with the Gash cotton scheme, which was only with difficulty completed before the rains."⁴ Riverain workers were imported for the picking season, but their work was unsatisfactory. The returning Sudanese increased the labour supply to the point where daily rates dropped to 7 piastres in October and November in Kassala. In the Gash, where the labour force seems to have filled its pockets earlier in the year, the November wage was still 7 piastres. As a result of this experience, the administration decided to supplement normal Gash labour by imported labour if it became necessary :

"Experience of the last few years has shown that the labour market is subject to sudden fluctuations for no apparent reason and as there is plenty of money about and no fear of unemployment, it is necessary to have a core of reliable labour as a guarantee of future supply."⁵

Although in October and November 1936 475 and 318 Sudanese respectively obtained travel papers to go to Eritrea, some had returned by the end of November

¹ *Monthly Economic Report*, Kassala Province, July 1935.

² *Ibid.*, August 1935.

³ *Sudan*—1936, Kassala Province, p. 111.

⁴ *Ibid.*

⁵ *Monthly Economic Report*, Kassala Province, November 1936.

with enough money. By December the situation had improved to the point where, in spite of bargaining for 7 piastres a day, the typical labourer was paid 5 piastres.

This movement of workers to and from Eritrea and Abyssinia was repeated in 1937. In January "the prospect of a renewal of the (normal) immigration of labour from Eritrea and Abyssinia (was) giving satisfaction"¹ but this optimism was perhaps occasioned by a temporary influx into Kassala of Sudanese who had been drawn to Eritrea for road work, which then ceased for a short time. It began again in the middle of the month and the labour immediately moved back. Picking labour in January and February was plentiful, since the numbers leaving for Eritrea "were balanced by those returning to cash their lire in Kassala."²

In April Gash labour was still plentiful, but at an average of 7 piastres. This level was due, as it often is, to the high rate obtainable for contract picking. A fast worker could make 8 to 10 piastres a day at 1 millieme per rotl, which would rise to 1½–2 milliemes when the cotton was nearly all picked. The 7-piastre rate was also applicable in May. In June, even though cultivation had started, the wage was only 6 piastres. By July this 6-piastre rate still obtained in Kassala; but it was 7–8 piastres a day in the Gash; in September it fell to 6, and in November to 4½–5 piastres.

The uncertain labour market had another effect, which had been discussed in official reports in 1936. Labour had to be imported for the heavy engineering programme of the Gash Board and the Engineering and Irrigation Departments. Two hundred Saidi labourers came from Egypt and were in the Gash from 7th January to 14th May. The programme of work was completed in time. "Their earth work averaged 8.23 cubic metres per man per day and the cost was 26.04 milliemes per cubic metre."³ This importation permitted the release of local labour to work in the cotton fields.⁴

The Tokar data for the 1930s are even more spotty. Labour was ample in 1933, and the typical daily rate was 5 piastres.⁵ In 1934 wages reached 7½ piastres but by September dropped to 5–6 piastres.⁶ The Italian construction activity in Eritrea also affected Tokar. Many Eritrean workers went to work on roads and military installations. Because of the small flood, however, the labour shortage was not as severe as it might have been.⁷

The number of nomads who arrive at Gash and Tokar, and the length of their stay, are largely determined by the timing and amount of rains in their home areas. In 1936 good rainland crops were harvested in most areas, and the pickers arriving at Tokar in early 1936 were so few that the administration "suffered embarrassment."⁸ The shortage continued throughout the year, resulting in weeding rates of 75–100 piastres per acre, and a daily sowing wage of 10 piastres in September.⁹ These rates were approximately double those paid in the Gash.

¹ *Monthly Economic Report*, Kassala Province, January 1937.

² *Ibid.*, February 1937.

³ *Sudan—1937*, Kassala Province, p. 101.

⁴ *Ibid.*, 1938, p. 108.

⁵ *Monthly Economic Report*, Kassala Province, April and August 1933.

⁶ *Ibid.*, September 1934.

⁷ *Ibid.*, July 1935.

⁸ *Ibid.*, February 1936.

⁹ *Ibid.*, September and October 1936.

Tokar had a very heavy crop in 1937, and labour at times was so short as to handicap normal maintenance.¹ The extended demand was combined with a none too plentiful labour supply, as rains had been satisfactory in most Beja areas. The government tried to encourage more Beja women and children to enter the picking force with their men.² From February to April, many Beja families came from the hills, and labour supply was adequate—"the will to work seems gratifyingly strong, considering the cheapness of dura and the good condition of the animals."³ Most left Tokar before the season was over. The price for cutting went up to 40-50 piastres per acre; labour was short for non-agricultural work, and by June daily rates were 8 piastres.⁴ But the returning West African pilgrims at the height of the picking season "saved the situation."⁵

During 1940, World War II became very much a part of the Sudan scene. Though the occupation of parts of eastern Sudan was brief, it did affect the Gash labour market.

"Owing to the dispersal of West Africans on the occupation of Kassala in 1940, labour was short for the establishment of the crop in the Gash cotton area. An attempt to import labour from the Gezira was unsuccessful, and sowing and weeding were largely carried out by the reduced permanent population. As armed forces increased in the province, local labour resources were taxed to the full and daily rates rose in the south, from 40 milliemes to 50 milliemes and in the north from 50 to 70 milliemes."⁶

In 1941 Gash wages rose with an abundance of work relative to labour supply. West Africans were brought from the Gedaref area as pickers. Daily rates in the war were double those of the mid-1930s, for by 1945 the typical pay for ordinary labour was 10 piastres, despite unemployment from the reduction of the armed forces in the area, and the influence of certain administrative changes.

The 1945 labour supply in the Gash was insufficient, particularly as weed growth was heavy; and there was even unused land. The supply of labour in Kassala in late 1945 became very short and town wages rose to 15 piastres a day. In consequence the labour force became more vocal:

"There were no serious stoppages or strikes, but there have been certain manifestations of restlessness and demands for higher wages, particularly in the building trade."⁷

There is little to report for Tokar during the early 1940s. Five hundred Saidi labourers were imported under contract to remove a major Tokar dune.⁸ Wages

¹ *Sudan*—1937, Kassala Province, p. 103.

² *Monthly Economic Report*, January 1937.

³ *Ibid.*, April 1937. Beja, especially Beni Amer, vary greatly from group to group, and their participation rates in more "modern" economic ventures are not necessarily consistent. The Seligmans wrote in 1930 "on the one hand, near Tokar, cotton planting as organized by the Government was absorbing more and more of the energy of the people, who were only too anxious to try this new thing, while a few days' journey up the Khor Baraka to the Eritrean frontier took us among several groups who grew little, or perhaps in some instances no grain, and seemed to have little connection with the outside world." C. G. and B. Z. Seligman, "Notes on the History and Present Condition of the Beni Amer (Southern Beja)," *SNR*, XIII, 1 (1930), p. 84.

⁴ *Ibid.*, May and June 1937.

⁵ *Sudan*—1937, Kassala Province, p. 105.

⁶ *Sudan*—1940, p. 159.

⁷ *Sudan*—1945, Kassala Province, p. 164.

⁸ *Ibid.*, 1938, p. 108.

were adequate, to attract a sufficient labour supply, although in 1945 Tokar experienced a very heavy crop "which, but for lack of labour, would have been larger still."¹ But as elsewhere during World War II, labour became relatively scarce.

From 1946 to 1955

After the war wage rates rose quickly. In the Gash in 1946 minimum rates of 30 to 50 piastres a day were reported, as agricultural labourers appeared to be in very short supply, especially during the peak periods. Wage rates remained high during 1947 although the normal rate by 1947 for non-peak periods was now established at approximately 10 piastres a day.

During 1947 an inquiry was conducted by the Department of Labour into immigrant labour, primarily Westerners. This was part of a larger Sudan study. Some of the concern was occasioned by the fact that many immigrants, mainly Westerners, settled down as independent farmers after two or three years and often became employers themselves.

During the 1948 picking season there were the usual temporary local shortages. Nomads from the north, some with families, moved into the Gash because their own crops had been insufficient. The bringing of families accentuates one problem: the number of mouths to feed should determine the allocation of land between cotton and millet, but if there are too many people, and cotton land is used for grain, then cotton output goes down.²

During 1949 labour was generally adequate in both the Gash delta and Kassala. Shortage of food again brought an influx of labour. The cotton crop was a record and part of the labour supply was obtained by subsidizing travel for Beja from the north of the district. In 1950 labour was considered adequate.

In 1946 Tokar wages were still fairly high, and daily rates of 30–50 piastres are quoted—they were undoubtedly higher during peak seasons.³ In 1947, unlike the rest of Kassala Province, Tokar labour supplies were adequate, due to the increasing participation of Eritrean Habab. In 1948 Tokar labour was abundant; too many Habab arrived for the demand, especially during February–April. A 1948 Ministry of Agriculture report indicated that contract wages were fixed at 1.5 milliemes per rotl. While cotton workers were mostly Habab and Beni Amer, Hadendowa joined them for grain harvesting. The same report provides the following wage rates:⁴ sowing, 8–10 piastres per day; weeding, 10–12 piastres per day; December–March, 5 piastres per day; picking, 1.5 milliemes per rotl increased to 2 milliemes in May; April–June, 7–8 piastres per day; cutting out, 30 piastres per acre.

Food was short in eastern Sudan and the Red Sea Hills in 1949, so the Tokar labour supply, especially of Habab, was more than adequate. Wages were a little higher in 1950, and the Habab "returned much better off than when they came."⁵ There are no meaningful comments on Tokar labour market and wage conditions after 1950.

¹ *Sudan*—1945, Kassala Province, p. 160.

² Appendix 4A, *Gash Board Report* for period 1st July 1947 to 30th June 1948 (attached to the Annual Report, Ministry of Agriculture, 1948, Kassala Province). Gash Board reports were of little help, generally speaking, in trying to study the labour market and wages.

³ *Sudan*—1946, Kassala Province, p. 168.

⁴ Ministry of Agriculture, *Annual Report for year ending 31 December 1948*; Appendix IV B—Tokar Delta.

⁵ *Sudan*—1950, Kassala Province, p. 112.

TABLE 3
KASSALA TOWN : DAILY WAGE RATES FOR UNSKILLED LABOUR
(IN PT.), BY MONTH, 1951-55

	J	F	M	A	M	J	J	A	S	O	N	D
1951 ..			12		13 ¹	11	12		13½	13½	13½	13½
1952 ..	14	14	-	14½	14½	14½			18 ²	18 ²	18	15
1953 ..	15 ³	18 ⁴	18	18	18	18						
1954 ..				17½	17½	17½	17½	17½	25	17½	17½	17½
1955 ..	17½	17½	17½	17½	17½	16½			16½			

¹ plentiful ² scarce ³ Eritreans appearing ⁴ available
Source : *Monthly Reports of the Provincial Commissioner, Kassala Province, 1951-5.*

Table 3 indicates daily wage rates by month from 1951 to 1955 in Kassala Town. The month with the most fluctuation in rates over the period is September, varying from 13½ in 1951 to 25 piastres a day in 1954. 1954 also shows the highest variation in rate over the year, 17½ piastres a day for most months and 25 piastres in September.

TABLE 4
GASH DELTA : DAILY WAGE RATES FOR UNSKILLED LABOUR, BY MONTH, 1951-54

	J	F	M	A	M	J	J	A	S	O	N	D
1951 ..	17½ ¹	17½ ¹	15½		15		15				22½	23½
1952 ..	(²)	15½	15½	15	15	12		28½	25	26½	25	20
1953 ..	20	20	16½	17½	10	10 ¹		27½	27½	16½		
1954 ..	16½ ³	17½ ⁴	16 ⁴	(⁵)	(⁶)	(¹)						

¹ short ² plentiful ³ adequate ⁴ pickers scarce ⁵ no cotton workers ⁶ Eritreans go home
Source : *Monthly Reports of the Provincial Commissioner, Kassala Province, 1951-4.*

Table 4 indicates that for any month rates are not necessarily the same from year to year. The busy seasons usually occur about the same time, but the labour supply does not necessarily arrive at the same time.

Also, the difference between the high and the low wage over any one year is not always the same. In 1951, the high was 23½ piastres per day (December), and the low 15 piastres probably for the period April to July or August, a difference of

8½ piastres. But in 1952 the high of 28½ piastres was in August, not December, and the low of 12 piastres preceded it in June and probably July, a difference of 16½ piastres, or more than the low for the year. It was the same in 1953, with an August and September high of 27½ piastres preceded in June-July by the low of 10; a difference of 17½ piastres.

The observations of the report writer, footnoted at Table 4, are not easy to reconcile in all cases with wage behaviour. In 1951 labour is reported as being "short" in both January and February. While one might therefore expect the February wage to rise slightly over January, instead of remaining at 17½ piastres, the March wage probably should not have fallen to 15½. The January 1952 comment that labour is "plentiful" would seem realistic, however, as the wage dropped from 23½ piastres in December 1951 to 15½ in February 1952. The observation in June 1953 that labour was "short" also seems to be borne out in wage behaviour as by August wages had risen to 22½ piastres.

In summary: the unskilled worker's typical daily wage in the Gash has moved from 3-5 piastres in the first decade of the century; to 5-8 piastres in the second and third; and from 10-30 from the beginning of World War II to the mid-1950s. At Tokar roughly the same rate of change occurred, but there wages have been 150-200% of those in the Gash. I have no way of knowing labour costs per unit of output, though these probably are going up as the technology has not altered significantly in recent decades. Prices both of export crops and of grain have certainly been going up. I do not know whether the standard of living of the typical worker has risen, though we may suspect that, given the mobility of many workers there is a tendency to go to the labour market where the highest standard of living is obtainable.

I also have no accurate idea of the total remuneration of the worker, who receives on occasion wage goods and services whose value normally exceeds the cash wage paid. That a cash wage changes is no reason to suppose that the *total* pay packet or the worker's standard of life has changed in the same degree or even in the same direction. For example I would be surprised if during the 1930s when prices and cash wages fell, the real income of the worker fell very much; he probably began receiving a larger proportion of his income in grain. So the Westerner, and many riverain migrants, probably get higher cash wages and a lesser share of real income; and the local workers, especially the nomads, probably get more real income, especially grain whose acquisition is their main reason for arriving in the first place.

But these are surmises. It is hoped, however, that this bringing together of scattered and hitherto uncollated Gash and Tokar data will shed light on the area's past, and serve to point out the need for more extensive economic and social research in this important region.

CLIMATE AND FAUNA IN THE CENTRAL AND SOUTHERN SUDAN

by

J. L. CLOUDSLEY-THOMPSON

Introduction

It is common ecological practice in temperate regions to assess the flora and fauna of an area by means of counts of the numbers of individuals in a series of quadrats selected at random across some geographical feature such as a shoreline and to relate them to the physical environment. In arid tropical regions, such as the northern and central Sudan, it is usually impractical to use the quadrat method because the fauna is so sparse and unevenly distributed that the only way to obtain quantitative results is to use the time factor as a standard. For example, the number of animals counted during an hour's collecting in one area at regular intervals throughout the year can be used to compare population fluctuations (Cloudsley-Thompson & Idris, 1964). By this method, I hoped that it might be possible to make a quantitative comparison of the fauna at various places between Khartoum and Nimule on the Uganda border, more than 1,000 miles southward, and to correlate differences observed with bioclimatic measurements made at the same time. During December 1961 I therefore made a journey to the southern Sudan accompanied by my wife and Faysal Taj el Din Abu Shamma, Demonstrator in Zoology, University of Khartoum. We drove to Malakal, shipped our Land Rover on a river steamer to Juba whence we drove to Yei on the Congo border and then to Nimule, Torit, Katire and Gilo in the Imatong Mountains.

Although we collected as many insects and other arthropods as possible and took bioclimatic readings throughout the trek, shortage of time and difficulties of working under field conditions prevented us from obtaining quantitative data or standardizing our results as had been hoped. It was not always possible for example, to take readings at the same time each day. Often, too, many insects would come to light during the early part of the evening although we had been able to find very few by searching before it got dark.

A large collection of insects was nevertheless made and presented to the British Museum (Natural History), whilst other invertebrates were deposited in the Musée Royal de l'Afrique Centrale, Tervuren, Belgium. Although the spiders and some other groups have not yet been identified, it seems unlikely that further names will be supplied within the near future. It may be worth while, however, to give a brief account of the fauna of an area, which has previously been little studied ecologically, in the hope that it may prove to be of interest to other zoologists who may one day visit it and obtain more concrete results from their labours.

Climate and Vegetation

Between Khartoum and the Uganda border the climate becomes gradually less severe, temperatures less extreme and rainfall greater. Of these factors, rainfall is probably the most important to the flora and fauna. Around Khartoum, annual precipitation averages 100–200 millimetres which increases to 400 millimetres in the neighbourhood of Kosti: Malakal has an annual rainfall of 600–800 millimetres. Between Malakal and Juba the average is 800–1,000 millimetres

whilst the figure for Nimule is 1,200–1,400 millimetres, for Yei 1,400–1,600 millimetres and 2,000 millimetres for Gilo in the Imatong Mountains.

The seasonal nature of the rainfall throughout most of the area must also aggravate the effects of an arid climate especially as regards the fauna; for it is extremes, not means, which determine whether a species can survive in a particular locality. It is for this reason that study of the microclimates in which animals survive throughout periods of extreme heat, drought and other vicissitudes is of especial importance to the understanding of animal ecology and distribution.

For the first 100 miles south of Khartoum, the vegetation consists of *Acacia tortilis*—*Macrura crassifolia* desert-scrub, which thereafter merges into semi-desert grassland on clay. South of El Dueim to about Gelhak there is *Acacia senegal* savannah which then becomes *A. seyal*—*Balanites aegyptiaca* savannah alternating with grass extending into a flood plain region of dark cracking clay. From Malakal to Juba, the Nile passes through the swamps of the sudd dominated by *Cyperus papyrus*, *Echinochloa stagnina*, *E. pyramidalis*, *Phragmites communis*, *Vetiveria nigrifolia* and *Hyparrhenia rufa*. Between Juba and Yei, Nimule and Torit, lies high rainfall woodland savannah on laterite catena soils where *Khaya senegalensis* is perhaps the most widespread species of tree although *Isobertia doka* and *Anogeissus schimperi* are also characteristic. Finally, the lower slopes of the Imatong Mountains between 1,500–2,600 metres are forested with *Syzygium gerrardii*, *Olea hochstetteri* and *Podocarpus milanjanus* as the climax vegetation. The upper montane forest zone, between 2,600–3,000 metres, in which *P. milanjanus* again forms climax forest includes large areas of fire-climax mountain-meadow in which the sedge *Bulbostylis atrosanguineus* is dominant, together with the grasses *Exothea abyssinica*, *Digitaria uniglumis* and *Setaria sphacelata*. The bamboo *Arundinaria alpina* also occupies fairly large areas. Finally, above 3,000 metres, there is an ericaceous zone with *Erica arborea* and *Myrica salicifolia* dominant with the grasses *Exothea abyssinica*, *Tripogon snowdenii* and other species (Harrison & Jackson, 1958).

Bioclimatic Readings

For the measurement of air temperature and relative humidity, a whirling hygrometer was employed. Micro-climatic temperatures were measured with an electrical resistance thermometer employing thermistors and humidities were determined by means of cobalt thiocyanate papers that were afterwards matched in a comparator with coloured glass standards. Wherever possible, ground surface temperatures and humidities were measured in places sheltered from the wind.

The results obtained have been grouped into two batches: readings that were taken during the middle of the day (Table 1) and readings made in the early morning (Table 2). Both tables show a steady drop in air temperature in localities ranging from north to south and a corresponding increase in relative humidity. Readings taken at Khartoum during a cold spell shortly after our return show that, even when the temperature was comparable to that in the southern Sudan, the relative humidity was very much lower. When temperatures are considered on the ground surface, 3 centimetres above and 3 centimetres below it, one can see that the surface tends to get much hotter further north while micro-habitat humidities are very much lower here than in the south.

Readings of air temperature and relative humidity were taken several times daily throughout the boat journey from Malakal to Juba and back, and the results

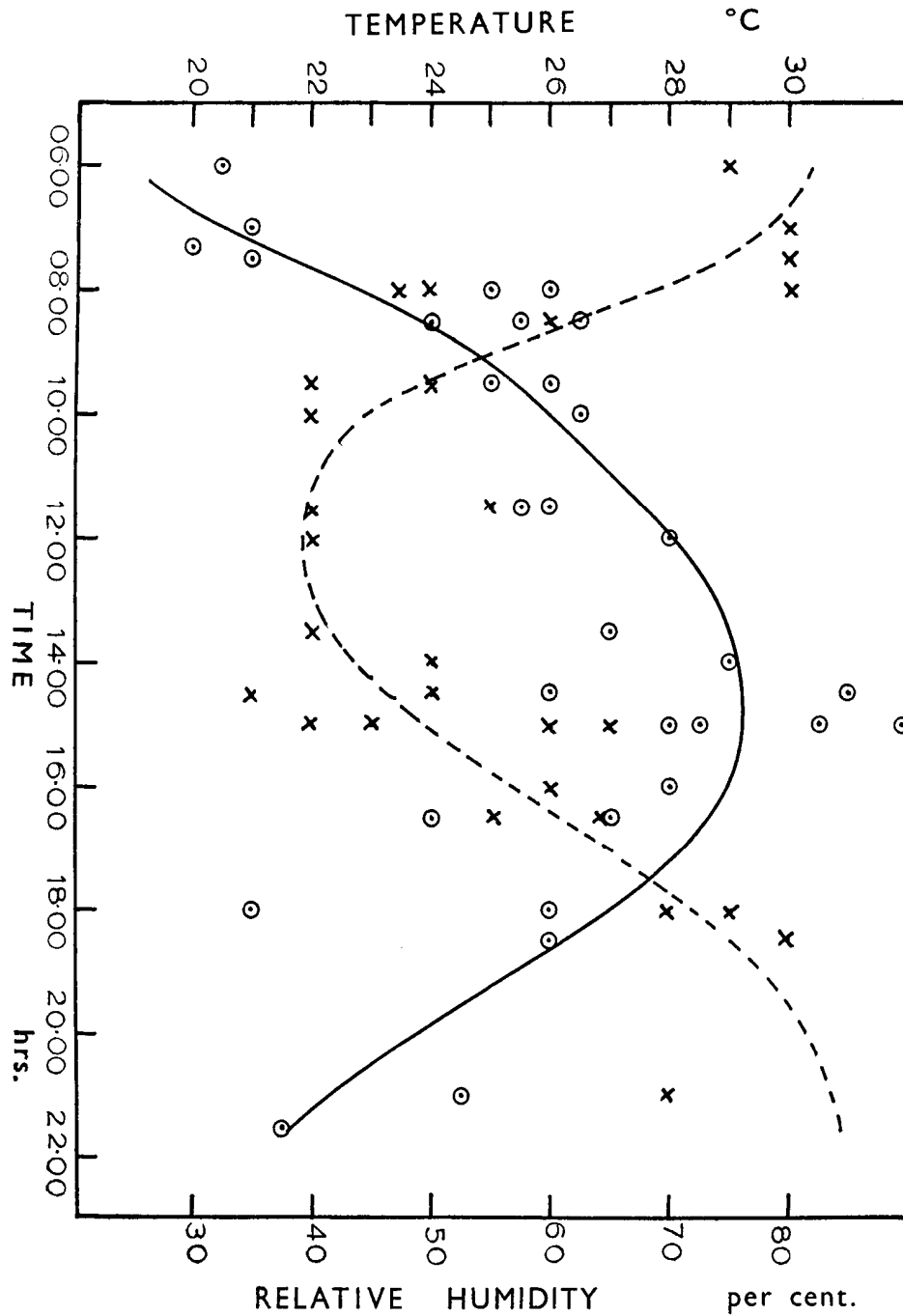


FIGURE 1

Diurnal Cycle of Temperature and Relative Humidity in the Sudd
during December 1961

TABLE 1
 BIOCLIMATIC READINGS MADE AT DIFFERENT LOCALITIES BETWEEN 13.00-15.00 HRS. DURING DECEMBER, 1961

LOCALITY	AIR		GROUND					DATE	REMARKS
	Temperature (°C)	Relative Humidity (%)	Temperature 3 cm. above surface (°C)	Surface temperature (°C)	Surface RH (%)	Temperature 3 cm. below surface (°C)	RH 3 cm. below surface (%)		
104 m. S. of Khartoum 14°35'N 32°15'E	33.0	20	37.5	51.0	5	36.5	10	2 Dec.	Mixed sand
Kosti 13°10'N 32°40'E	33.0	35	34.0	47.0	15	32.0	55	3 Dec.	Mixed sand and black earth
Renk 11°45'N 32°45'E	29.0	30	29.0	42.0	10	26.5	30	6 Dec.	Black cracking clay with shortish grass
17 m. E. of Renk 11°45'N 33°00'E	31.0	20	31.0	42.5	10	26.5	20	6 Dec.	Black cracking clay with tall grass
5 m. N. of Gelhak 11°10'N 32°45'E	34.0	30	38.5	47.0	10	35.5	30	5 Dec.	Black cracking clay with tall grass
Malakal 9°35'N 31°40'E	34.0	20	30.5	38.5	0	27.5	10	8 Dec.	Short much grazed grass
Yei 4°05'N 30°40'E	33.5	50	30.0	39.0	20	24.5	60	16 Dec.	Tall grass
Nimule 3°35'N 32°05'E	31.5	35	29.0	30.0	30	29.0	40	19 Dec.	Tall grass
Gilo 4°05'N 32°55'E	25.0	60	26.0	26.5	65	21.5	100	21 Dec.	Short grass in montane forest
Khartoum 15°40'N 32°30'E	26.5	35	23.0	39.0	5	21.5	5	2 Jan., 1962	Sand, scattered grass

TABLE 2
 BIOCLIMATIC READINGS MADE AT DIFFERENT LOCALITIES BETWEEN 07.30-08.30 HRS. DURING DECEMBER, 1961

LOCALITY	AIR		GROUND					DATE	REMARKS
	Temperature (°C)	Relative Humidity (%)	Temperature 3 cm. above surface (°C)	Surface temperature (°C)	Surface RH (%)	Temperature 3 cm. below surface (°C)	RH 3 cm. below surface (%)		
Kawa	25.0	40	28.5	38.0	10	30.5	15	3 Dec.	Clayish sand
El Jebelain	25.5	40	23.5	25.0	5	30.5	35	4 Dec.	Mixed sand
Renk	25.0	40	23.0	25.0	10	22.0	55	5 Dec.	Black cracking clay
99 m. S. of Renk	26.0	40	27.5	33.0	5	21.0	15	8 Dec.	Grass savannah
Malakal	22.0	35	17.0	24.0	10	17.0	65	9 Dec.	Short much grazed grass
Juba	24.0	60	29.0	25.0	25	21.5	35	16 Dec.	Medium grass
Nimule	21.0	90	17.0	18.0	70	16.5	75	18 Dec.	Tall grass
Nimule	23.5	75	18.0	19.5	70	17.0	75	19 Dec.	Tall grass
Katire	22.0	75	18.5	22.0	20	15.5	95	21 Dec.	Grass
Katire	21.0	85	17.5	18.5	80	17.0	85	22 Dec.	Grass
Khartoum	17.0	35	17.0	17.5	10	15.0	75	3 Jan., 1962	Sand, scattered grass

are plotted in Figure 1. They show the high humidities that prevailed at dusk, the time of greatest activity by mosquitoes and lake-flies (Chironomidae).

Fauna

From Khartoum to El Geteina and onwards, the road crossed an immense plain of yellow grass with scattered *Acacia* bushes. A few grasshoppers, Hemiptera, ants, *Monomorium salomonis* L., Tabanidae such as *Atylotus agrestis* Wied. and house-flies were collected 104 miles south of Khartoum where climatic readings were also taken (1).^{*} After this, we crossed a region of shorter grass without Acacias. Many insects came to light during the night which was spent at Kawa. These included crickets, *Acheta hispanica* Rambur, mantids, the trichopteran *Eatonica schouledani* Nar., dung-beetles *Heteronychus lichas* Klug and *Onthophagus gazella* F., hawk-moths (no longer in season at Khartoum), doryline and other ants (2).

South of Kosti there were vast areas of grass about 5 feet high with patches of swamp beside the road, quelea birds flying in long ribbons, carmine bee-eaters and fly-catchers. Beyond Renk, *Tabanus taeniola* P. de B. was extremely common, attacking camels. Vast numbers of mantids, crickets, grasshoppers, earwigs and beetles, etc. came to light after dark and we were pestered by the bites of mosquitoes, mostly culicines (6). The call of a hyaena was heard during the night.

From the rich insect fauna at Renk, despite the flat aridity of the countryside, it seemed likely that richer vegetation would be found only a few miles further south and, indeed, many *Acacia seyal* trees appeared after about 5 miles. Patches of swamp, from the heavy rains earlier in the year, appeared just west of the road. When some Shukria people passed with their camels, the Land Rover was soon filled with Tabanidae, mostly *T. taeniola*. Five miles north of Gelhak we picked up a number of fossil bones—human, elephant, buffalo, etc. and broken pottery, unearthed during the construction of a new irrigation ditch. The engineer of a pump scheme nearby told us that grivet monkeys came down to steal tomatoes every time the engine stopped. From here to Malakal, the country consists mostly of flat, grassy plains: we saw a few gazelles and water-buck.

While the vegetation of the sudd is predominantly papyrus, *Cyperus papyrus*, which forms areas of luxuriant growth, often reaching a height of 25 feet or more, many other plants such as reeds, rushes and grasses also occur. Ambatch, *Herminiera elaphroxylon*, is a striking legume with bright yellow flowers. In the more open water grow water-lilies, water-lettuce and the notorious water-hyacinth, *Eichornia crassipes*. Floating vegetation, broken from the banks, may pile up to a height of 20 feet above the water so that cutting and dredging are necessary to keep the channel open.

In these marshes, the hippopotamus is at home, elephant, buffalo, tiang, lechwe, kob, reed-buck, water-buck and others are characteristic members of the fauna. Birds include the shoebill of the Bahr el Ghazal, cormorants, storks, pelicans, spoonbills, geese, snake-birds, river eagles and various water-fowl. Among the reptiles are crocodiles, monitors and many species of snake. Fish are of prime importance to the local inhabitants: a record Nile perch from Lake No weighed as much as 280 lbs.

During the first part of our journey through the sudd, many Tabanidae (10) came aboard but, after a couple of days, their numbers dropped considerably. Presumably they must feed principally on Nuer cattle. There was a terrific chorus

^{*}Numbers in parentheses refer to the list of localities (see Appendix).

of insects at night (13). Many Trichoptera, *Amphipsyche* sp., *Dipseudopsis capensis* and *Polymorphanicus* sp. came aboard with innumerable small flies, but fewer mosquitoes than nearer Malakal. The river was unusually high in 1961, and we saw few crocodiles or hippopotamuses and no elephants, buffalo, or antelope at the water's edge.

As we sailed through the swamp of papyrus, reeds and water-hyacinth, innumerable insects and spiders were shaken on board when the barges scraped the vegetation—accompanied occasionally by a frog or a vivid green snake (2). The papyrus fauna consisted chiefly of small cockroaches, probably *Matabelina abdominalis* (Shelf.), stick insects, pentatomid and other bugs, tenebrionid beetles and lepidopterous larvae. Spiders were mostly Salticidae, a few Lycosidae, Thomisidae and Argiopidae (11, 22). The fauna of *Cyperus papyrus* has been described in some detail by Thornton (1957) so I will not here discuss it further. Nor will I mention the bird life of the sudd as it has been well documented.

One of the first things that struck me about Juba was that the termite galleries on trees were occupied throughout the day and not empty as in drier places. When they were damaged, their occupants were immediately attacked by ants. On the road to Yei, we stopped 62 miles south west from Juba. Although the grass was 6 feet high, its fauna must have been extremely poor because 50 sweeps with a sweep-net produced only 3 ants and one small dragon-fly, *Crocothermis erythraea* (Br.) (15). Gazelles, baboons and red-hussar monkeys were the only mammals to be seen. At Yei the fauna was somewhat richer and consisted mainly of dragonflies, termites, ants, bees, wasps, butterflies and clubionid and salticid spiders (16). The Linyphiidae, so conspicuous in temperate regions, appeared to be almost absent here.

West of the great escarpments that run parallel to the Nile by the Uganda border, the ground falls towards the river in a series of gullies, stony slopes and rocky screes. Largely uninhabited, with eroded soil covered by grass and bushy acacias, except in some of the deeper glades along the river, the area is eminently suitable as a game reserve. Although smaller species such as bush-buck, water-buck, hartebeeste, duiker, oribi, wart-hog, hyrax and baboon are not common, there is a remarkable aggregation of bigger game.

The invertebrate fauna was considerably richer at Nimule than further west and I collected from under stones a number of snails, some mygalomorph spiders, scolopendromorph centipedes, *Ethmostigmus trigonopodus* Leach, *Pselliophora zebra* Verhoeff (Scutigerae), the scorpion *Buthotus minax* (L. Koch) which, around Khartoum, is confined to crevices beneath the bark of acacia trees, and a number of insects (17). Near the Fula Rapids we were bitten by tsetse flies, *Glossina morsitans* Westw., but not badly.

In the National Park we were able twice to walk within a hundred yards of a herd of about 40 elephants with ox-peckers on their backs. The average size of their tusks was considerably greater than those of the elephants I have seen in East Africa. This National Park comprises only 100 square miles, but it is one of the finest in Africa. It is primarily a sanctuary for the white rhinoceros, of which we saw several, as well as innumerable Uganda kob, water-buck, buffalo, wart-hog and a five-foot puff-adder. We were able to walk within 18 paces of one pair of rhinos sleeping under a tree. The rhinoceros is a creature of regular and tidy habits. The ground under that tree was iron hard from the tramping of feet and its trunk polished quite smooth, while nearby we found a large heap of dung. In contrast, elephants wander where they please.

From Nimule we went eastward up the Imatong Mountains to Katire and Gilo, into the rich montane forests of mahogany, with patches of bamboo and giant lobelias. Here we saw colobus monkeys in the tree-tops but little other game although we were told that elephants live in the mountains along with a few buffalo. The Imatongs have the Sudan's highest rainfall, averaging over 2,000 millimetres at Gilo, and its largest area of closed forest (Jackson & Owen, 1950). There are numerous perennial streams there with waterfalls and rapids and the scenery is magnificent. Many of the ants here, as at Juba, were tree-living species. Butterflies and moths were very common and I found a number of Collembola and geophilid centipedes which were not apparent further north or at lower altitudes (19).

REFERENCES

- CLOUDSLEY-THOMPSON, J. L. and IDRIS, B. E. M. (1964). "The Insect Fauna of the Desert near Khartoum: seasonal fluctuation and the effect of grazing," *Proc.R.ent.Soc.Lond.* (A), vol. 39, pp. 41-6.
- HARRISON, M. N. and JACKSON, J. K. (1958). "Ecological Classification of the Vegetation of the Sudan," *Forests Dept. Bull.* (N.S.), No. 2, p. 45.
- JACKSON, J. K. and OWEN, J. S. (1950). "Animal Life in the Imatong Mountains," *Sudan Wild Life and Sport*, vol. 1 (4), pp. 3-10.
- THORNTON, I. W. B. (1957). "Faunal Succession in Umbels of *Cyperus papyrus* L. on the upper White Nile," *Proc.R.ent.Soc.Lond.* (A), vol. 32, pp. 119-31.

APPENDIX

FAUNA

Locality data of collections

1.	104 m. S. of Khartoum (14°35'N 32°15'E)	..	..	2 Dec. 1961
2.	Kawa, 157 m. S. of Khartoum (13°45'N 32°30'E)	..	..	2-3 Dec. 1961
3.	Kosti (13°10'N 32°40'E)	..	..	3 Dec. 1961
4.	El Jebelain (12°35'N 32°50'E)	..	..	3-4 Dec. 1961
5.	Renk (11°45'N 32°45'E)	..	..	4-7 Dec. 1961
6.	Renk (at light)			
7.	99 m. S. of Renk (at light)	..	..	7 Dec. 1961
8.	On road between 10°30'N 32°30'E and 9°35'N 31°40'E	..	..	8 Dec. 1961
9.	Malakal (at light) (9°35'N 31°40'E)	..	..	8 Dec. 1961
10.	Taken on boat, Malakal—Shambe (9°35'N 31°40'E 7°05'N 30°45'E)			
11.	On boat (fauna of papyrus)			
12.	On boat, Shambe—Juba (7°05'N 30°45'E—4°50'N 31°35'E)			
13.	On boat at light (10°35'N 31°50'E)	..	..	14 Dec. 1961
14.	Juba (4°50'N 31°35'E)			
15.	62 m. S.W. of Juba (4°20'N 31°00'E)	..	..	16 Dec. 1961
16.	Yei (4°05'N 30°40'E)	..	..	16 Dec. 1961
17.	Nimule (3°35'N 32°05'E)	..	..	17-20 Dec. 1961
18.	Katire, Imatong Mountains (4°05'N 32°50'E)	..	..	20-22 Dec. 1961
19.	Gilo, Imatong Mountains (4°05'N 32°55'E)	..	..	21 Dec. 1961
20.	Torit (4°25'N 32°35'E)	..	..	22 Dec. 1961
21.	On boat, 20 m. N. of Mongalla (5°25'N 31°45'E)	..	..	24 Dec. 1961
22.	On boat, Mongalla—Malakal (mostly papyrus fauna)	..	..	24-27 Dec. 1961
23.	75 m. S. of Renk (10°40'N 32°30'E)	..	..	28 Dec. 1961
24.	Geiger (at light) (12°00'N 35°45'E)	..	..	28 Dec. 1961
25.	20 m. N. of Kosti (13°20'N 32°40'E)	..	..	29 Dec. 1961

FAUNAL LIST

MOLLUSCA

(det. P. L. G. Benoit)

Ledoulxia sp.
Burtoa nilotica (Pfeiffer)
Limicolaria festiva (V. Martens)
L. saturata chromatica Pilsbry

CHILOPODA

(det. P. L. G. Benoit)

SCOLOPENDRIIDAE
Ethmostigmus trigonopodus Leach (17)*

SCUTIGERIDAE
Pselliophora zebra Verhoeff (17)

SCORPIONES

(det. J. L. Cloudsley-Thompson)

Buthotus minax (L. Koch) (17)

INSECTA

ORTHOPTERA

ACRIDIDAE (det. D. Hollis)
Eyprepocnemis plorans ornatipes (Walker) (2, 6)
Acanthacris ruficornis lineata (Stoll) (14)
Paracinema tricolor (Thunberg) (6)
Acrotylus longipes (Charpentier) (1)
Sudanacris pallida (Burmeister) (6)
Catantops melanostictus Sch. (5, 16)
Oxya hyla Serville (10)
Zonocerus variegatus (L.) (18)
Coryphasima sternoptera pharaonis Karny (22)
Aidopus thalassinus (Fab.) (3)
Chrotogonus senegalensis Krauss (17)
Caloptenopsis sp. (8)
Tylorropidius gracilipes Brancs. (17)

TETTIGONIIDAE (det. D. R. Ragge)
Tylopsis irregularis Karsch (7, 8, 15)
Eurycorypha stylata Stal (6)
Lanista africana Walker (19)
Homorocoryphus nitidulus vicinus (Walker) (7, 9)

GRYLLIDAE (det. P. M. Newman)
Gryllus bimaculatus Deg. (5)
Acheta hispanica Rambur (2)
Scapsipedus marginatus Afzel (4, 6)

DICTYOPTERA

MANTIDAE (det. P. M. Newman)
Sphodromantis viridis (Forsk.) (4)
Tenodera sp. (12)
T. bokiana (Giglio-Tos) (12)
Hoplocorypha sp. (3, 7)
Phlaebarodes sudanensis (Walker) (6)
Ligaria quadrinotata Stal. (7)
Tarachodes obtusiceps (Stal.) (5, 8)

BLATTIDAE (det. P. M. Newman)
Blatella germanica (L.) (9)

DERMAPTERA

(det. P. M. Newman)

Labidura riparia Pallas (9)

ODONATA

(det. D. E. Kimmins)

Hemianes ephippiger Burm. (22)
Crocothermis erythraea (Br.) (15)
Orthetrum angostiventris Ramb. (12)
Urothemis edwardsi Selys (5)
Braethemism leucostica (Burm.) (3)

TRICHOPTERA

(det. D. E. Kimmins)

Amphipsyche sp. (13)
Dipseudopsis capensis Walk. (13)
Chloropsyche dispar (Brauer) (10)
Eatomica schouledani Nar. (2)
Polymorphamiscus sp. (10, 13)

DIPTERA

(det. H. Oldroyd)

TABANIDAE
Atylotus agrestis Wied. (1, 5, 8, 23)
Chrysomyia chloropygea (Wied.) (18)
C. marginalis (Wied.) (5)
Chrysops brucei Austen (22)
Haematopota brunnescens Ric. (13)
Tabanus taeniola P. de B. (5, 14, 21, 22)

BOMBYLIIDAE
Eurycarenum dichopticus Bezzi (20)

MUSCIDAE
Glossina morsitans Westw. (17)

COLEOPTERA

CARABIDAE
Chlaenius mirificus Pom. (17)
Eudichirus ochropus Dej. (5)
Rembus aegyptiacus Dej. (13)
Scarites procerus Dej. (9)
Scarites aestuans Klug. (9)

* Numbers in parentheses refer to the list of localities.

COLEOPTERA—continued

SCARABAEIDAE

- Helioligus meles* Billb. (13)
Heteronychus lica Klug. (2)
Copris nepos Gillet (7)
Onthophagus gazella F. (2)
Catharsius phidius Ol. (7)
Chiron grandis Gory (9)

HYDROPHILIDAE

- Hydrobiomorpha cultrifer* Reg. (5)
 (formerly *Hydrochara*)

CHRYSOMELIDAE

- Phaedon areata* F. (17)

GALERUCIDAE

- Abecesta cyanipennis* Har. (17)

EUMOLPIDAE

- Syagrus* sp. nr. *rugiceps* Lef. (2, 5, 12)

BOSTRYCHIDAE

- Heterobostrychus zickeli* (2)
Sinoxylon ruficorne Fahr. (17)
Phonapate sp. (not in B.M.) (7)

LAMPYRIDAE

- Luciola biguttata* Ol. (12, 13)

DASYTIDAE

- Melyris foveolata* Champ. (14, 16)

MELOIDAE

- Cylindrothorax spurcaticollis* Fairm. (5)
Cissites cephalotes Ol. (19)

BUPRESTIDAE

- Steraspis speciosa* Kr. (17)

TENEBRIONIDAE

- Adesmia (Macropoda) abyssinica* Reiche (2)
Adesmia (Macropoda) variolaris s. sp.? (2)
Gonocephalum sp.
Opatrinus sp. (2, 5)

CURCULIONIDAE

- Lixus acuminatus* Boh. (11, 22)
Brachyceropsis verrucosus (Fab.) (11, 22)
Tanymecus sparsus Fahr. (2)
Nematocerus sp. indet. (19)

STAPHYLINIDAE

- (Unidentified specimens)

ELATERIDAE

- Anchastus* sp. (1)

REPTILIA

(det. Ahmed M. el Sayed)

- Chlorophis irregularis* (= *emini*) (Gnther.) (12)
Crotaphopeltis hotomboeia (Laur.) (12)

GEOLOGY AND SCENERY OF THE SUDAN*

by

A. J. WHITEMAN

The general geology of the Sudan is not complicated as a glance at the 1949 Edition of the 1 : 4,000,000 Geological Map will show. The most striking feature of this map is the broad extent of some of the formations.

A geological column for the Sudan is given below, oldest rocks at the bottom, youngest at the top. The approximate percentages given at the side are the percentage surface areas of each formation or group of formations based on the 1949 Edition of the Sudan Geological Survey Map. These have been changed slightly on the new edition of the map which is now almost ready for publication.

TABLE I					%
Coastal Plain Deposits (Red Sea Margin)	..				0.36
Umm Ruwaba Formation	..	..	..	..	9.42
Tertiary Lavas	..	..	..	..	1.40
Hudi Chert	..	..	..	..	0.02
Yirol Beds	..	..	..	..	0.44
Nubian Formation	..	..	..	..	17.00
Palaeozoic Sandstone Formation	..	..	..	..	0.27
Nawa Formation	..	..	..	..	0.06
Basement Complex (mainly Precambrian)	..				71.00
TOTAL					99.97

Three formations—the Umm Ruwaba, the Nubian and the Basement Complex—account for 97.42% of the surface area of the Sudan, a country of almost 1,000,000 square miles, hence my statement that the general geology of the Sudan is not complicated.

Before dealing systematically with these formations and discussing their geology and the type of scenery which has developed on them, I make a few general points about rocks.

These are three main rock types :—

- (1) *Igneous Rocks* : In petrology the term “igneous” refers to those rocks formed by solidification from a molten or partially molten state. As their name implies they were fire-formed. They occur in two major groups :
 - (a) as plutonic or intrusive rocks in which the liquid rock material called magma was intruded or forced into the country rocks eventually crystallizing to form such rocks as granite, and gabbro.
 - (b) as volcanic or extrusive rocks in which the magma welled up through joints, faults, and fissures in the country rock to form great lava sheets or volcanics.
- (2) *Metamorphic Rocks* : These rocks may have been either igneous or sedimentary (the third type) in origin but have been subsequently subjected to heat and

* Lecture given 25 February 1964 in the University of Khartoum Extra Mural Lecture Series.

pressure deep down in the earth. Metamorphism is the mineralogical and structural adjustment of solid rocks to physical or chemical conditions differing from those under which the rock in question originated.

(3) *Sedimentary Rocks* : These are the layered or bedded rocks laid down by deposition of material from a medium at the surface of the earth under normal surface conditions. The materials are derived by erosion from older sedimentary, igneous and metamorphic rocks and deposited mainly in the medium water.

The chemical and physical properties of these three rock types vary considerably and so they give rise to different types of scenery. Perhaps the most important property is the way they weather under differing climatic conditions. Composition, texture, degree of cementation, gross hardness, individual grain hardness, bedding joints, cleavage, etc., all influence the expression a rock makes at outcrop.

I. BASEMENT COMPLEX

These are the oldest rocks in the Sudan. They consist of igneous and metamorphic rocks, and some sediments. In general they are poorly bedded, often folded and contorted, and cleaved. They include such types as : schist, gneiss, marble, graphite schist, phyllites, greywackes, quartzites, meta-lavas, acidic and basic igneous plutonics and extrusives, including granites, gabbros and basalts. Great variations in metamorphic grade occur, some of the rocks being of low grade and still retaining their original sedimentary or volcanic characteristics, whereas others are so highly altered that their original constitution is impossible to decipher.

Many types of scenery are developed on the Basement Complex rocks but the following main types can be recognized :—

(1) *Granite—Gneiss Scenery* : This is a very common type in the Sudan, in fact the chances are high that if jebels occur on the Basement Complex they are either granite or gneiss in composition. Granite jebels are particularly well developed on either side of the railway line in the Sabaloka-Geri area. They are formed by porphyritic granites probably of migmatic origin. Granite and gneiss jebels form many of the hills which comprise the Nuba Mountains Group of Jebels and there are some spectacular examples of granite jebels near Haiya Junction clearly visible from the railway. Conspicuous granite jebels occur at many localities in the Red Sea Hills. Jebel Hamashaweib is a particularly striking example, near Bir Salala, north of Port Sudan. Perhaps the finest example of a gneissose granite and gneiss jebel is Jebel Kassala which forms such a striking backdrop to the town of Kassala. The double granite walls of the Derudeb Ring Complex between Kassala and Haiya on the railway line are also a spectacular group.

On homogeneous granites spheroidal weathering develops but on gneiss a sub-spheroidal pattern forms because of the control of lineation as well as jointing.

The reason why granites and gneisses disintegrate in this fashion is that under the action of rain water, charged with carbonic acid derived from carbon dioxide of the atmosphere, the feldspars, which are potassium, sodium, or calcium silicates, disintegrate to form clay minerals and soluble carbonates. The reaction is accompanied by volume changes which cause cracking and further disintegration of the mineral assemblage resulting often in the reduction of the granite into quartz sand, partially digested feldspar and other silicates such as micas and amphiboles, and fine kaolinitic clays. If we start with a cube of granite and allow the weather

to eat into the rock from the corners at equal rates then the result will be a sphere of granite. Spheroidal boulders are the characteristic features of granite outcrops. The mode of weathering is called exfoliation or onion-skin weathering because of the way the granite peels off in sheets. Other controls operate in the weathering of granite and gneiss (which consists of similar minerals) such as differential heating over long periods, joints, flow structure lineation, etc., but by far the most important, despite what is still written in some "modern" textbooks of geomorphology and geology, is chemical weathering.

(2) *Ultrabasic Scenery* : This is a rarer type than the first and is developed at Gala el Nahl and in the Ingessana Hills, and to a limited extent in the Red Sea Hills on such jebels as Hadarabab, Tosherer, and Akrah north of Port Sudan. In the Gala el Nahl area and the Ingessana Hills it is developed on serpentines. In the Ingessana Hills the ultrabasic rocks are associated with small chrome deposits which are now being worked on a limited scale. At Jebel Hadarabab the rocks are gabbros. Another conspicuous mass of basic rock occurs immediately east of Ogrein Station, some sixty miles east-north-east of Atbara where Jebel Siyete stands sentinel astride the road to Suakin.

(3) *The Butana Scenery* : This type is developed mainly on the amphibole bearing rocks and the so-called undifferentiated gneisses of the Butana, the great clay plain which sweeps eastward from Jebel Geili to the Ethiopian Jebels east of Kassala. The explanation of these plains lies in the fact that basic rocks which underlie them disintegrate more rapidly than the granite and quartzites which form occasional diversifying jebels. Feldspars in the undifferentiated gneisses also disintegrate easily.

The chemical disintegration of rocks at the earth's surface is governed by Goldich's Reaction Series. This states that the minerals that crystallized at the highest temperatures, under the most anhydrous conditions, are more readily weathered than those that crystallized last from the lower temperature more aqueous magmas. As a general rule, therefore, the closer conditions of crystallization approximate to those prevailing at the surface of the earth, the more resistant is the mineral to weathering.

TABLE II
Relative Stability of Common Minerals based on Goldich, 1938

INCREASING STABILITY	Olivine	Calcic plagioclase
	Augite	Calc-alkali plagioclase
	Hornblende	Alkali-calcic plagioclase
	Biotite	Alkali plagioclase
	Potash feldspar	
	Muscovite	
	Quartz	

From this table it is clearly seen that hornblende-bearing rocks such as the Butana greenstones are less stable than granite which is composed often of quartz, mica (muscovite or biotite), and potash or alkali feldspar. Hence the fact that granite often forms jebels whereas the more basic rocks form the plains in the Sudan.

The weathering products of the Butana rocks are predominantly clays. These form great residual plains having been deposited on pediment surfaces or by wadis during the kharif, and to some extent by the wind during dust storms and haboobs. Viewed from the air these clays show evidence of mass movement, with a steady downward creep of wet clay from the low divides being picked out by grass bands, which grow along cracked and more fertile wetter zones. The yellowish bands are separated by patches of bare clay late in the dry season and these give a bizarre effect of zebra-like stripes. From the ground they are less conspicuous. The grass patterns are best developed a few miles east of Jebel Geili, south of the Khartoum-Kassala track.

(4) *The Metasedimentary Rocks and Meta-volcanics of the Red Sea Hills* : These rocks have been subjected to pressure and heat and as a consequence have been metamorphosed. As a result the rocks are cleaved and fractured and tend to break up along cleavage planes, as well as along joints and bedding if it has not been obliterated, giving jebels with jagged outlines. The jebels west of Port Sudan illustrate this point well.

II. AGE OF THE BASEMENT COMPLEX

Earlier I said that these rocks are old and that they are Precambrian in age in terms of the relative times scale. For the most of the Basement Complex rocks of the Sudan this is as much as we can say about age, but fortunately I have obtained three isotopic dates using the potassium-40—argon-40 method which enables us to give accurate ages in millions of years. The method depends on the phenomenon that the isotope potassium-40 decays with emission of an electron to produce argon-40. In certain minerals such as biotite the radiogenic argon is largely contained within the crystal lattice, if certain conditions are fulfilled, and with modern analytical methods the ratio K-40/Ar-40 can be determined accurately which, together with a knowledge of the decay constant, enables us to determine the age of specimen analysed. Incidentally it is the disintegration of K-40 to Ar-40 which accounts for the high proportion of argon in the atmosphere (c. 1% by volume), potassium being a common constituent of igneous and metamorphic rocks.

(1) *Sabaloka Ring Dyke and Jebel Geri Granite* : The first analysis was done on a biotite concentrate from the quartz porphyry which forms the Ring Dyke at Sabaloka, some 50 miles north of Khartoum on the main Nile. This gave an age of 540 ± 25 million years. The second was done on an amphibole from a porphyritic granite collected from Jebel Geri, 12 miles east of Asal Village, Sabaloka. This gave an age of 400 ± 40 million years. Taken at their face value both these specimens indicate a lower Palaeozoic and not a Precambrian age and that the Ring Dyke was intruded before the Jebel Geri granite. Unfortunately, this last idea runs counter to the field evidence. However, it can be explained quite simply because of the different argon retentivities of the two minerals analysed and their thermal stability.

Biotite if heated for long periods above 150° – 200° C gives up its radiogenic-argon so giving on analysis a younger date, whereas amphibole is more stable and

can be heated up to 400°C without effectively altering the age. The intrusion or emplacement of the Jebel Geri granites would have been accompanied by prolonged heating and therefore if the granite had been intruded before the Ring Dyke, the biotite from the dyke would have given up some of its radiogenic-argon and it would be impossible to obtain the age difference we have found.

The reason for the difference in ages is that the argon retentivity of amphibole is less than that of biotite and that some radiogenic-argon has escaped giving an analytical age younger than the actual age of the granite. In fact the geological history of the region and the thermal history indicate that the Jebel Geri granite was intruded before the Ring Dyke.

The date for the Ring Dyke of 540 ± 25 million years is the best one because biotite has a higher argon retentivity, the radiogenic-argon being "trapped" in the crystal lattice. Nevertheless, some argon may have escaped since Cambrian time when the body was intruded and therefore like so many potassium-argon dates it must be regarded as a minimum figure but of the correct order.

(2) *Dyke Rock near Bir Salala, Red Sea Hills* : During the University of Khartoum Red Sea Hills Expedition 1962 I collected a basalt specimen from a prominent N-S and E-W dyke swarm which cuts the gneissose basement near Bir Salala, north of Port Sudan. At the time I thought that the dyke swarm was intruded into a series of tension fractures associated with the tension system produced during the formation of the Rift Valley in the Red Sea during the Tertiary. However, a "whole rock analysis" gave an age of 740 ± 80 million years, well and truly a Precambrian age considering that the method provides minimum dates.

The rough parallelism of the N-S system and the trend of the Rift Valley in this area may well be evidence of the antiquity of the Rift System a point put forward by Dixey (1956) for Nyasaland, etc.

Since the dyke cuts a whole series of Basement Rocks in the area it provides a minimum age for many of the formations of the Red Sea Hills.

Much more could be said on the geology of the Basement Complex because these are the rocks which contain minerals such as gold, manganese, copper, iron, mica, and other minerals and products of economic value.

The rocks and scenic types we have to deal with next are mainly sedimentary and volcanic. They differ from the Basement Rocks in that they are in general well bedded and flat-lying which imparts a basic tabular plan to the land forms which develop on them.

III. NAWA FORMATION AND THE PALAEOZOIC SANDSTONES

Together these two formations occupy only 0.33% of the surface area of the Sudan and as such are relatively unimportant. The Nawa Beds occur near the bend of the railway line to El Obeid, at Rahad, on the Khor Abu Habi and are mainly known from boreholes. Their age is uncertain. The Palaeozoic Sandstones occur mainly in the north-west along the Chad-Sudan frontier and at Jebel Uweinat. Plant fossils such as *Archaeocalamites* and *Archaeolepidodendron* which indicate a Lower Carboniferous age (c. 310 million years).

The petroleum prospects of this formation were considered by the Shell-BP Expedition which studied the north-western Sudan in 1959. They are continental deposits which pinch out between the Nubian Sandstone formation and the Basement Complex eastwards into the Sudan and have very low petroleum possibilities. More recently they have been studied jointly by French and Italian

petroleum geologists who visited Jebel Uweinat (Burolet 1963) and neighbouring parts of the Sudan and concluded that the Carboniferous sediments have been intruded by post-Carboniferous ring complex granites. If this is correct then the petroleum prospects are reduced even further because of possible fractionation effects.

IV. NUBIAN SANDSTONE FORMATION

The Nubian formation consists of conglomerates, grit, sandstones, sandy mudstones, and mudstones. It is usually flat-lying or gently dipping. Often it is reddish brown to yellowish in colour and in the morning or evening light gives rise to pleasant scenery especially along the banks of the Nile. The jebels at Umm Ali north of Shendi which sweep down to the Nile are particularly pleasing in the evening light.

The Nubian rests unconformably on the Basement Complex rocks over much of the Sudan. The unconformity is particularly well displayed on Jebel Rauwiyān, at the entrance to the Sabaloka Gorge and on Jebel Firka and Jebel Ali Barsi north of Dongola.

The Nubian Sandstone is used in many of the Meroitic Temples at Musawwarat, Naga, Bagrawiya Meroe, etc. and is perhaps seen at its best in the Lion Temple at Naga or the Pyramids at Bagrawiya. Abu Simbel is also carved out of Nubian Sandstone. Modern use of Nubian Sandstone can be seen in the Mosque in the Suq, Khartoum, the Anglican Cathedral and in the cornerstones, window sills, etc. of Gordon College.

The Nubian formation and its water supply problems are now being studied by two research students from the Department of Geology because it is one of the most important aquifers in the Northern Sudan. Many nomads with their flocks and herds, as well as many towns and villages, depend for their water supplies on wells sunk in the Nubian formation.

V. YIROL BEDS AND HUDI CHERT

These two formations are of limited extent occupying 0.46% of the surface area of the Sudan. The Yirol Beds outcrop at Yirol only, north-west of Juba; and the Hudi takes its name from Hudi Station, east of Atbara. The Hudi consists mainly of chert and contains snail fossils which indicate an Oligocene or Lower Tertiary age. It contains pretty banded rocks, agates, which when cut and polished could be used as ornamental stones in bracelets, rings, etc. Finds at the Sun Temple at Bagrawiya Meroe, and elsewhere, indicate that the Meroitic peoples appreciated their qualities for jewellery.

VI. TERTIARY LAVAS

There are eight main outcrops of volcanic rocks :—Jebel Marra and Meidob areas; Gedaref-Gallabat area; South-eastern Sudan, east of Pibor Post and Kapoeta; Jebel Nakhura and the Bayuda Volcanic field in the Bend of the Nile between Atbara and Kareima; scattered outcrops near Arbain, west of Dongola; Khor Langeb area, north of Kassala; Khor Shenab area on the Red Sea Coast; Fareig Volcanics north of Dongola, along the banks of the Nile. Despite the widespread distribution, however, they only occupy 1.4% of the surface area of the country.

The Khor Langeb outcrops are the northernmost extension of the great lava sheets and shield volcanoes of Eritrea and Ethiopia, and the outcrops of volcanic

rocks east of Kapoeta, Pibor Post, and Gedaref also belong to this great volcanic plateau. In Ethiopia in places these lavas are more than 10,000 ft. thick and were extruded at the time of the formation of the Rift Valley. In the Sudan they are much thinner. Although marked on the map as Tertiary volcanics, not all of them are of this age. I have had a "whole rock" potassium-argon analysis done on basalts from the Fareig volcanics for instance which are intruded into the Nubian Sandstone at the small bend of the Nile at Fareig, north of Dongola. This turned out to be 88 ± 8 million years, i.e. Upper Cretaceous, not Tertiary.

Another potassium-argon analysis was obtained for a basaltic rock intruded into so-called "Tertiary or Miocene" Sediments at Khor Shenab, Port Sudan. This gave a minimum age of 148 ± 30 million years, i.e. a Late Jurassic age. The basalt forms part of a series of flows and sills interbedded with and intruded into the Red Sea clastic facies and therefore these rocks must be older than Late Jurassic at this locality. This result was startling because the rock analysed occurs at the foot of the Red Sea Escarpment and alters much of the current views concerning the date and origin of the Rift Valley Structures of the Red Sea. These potassium-argon dates are of economic value as well as academic interest because the occurrence of Jurassic basalt in the Red Sea area intruded into the clastic facies extends the geological history of the region by some 70 million years. This is extremely important from a petroleum point of view as it indicates more petroleum possibilities.

Some of the Bayuda Volcanics in the Bend of the Nile are probably younger than Tertiary, if we are to judge by the freshness of many of the land forms. Some of the lava flows may even be Recent.

VII. UMM RUWABA DEPOSITS

The Umm Ruwaba deposits occupy 9.42% of the surface area of the Sudan. They take their name from the town of Umm Ruwaba on the Kosti - El Obeid railway line. The outcrops form two great lobes extending northwards down the Nile Valley from Juba with two extensions on either side of the Nuba Mountains. An isolated basin occupied by Umm Ruwaba has been mapped on the Blue Nile. The deposits consist of sands, clayey sands, and clays and are known mainly from boreholes. Presumably they underlie the Sudd Region and were probably laid down as proto-Nile deposits which accumulated in this great subsiding area, which was even then perhaps, occupied by lakes and marshes.

VIII. COASTAL DEPOSITS OF THE RED SEA MARGIN

The accepted view is that the Red Sea was formed in mid-Tertiary time, probably during the Oligocene, and that the Coastal Plain Sediments have been accumulating since then. From what I have said already concerning the potassium-argon dates on rocks from Khor Shenab and Bir Salala this view will have to be modified considerably. The Red Sea forms part of the Rift Valley System which on the land runs from Syria to the mouth of the Zambezi—1/6th of the circumference of the earth. Whether the escarpments which form the eastern side of the Red Sea Hills in the Sudan are fault scarps is doubted now. Tertiary and Basement Complex contact is an unconformity and no continuous faults are known on the land from either the Basement Complex areas or the Tertiary rocks. Our gravity results support this idea. It appears then that the Rift Valley faults must follow the central depression of the Red Sea and that we are dealing with fault line scarps of great age which have receded landwards with parallel subsiding "geosynclinal" troughs developing over the shoulders of the fault blocks.

That the escarpment is of great age is supported by the occurrence of well developed erosion surfaces along the Red Sea Escarpment and in the hills.

The Coastal Plain sediments are of two main types :—

(1) Terrigenous clastics including sands, gravels, conglomerates derived by erosion of the Basement Complex of the Red Sea Hills. These deposits were swept seaward by wadi systems much as they are today. (2) Calcareous facies formed in the warm waters of the Red Sea by the action of organisms such as corals, algae, molluscs, etc. and physico-chemical precipitates formed directly from sea water, mainly in lagoons such as limestones, gypsum and salt.

These facies intertongued and/or interdigitated more or less as they do at the present. Occasionally marine influence extended landwards and the clastic deposits extended seawards. The occurrence of intertonguing deposits of this type is important for the accumulation of petroleum, especially since these rocks are faulted and folded. In fact the Red Sea Coastal Plain together with the off-shore belt constitute a potential petroleum province.

This brings me to the end of this general account of the geology of the solid rocks.

IX. SUPERFICIAL ROCKS

I refer finally, and only briefly, to these deposits but this is not to detract from their importance, imparting as they do the characteristic features of the land between the jebels and often forming the agricultural and pastoral areas.

Under the varying influence of climate, rocks weather and decay to produce a variety of products. These are generally referred to as Superficial Deposits or Drifts.

In the Sudan they comprise the following main groups : Laterite or Iron Rich Soils of the South, especially along the Nile - Congo Divide ; Butana Clays ; Nile Silts, Gezira "Clays," and other riverain deposits ; the Hamada or Stone Desert ; the Sand Dunes and Sand Sheets ; and the Goz, or Fixed Dunes.

A RE-ESTIMATION OF THE NOMADIC POPULATION OF THE SIX NORTHERN PROVINCES

by

ROUSHDI A. HENIN

The 1955/6 Population Census Final Report shows that the nomadic population amounts to 18.8% of the total population of the six northern provinces.¹ This figure underestimates the nomadic part of the population at the time of the census. This is because, for enumeration by sampling, various enumeration techniques were used ; and when it came to the stage of analysis the mode of life of any given population was determined by the enumeration technique which had been used in that instance.² However, a good part of the nomadic population was enumerated at the time of the year when they were settled in their headquarters (Dars). A "settled" enumeration technique was therefore used and thus at the analysis stage they were considered as settled. In other words only that part of the population that was enumerated under the nomadic enumeration technique was considered as nomadic in the final report, while other nomads who were enumerated at the time of the year when they were congregated around wells or temporarily settled in scattered huts, or in their fields during the cultivation season escaped being classified as nomads.

I describe below the procedure used in the re-estimation. In view of the difficulty of relating to each other data from different sources, in a number of cases decisions had to be arbitrary, and averages had to be taken. But the resulting figures give a more realistic picture of the situation. I did not apply the procedure to the three southern provinces, where it is difficult to find a good working definition of nomadism.

Appendix 4.30 of Volume 2 of the Census Methods Report, which shows the movements of tribes ; Appendix 4.20 which shows the enumeration techniques used ; and finally the names given to census groups by the Census Office, were used for this purpose. The last source needs a little explanation. All homogeneous nomadic omodias of one census area were grouped together by the Census Office, at the production of the frame stage, and called a "Nomadic Omodias" group. Thus I have considered the total number of persons in such a group as nomadic after confirmation with Appendices 4.20 and 4.30. With groups called "Compound Omodias" by the Census Office, or where the Census Area in question was not divided into homogeneous groups but was called "Whole Census Area," I have made reference to Appendices 4.20 and 4.30, as well as the Final Report Tables showing the *tribal* composition of the Census Area, in order to determine whether the tribes in the area are nomadic or not. Where the figures in Tables 1.6 and 1.7 of the Final Report, which show the breakdown of the Census Area populations by mode of life, were more or less in agreement with Appendices 4.20 and 4.30, these figures were accepted.

I have used this procedure for each census area in the six northern provinces.

¹ *First Population Census of Sudan 1955/56*, Final Report, Vol. 1, Table 1.5, p. 5, which shows mode of life by province and whole country.

² For a full account of the enumeration techniques used see *First Population Census of Sudan, 1955/56*, A Methods Report, Vol. 1. Department of Statistics (Khartoum, 1960).

The resulting summary by province is shown below.

Province	Total Population (000)	Total Nomads (Table 1.4) (000)	Percentage of Total	Total Nomads (Corrected) (000)	Percentage of Total (Corrected)
(1)	(2)	(3)	(4)	(5)	(6)
Blue Nile ..	2,070	124	6.0	337	16.2
Darfur ..	1,329	266	20.0	691	51.9
Kassala ..	941	502	53.3	551	58.6
Khartoum ..	505	53	10.6	81	16.0
Kordofan ..	1,762	394	22.3	493	27.9
Northern ..	873	67	7.7	238	27.3
Total ..	7,480	1,406	18.8	2,391	30.6

In other words it can be said that the nomadic population of the six northern provinces is about 31%, as compared with the Census estimate of about 19%.

Lack of space prevents the production here of the detailed calculations. These will be shown in a later publication. However, two examples are shown in the following appendix.

APPENDIX

METHOD OF CORRECTING DATA ON MODE OF LIFE

Census Area 244—Rufa'a. Appendix 4.30 does not show any concrete information about tribal movements in this area. There is on the other hand a census group (2441 Nomadic Omodias) with a total population of 5.3 thousand persons.

Appendix 4.20, however, shows that the enumeration techniques used were as follows :—

<i>Techniques used</i>						<i>Number of persons enumerated</i>
2 scattered tukls	..	..	..	..	..	2,004
3 nomadic	..	..	..	..	..	237
4.1 village-nomadic	..	..	..	..	..	218
4.2 village scattered tukls	..	..	..	..	..	1,093
4.5 large villages	..	..	..	..	..	9,997
Total	..	..	..	..	..	13,549

The scattered tukls technique was meant to be used in census areas which represent a certain type of mode of life that prevails in the three southern provinces, as well as in the Nuba Mountains. Resort to this enumeration technique was made in other areas where the population was temporarily settled at the time of the census, but were otherwise nomadic for the rest of the year.

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If we add up the first four categories we arrive at a total of 3.6 thousand out of a total of 13.6 thousand enumerated persons, or about 26.5%¹ of the rural population. This percentage could be considered as nomadic or semi-nomadic. The rural population amounted to 181.072 thousands, and 26.5% of that is about 48 thousand persons. The average of the low estimate of 5.3 thousand and the high estimate of 48.0 thousand will be taken, i.e. 26.5 thousand.

Census Area 732—Northern Jebels West. Appendix 4.30 states: "Hawazma and Rawaga from Jebels District move to Dar Bedeiriya from July–October. Hawazma and Shenabla often camp outside Bedeiriya villages."

In this census area I have taken what were called "Hawazma Omodias," with a population of 45,005 persons, as representing the nomadic and semi-nomadic population in this census area.

As regards the enumeration technique used in the census area it was as follows :

<i>Techniques used</i>					<i>Number of persons enumerated</i>
2 scattered tukls	..	..	..	..	8,120
3 nomadic	..	..	..	..	1,136
4.3 scattered tukls nomadic	..	..	..	..	1,077
					} 2,213
Total	..	..	..	..	10,333

The Nuba themselves live in scattered tukls and were enumerated legitimately under that technique. Those enumerated under the nomadic or semi-nomadic techniques were about 21.5% of persons enumerated, i.e. a nomadic population of about 28,000 persons. The scattered tukls nomadic technique was used for part of the Arab Omodias in this census area, out of convenience, presumably when the Hawazama were settled cultivating. The average for the two estimates is 1/2 (28,000+45,000)=36,500 persons.

¹ Sampling was used in rural areas. Different raising factors were calculated and used for arriving at the *total* population. For our present purpose it is assumed that the total nomadic population in a census area holds the same proportion to the total population of a census area, as that of the sampled nomadic population to the total number of persons enumerated in the sample.

A NOTE ON THE POLITICAL PRISONERS OF WADI HALFA

by

HASAN DAFALLA

In 1908 Halfa was chosen on grounds of its isolation from the Sudan and Egypt as an ideal place for the exile and custody of the big Mahdist political prisoners, who were originally important Emirs or prominent leaders during the reign of the Khalifa. The story of these unfortunate heroes is briefly the following.

After the defeat of Nijumi at Toski in 1889 all captives were taken to Cairo as war prisoners. In 1893 a special prison was built for them at Rosetta, where they were sent to spend their unspecified terms of confinement. When the battle of Nikheila was fought on 8th April 1898 Emir Maḥmud Aḥmed surrendered with a large number of his men including his own brothers and were sent to join the Toski prisoners via Wadi Halfa. At that time it was decided to build another prison at Damietta for the detention of important prisoners and Mahdist leaders who might fall alive into the hands of the conquerors during the progress of advance to Omdurman. When the battle of Omdurman was over a big group of gallant Emirs and important personalities, mostly of Ta'aisha and Danagla origin, were captured and deported under military guard to the Nile Delta via Suakin. 'Uthman Digna fled and lived under disguise at hides in Goz Rejeb and Tokar, and it was not until 19th January 1900 that he was discovered and arrested. He was sent via the Red Sea to Damietta.

Until 1908 the survivors of these dignitaries included the following : 'Uthman Digna, 'Ali 'Abd el Karim, Isma'il Aḥmed with his wife Mastura, his son Muḥammad and daughter Safia ; Muḥammad el Maḥdi Aḥmed with his wife Safia and daughters Halima, Faṭma and Sakina ; Ibrahim Malik, who was sixty years old, with his daughters Ma'rufa, Zahra, Faṭma and his son 'Abbas ; 'Abd el Bagi el Wakil, who was sixty-five, with his wife Faṭma and daughter Zahra and his son Bagadi ; Muḥammad Aḥmed el Helu, who was twenty-eight, with his Shilluk wife El Karim Yenenu and sons Ya'ghub and 'Ali and daughters Amna and Nur el Sham. The rest were Khatir Ḥamda, 'Ali Farfar who was the agent of Zaki Tamal, Hilba El Maḥsun, Ibrahim Malik, Ibrahim Mukhayar, Ya'gub Abu Zeinab, the famous Yunis Wad el Digeim, 'Ali el Sheikh Sa'id, Muḥammad el Zaki, Ibrahim el Turgumawi, El Khatim Musa, Faḍl el Ḥusna, 'Awaḍ Abu el Gaṣim, Muḥammad Faḍlalla, Sharif Adim 'Abd el Raḥman and Kor Nadok.

These unfortunate heroes remained in the Delta prisons up to 1908, exposed to most undeserving ill-treatment and hardship ; and the damp weather of the Mediterranean to which they were not accustomed injuriously affected the state of their health so much that many of their colleagues, including Amir Maḥmud Aḥmed, died of chest disease.

On 22nd March 1908 the convicts of Damietta submitted petitions to the Intelligence Department and to Slatin Pasha who was occupying the post of Inspector General of the Sudan in Cairo requesting their return home. The petitions complained that the damp and sticky weather of Damietta had caused many deaths among them and had considerably damaged the health of those who remained alive. The Intelligence Department, evidently disturbed by those petitions, enquired

about the instigator of the discontent. Eventually it was known that they were drafted in the handwriting of Ahmed Wad Helu and that the two brothers of Emir Mahmud Ahmed were the dictators of the complaint, and they were determined to send in petitions every two weeks.

In the same month a certain Mr Brailsford, a leading member of the British Liberal Party, paid a visit to the Delta prisons and had an interview with 'Uthman Digna. Their pathetic condition required no proof and he was extremely upset by what he saw and heard. He expressed his displeasure to the British authorities for the way they were treating the captives and requested that they should be fairly and kindly dealt with. This remark had caused distress and anxiety to the British administrators.

On his return to London Mr Brailsford wrote a critical article in his paper and submitted a report to the War Office. Soon afterwards the Egyptian press became particularly attracted, and articles appeared in *El Ahrām*, *El Minbar*, *El Lewa* and *El Mu'ayyad* in support of Brailsford's views. The famous Hussein Heikal, the editor of *El Siyasa*, the organ of the Liberal constitutional party, had published a strongly-worded leading article, under the title "Mercy is above Justice—'Uthman Digna the eternal prisoner," in which he described the treatment of the convicts as most inhuman. Heikal had also stated that the deportees were not actually prisoners but were the dignitaries of their own country and that what they had done in no way exceeded the limits of the sacred right of defence against foreign invasion. He ended his article with an appeal to the British authorities for their immediate release and safe return home.

This breathing of Mr Brailsford, and the high positive feeling it aroused in the Egyptian press, had frightened the British authorities in Cairo and led them to believe that another public scandal of the magnitude of Denshiwai would spring up out of the case of the deportees. After careful investigation it was decided to remove them to Halfa. A decision was then taken to send them in small successive batches to their new banishment. The last group arrived on 13th April 1908; 'Uthman Digna followed in December.

They were then divided in accordance with their political importance. The first grade included the big leaders who were placed under special careful custody in Fort No. 4 and they were not allowed to leave their cells except once a day at noon. These were 'Uthman Digna and 'Ali 'Abd el Karim. Group (B) were also kept in Fort No. 4 and were granted a piece of land east of the railway workshops which they were allowed to cultivate. They were forbidden to make any contacts with the inhabitants. This group was composed of the elderly Ansar like Muhammad el Zaki, Ibrahim el Turgumawi, El Khatim Musa, Hilba el Mahsun, 'Ali Farfar, Faḍl el Husna, Yunis el Digeim, Ibrahim Malik and 'Abd el Bagi el Wakil. Group (C) were the young captives who were put under light surveillance which in most cases did not go beyond the limits of restricted residence. They lived in the old camel corps lines and were allowed to move freely in the town and establish businesses in the market. Some of them were employed in the railway workshops. This number included Isma'il and Muḥammad el Mahdi, the brothers of Mahmud, Ahmed el Helu, 'Awad Abu el Gaṣim, Muḥammad Faḍlalla, Sharif Adim 'Abd el Raḥman and Kor Nadok.

After the lapse of some years the Sudan Government changed their attitude towards these captives and decided to take constructive steps with a view of restoring them to their normal position in the new Sudanese society. Those of them who had

agricultural training at the experimental farm in Miet Dieba in Egypt were appointed in the Department of Agriculture, and many others were recruited as artisans in the railway workshops. Moreover a number of them were allowed to live under restricted residence at home in Omdurman, Wad Medani, Gedaref, Jebelein, Sinja and Kost. By December 1917 only four of them remained in Halfa; their release was held to have been dangerous for security at that time. These unfortunates were 'Uthman Digna, 'Ali Abd el Karim, 'Awaḍ Abu el Gaṣim and Muḥammad Aḥmed Helu.

After a short period, 'Awaḍ Abu el Gaṣim and Muḥammad Aḥmed Helu were allowed to leave Halfa and live under supervision in their homes; thus leaving 'Uthman Digna and 'Ali 'Abd el Karim who were destined to remain for life in this town. The latter was a millenarian whose mind was unbalanced.

In 1923 'Uthman Digna tendered a petition to the authorities requesting permission to go on pilgrimage to Mecca, but his noble wish was denied and his appeal was summarily dismissed. The news leaked out and was flared by Reuter. It found a place in the British Liberal press and one of the Liberal M.P.s directed a question in Parliament to Under-Secretary for Foreign Affairs about the dismissal of 'Uthman Digna's request to visit the Holy Land. The Under-Secretary denied that 'Uthman Digna had submitted such a request or expressed any such a wish, and assured the members that he was leading a calm and happy life in his exile and that he was contented and satisfied. The Liberal papers sharply criticized the untruthful reply, and demanded that the matter should be carefully investigated and the injustice removed.

No doubt the press commentary had embarrassed the British Government, who to cover their situation had instructed the Sudan authorities to meet Digna's request. In 1924 he was reluctantly allowed to proceed to Mecca. Eventually he went, paid tribute to his creator, and came back to Wadi Halfa. On his return, he was allotted a small house next door to the police station where he spent the rest of his life, fasting all day, contented with little food and little milk at night, devoting all his time in prayer and worship until he passed away peacefully at night on 7th December 1927. After a calm and quiet funeral procession he was buried in the cemetery of Sidi Ibrahim.

Thus ended the life of the greatest hero ever known in the history of the Sudan and one of the most courageous and daring fighters of the 19th century, the leader of the "Fuzzy-Wuzzies," the warrior who won five battles and defeated the Empire troops at Tokar, Sinkat, Aldeb, Handoub and Tamai. His heroism, valour and tact had attracted world-wide appreciation of the historians and Churchill spoke about him in glamorous praise.

After the death of 'Uthman Digna, 'Ali 'Abd el Karim was left alone with his family living at El Geiger cultivating his small piece of land and harvesting the yield of his date trees until he died.

It should be recorded here that in spite of their captivity and seclusion, these gallant prisoners were kindly treated by the inhabitants, and those of them who were allowed to mix with the natives left many friends behind, who still hold good memories of them. Although the great history behind 'Uthman Digna was unknown to the common folk of Halfa town, yet he was generally held to have been a saint and many legends were woven around him.

THE CUSTOM OF PLACING PEBBLES ON NUBIAN GRAVES

by

M. W. CAVENDISH

When the explorer Burckhardt visited Sudanese Nubia in 1813, he was struck by the fact that the inhabitants, practising Muslims of a not very orthodox type, decorated their graves with piles of small stones, or quartz pebbles. He says : "The Nubians place an earthen vessel by the side of every grave, which they fill with water the moment the deceased is interred, and leave it there ; the grave itself is covered with small pebbles of various colours, and two large palm leaves are stuck into the ground at either extremity, the symbol of victory thus becoming, in Nubia, the symbol of death."¹

The practice does not cease with Nubia, but extends further south along the Nile. At Um Dawud, east of Atbara, Burckhardt commented : "According to the Nubian custom, the graves were covered with pebbles of white quartz, and a pole was stuck down at each end."² Still further south, towards Damer, he remarked : "At a short distance from the hamlets, we came to a great number of new tombstones, in the desert, the melancholy proofs of the terrible ravages of smallpox. According to the Nubian custom, which I had already observed in the Bera'bera country, every tomb was covered with pieces of white pebbles, and pieces of quartz."³

At Damer itself, he observed the pebbles, in this case all white, being used in the funeral ritual. "One afternoon, while crying my beads for sale, I was accosted by a Faky, who asked me if I could read. . . . I found a great number of people collected to celebrate the memory of some relative lately deceased. Several Fakys were reading the Koran in a low tone of voice. A great Faky afterwards came in, whose arrival was the sign for reciting the Koran in loud songs, in the manner customary in the east. This was continued for about half an hour, until dinner was brought in, which was plentiful, as a cow had been killed upon the occasion. After a hasty meal, we recommenced our reading. One of the Shikhs produced a basket full of white pebbles, over which several prayers were read. These pebbles were destined to be strewed over the tomb of the deceased in the manner which I had often observed upon tombs freshly made. Upon my enquiries concerning the custom, which I confessed to have never before seen practised in any Mohammedan country, the Faky answered that it was a mere meritorious action, that there was no absolute necessity for it, but that it was thought that the soul of the deceased, when hereafter visiting the tomb, might be glad to find these pebbles, in order to use them as beads in addressing its prayers to the Creator."⁴

Numerous graves similar to those apparent in Burckhardt's time are being submerged by the rising waters of the Aswan Dam reservoir (Figure 1). Passers-by may note that the graves are directed to the South, the deceased having been laid on his right side with the face towards Mecca. At either end of the grave is a mark, usually of metal or stone, and between these marks is a mound which is covered with

¹ J. L. Burckhardt, *Travels in Nubia* (London, 1819), p. 35.

² *Ibid.*, p. 377.

³ *Ibid.*, pp. 263-4.

⁴ *Ibid.*, p. 269.

white pebbles. Palm branches are stuck in the ground at the head and foot, or laid over the grave. An interesting detail is the function of water, which is held in an open bowl at the head of the grave, with usually a tin can or another form of dipper placed beside. This water is to be poured over the white pebbles, in the form of a libation, while he who pours recites phrases of the Koran. Another interesting feature is that green plants of local dura grain are nurtured at the head of the grave. A vital fact, as was elucidated to us by the people of Mugaffil in the Omodiya and Sheikhship of Saras, is that there should be some wet thing near the grave.



FIGURE 1

Nubian grave from Omodiya Duweishat, Sheikhship Duweishat, Hillet Ushair

The men of Mugaffil, when explaining their grave customs in December 1964 squatted upon the ground and with practised agility prepared a model of the Nubian grave which was about 6 inches long (Figure 2). I was reminded of a further note of Burckhardt, in much the same area of Nubia, where he observed a mode of extracting small presents from the traveller, which was in use among the local guides: "They alight at certain spots in the mountain Akabet el Benat . . . and beg a present. If it is refused, they collect a heap of sand and mould it into the form of a diminutive

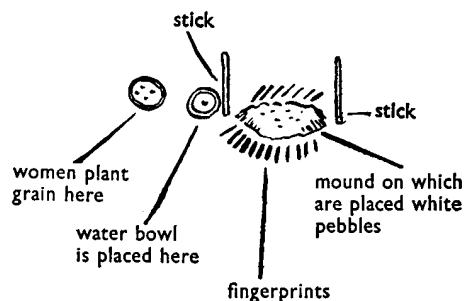


FIGURE 2

Model grave made in Omodiya Saras, Sheikhship Saras-Tahali, Hillet Mugaffil

tomb, and then placing a stone at each of its extremities, they apprise the traveller that his tomb is made, meaning that henceforward, there will be no security for him in this rocky wilderness. Most persons pay a trifling contribution rather than have their graves made before their eyes."¹

There was no evidence among the men of Mugaffil, however, that they had any other goal in mind than scientific exactitude. Their model grave had a stick at each end which represented the required mark. Beyond the stick at the south end of the grave they made two circles with the fingertip. That nearest the mark depicted the water bowl, and that just beyond it, the grain. Water, they said, was poured on the grave the first fifteen days after the interment. Also during the Eid period, after Ramadan, people came to the grave and poured water, reciting prayers from the Koran. The dura grain at the head of the grave was tended five days and then died, as no more water was poured on it. Palm branches were added at the Eid.

The men of Mugaffil had an explanation for the pebbles which differed slightly from that told to Burckhardt at Damer. The pebbles were used as prayer counters, not by the deceased, but by relatives of the deceased. There were exactly 1,000 pebbles, no more, no less. At the funeral, the pebbles were put on one at a time, and for each pebble it was necessary to say, "There is no god but God and Muhammad is the Prophet of God." People said this 1,000 times in all, and went away. At the feast of the Eid the people returned and sat round the grave, encircling the grave with finger strokes in the sand, side by side, until the grave was surrounded by tiny rays. For each finger stroke they repeated, "There is no god but God and Muhammad is his Prophet," so that each stroke, in the same manner as each white pebble, represented a prayer. After having finished the separate fingerprints, they encircled these in turn by one finger trail, made by someone repeating, "There is no god but God," once. After this they took water in the water pouter which had been left at the head of the grave, and poured it over the mark which had been placed at the foot.

Another habit, which they performed at the Eid, was that the children were given some dura, popped to resemble pop-corn, in a handkerchief, one handkerchief full to each child. These handkerchiefs they took to the grave. One child laid a long sheet on the tomb, over the top of the white pebbles, and the sheet was covered with the popped grain. Then all the children sat round the grave and ate up the grain. If a woman had lost her husband, she was kept in the house for forty days. Then she went to the grave of her husband taking dura, and gave it to some people to eat near the grave, during which such activity she sat and wept. After this she returned home.

Further south in Nubia, in the Omodiya of Duweishat, Sheikhship Ambukol, in the village of Engasi, people also take dura wheat to the grave and give it to the children to eat, though others may also partake. The customs at the Eid are much the same. Fresh palm branches are put on the grave, but not fresh pebbles. There are, however, new details concerning the pebbles. They are never put upon the graves of children, nor is the ritual with the fingerprints carried out over children's graves. The reason for this is that both the white pebbles and the fingerprints represent prayers for the forgiveness of sins, and children have no sins for which to ask forgiveness. Also, although 1,000 white pebbles are still selected and each

¹ J. L. Burckhardt, *Travels in Nubia* (London, 1819), p. 47.

pebble still represents a prayer, the prayers are not said when the pebbles are put on the grave, but rather in the home of the deceased. They bring the stones to the house, make sure there are 1,000 and begin saying prayers on the seventh day after the death. Two or three days must elapse after this seventh day before the pebbles are taken out and poured on the grave. No prayers are said then. In the Sheikship of Melik el Nasr and the village of Hawata also in Duweishat, the practice is the same, except that children carry grain to the grave in wooden bowls about a foot in diameter.

Certain features emerge from the Nubian practices. Specially selected stones, usually quartz, are prayed over and put on the grave, over the body of the deceased. Water is poured over them and grain is made to grow, either directly, in the form of actual grain planted at the grave, or indirectly, in the form of giving its growth to the children who eat it off the top of the grave, above the quartz stones.

This custom is not found in other parts of the Muslim world. It may, however, be traced in one form or another further north and south along the Nile. In Egyptian Nubia pebbles are still placed upon graves, though they are not so common there as in the Sudan. Dr Jane Philips of Howard University can remember them only at Dahmit, south of Aswan, where they are found on some graves but by no means on all, at Seiyala, and at the holy mountain of Gurni. In these places a ritual of pebble putting is observed which is somewhat similar to that which we have already described in the Sudan. The explanation offered to Dr Philips in Egyptian Nubia was, however, that this ritual was the same as throwing stones at Arafat in Mecca, at the end of the pilgrimage.

Amelia Edwards, who travelled up the Nile in 1888, comments on a graveyard at Derr: "All (graves) were alike nameless, some, more cared for than the rest, were bordered with large stones and filled in with variegated pebbles. One or two were fenced about with a mud wall. All had a bowl of baked clay at the head. Wherever we saw a burial ground in Nubia, we saw these bowls upon the grave. The mourners, they told us, mourn here for the first forty days; during which they come every Friday and fill the bowl with fresh water that the birds may drink from it."¹ She does not mention the water being used for libation over the pebbles. Professor Emery, however, in his book *Nubian Treasure*, does mention libation, and that of an unusual kind: "All the modern Nubians are strict Mohammedans, but still retain in their burial customs many survivals of pagan times. This particularly applies to food and offerings to the dead, and at the foot of all well-kept Nubian graves one will find pottery vessels to contain food and water just as we find in the graves of the C-Group people of Nubia (2270-2600 B.C.). I have seen many Nubian women, on receiving compensation from Egyptian officials, buying cheap Greek wine from travelling merchants and pouring it over their family graves! This practice was, I must add, not encouraged by their men-folks."²

Above Nubia, the custom of placing white pebbles and water on the grave was noted by Burckhardt at Berber, Damer and Atbara, as mentioned before. However, it may be found even further south along the Nile. In the village of Gazara the use of

¹ Amelia B. Edwards, *A Thousand Miles up the Nile* (London, 1888), pp. 254-5.

² W. B. Emery, *Nubian Treasure* (London and Southampton, 1948), p. 17. It is unlikely that the pottery vessels which Emery observed were at the foot rather than at the head. Further, objects placed on a grave cannot be allied with those placed inside a grave, except with the utmost care. However, Dr Philips supports Emery's observation that in Egyptian Nubia, food as well as water is left on the graves.

quartz pebbles sprinkled on top of the grave still prevails.¹ There no longer need be a thousand. The grave itself is made of mud, and water is mixed with soil to shape it into a peak running lengthwise. Soil is poured on top of the closed grave to make a mound. Pieces of white quartz are put on top of this soil. The water left over from making the mud has been kept aside, and is poured over the stones. The reason given for this act is that the water must not be wasted. The pebbles themselves have no meaning, and need not be put on, but usually are. No prayers are said over them, though people do come to visit the tomb, bringing with them memorized passages of the Koran. Food is no longer eaten off the top of the grave. Donations of meat from a slaughtered sheep used to be given to the poor from the house of the deceased, but in recent years gifts of cloth have been substituted for the meat.

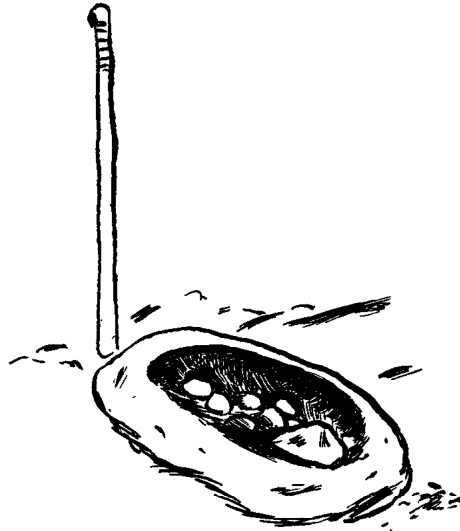


FIGURE 3

Bari grave of a rain-maker's father, showing quartz pebbles on a grindstone.
(After Seligman)

Among the Nilotic Bari the rain-maker manipulates certain objects in a ceremony for producing rain, for ensuring fertility and for banishing disease. He says a charm over these objects, such as : "Make water (come) so that it may fall, so that these people may cultivate, so that also their durra may ripen, so that these people may bear and produce and their wombs grow large."² The manipulation of the objects is closely associated with the generation of the tribe. The most important objects which the rain-maker uses are so-called "rainstones." These include large and small pebbles, and pieces of white quartz. Conical stones are male, cylindrical, female. The first step of the ceremony is to wash the stones. When they are wet,

¹ Information from Mustafa Ibrahim Taha, of the University of Khartoum.

² C. G. and B. Z. Seligman, "The Bari," *Journal of the Royal Anthropological Institute*, LVIII (London, 1928), pp. 463-5.

the rain-maker puts them on a grindstone, used for grinding wheat. Near this he slaughters an animal, and the people eat. Throughout the rain-making ritual prayers are recited to ancestral spirits. The whole ceremony is often performed at the graves of the rain-maker's ancestors. The grindstone itself, covered with pieces of white quartz, may be actually laid upon the grave.¹ The head of the grave is then marked by a stick, and the arrangement strikingly resembles some graves to be seen in Nubia (Figure 3).

Other features of Bari rain-making are strikingly similar to some aspects of the Nubian funeral: in particular the habit of pouring water over quartz stones, performed in connection with a grave, during the course of which prayers are being said. Eating may be carried out nearby, and grain evokes the notion of fecundity and generation. Among the Bari, the grindstone is put under the quartz pebbles. Among the Nubians, grain is laid over the pebbles and eaten by the children.

Perhaps the custom of placing pebbles on Nubian graves is no more than an imitation of throwing stones at Arafat in Mecca: evidence of the devotion with which Nubian Muslims pursue their faith. Yet it does not exist elsewhere in the Muslim world beyond the reaches of the Nile, it is not to be found at the Nile mouth, it is less practised in Egyptian Nubia but more in the Nubia of the Sudan; it may be associated with food and grain but it is indubitably and everywhere associated with water. Also, however much it may resemble the throwing of stones at Arafat, it also resembles a ritual among the Nilotic Bari, where the spirits of deceased ancestors are called upon to perform through the media of damp quartz stones in bringing general fecundity to the tribe.

¹ C. G. and B. Z. Seligman, "The Bari," *Journal of the Royal Anthropological Institute*, LVIII (London, 1928), pl. xlvii, fig. 4.

THE SUDAN POWER PROBLEM

by

F. DE LA C. CHARD

The demand for electricity increases continuously throughout the world without any sign of saturation. In the highly industrialized countries, a rate of growth of 10% per year corresponding to doubling of the demand in every $7\frac{1}{2}$ years has been maintained, while in developing countries higher rates of growth are realized. As reported in the *Sudan Engineering Society Journal*,¹ expansion in the Khartoum-Burri-Sennar system is at the rate of 13% per year which is roughly a doubling in every six-year period. Electricity, regarded as a commodity, suffers the great disadvantage over other manufactured products that it has to be produced at the instant of demand, so an increase in plant capacity corresponding to or at times greatly exceeding the increased demand is inevitable. Actually the peak demand grows faster than the average demand which again involves a heavy capital outlay, on plant destined to operate at a low load factor.

The Khartoum-Burri-Sennar system load forecast given in the Sudan Power Plan, which was fully realized in 1964, shows a small plant surplus in 1965-66 and an overall plant deficiency of 3.6MW in 1966-67, increasing to 22.4MW in 1968-69. This has necessitated an immediate increase in generating plant capacity which, as reported by C.E.W.A. in the journal quoted above, is being undertaken over the next two years, by the installation of 13MW of residual-oil Diesel plant at Burri and 4MW of similar plant at Wad Medani. While sets of this nature represent the cheapest type of plant per MW installed and are no doubt suitable for meeting peak load demand rapidly, they are only a palliative ; in fact by 1968 the system will again be deficient in generating capacity even allowing for increased output from Sennar due to the completion of the Roseires Dam.

Roseires itself is the major provision of new generating capacity in the years from 1968-69 onwards, commencing with one 25MW set and extending to an ultimate capacity of seven such sets. This does not, however, represent a firm capacity throughout the year of 175MW, owing to flow conditions and irrigation requirements, but it will be an appreciable addition to the system plant capacity. However, the transfer of this power to the Khartoum or Wad Medani areas necessitates a transmission line with a minimum voltage of 220kV. Such a major transmission project calls for heavy capital expenditure, on which a full return will not be realized until the ultimate generating capacity is available at Roseires. It is therefore important that this transmission project be undertaken in the most economical manner possible.

The estimated cost of the 340-mile 220kV transmission line for the single circuit line alone, excluding sub-stations but including 15% for contingencies is given as:—²

Foreign expenditure	..	£S.2.717 million
Local	„	£S.0.482 „

Customs duty on the former, estimated at 25% on the conductors and 40% on the towers, is some £S.0.950 million, assuming the cost of the transmission towers to be two thirds of the foreign expenditure. The design of the line has not been

¹ *Sudan Engineering Society Journal*, No. 9, p. 36, Item 5.

² *Project Report of Roseires Power Station and the Roseires Khartoum Transmission Line* (1964).

disclosed but if the Khartoum Sennar line and the Sennar Rabak line are any indication, it is a standard European type of line, paying no regard to local materials or conditions. If ferro-concrete towers were used, for instance, some £S.1.8 million would be transferred from the foreign to the local expenditure and further £S.700 thousand saved on Customs Duty. Concrete towers have already been used both in Sweden and Switzerland on heavy power transmission lines up to 220kV, so it would hardly be an innovation. Further, most European power lines pass over valuable land, so that even the tower footings are designed to occupy the minimum area. Long spans are used (400m or more) to give the minimum number of transmission towers but in this case the sag of the conductor is also large, which necessitates towers of great height. A line over desert country should be designed with towers of the cheapest design, permitting the use of more towers per mile with less conductor sag and requiring towers of less height. Still lower towers could be used if the conductor height at the middle of the span were reduced to the minimum ground clearance, say 3 metres instead of the usual 7.5 metres. This would necessitate fencing in the line of the towers with a high wire-mesh fence and the provision of higher towers with a crossing place at say every 5 miles. It would have to be shown that the provision of the double fence gave an appreciable saving on the cost of higher towers, but this might well be so.

It is possible that a line designed for 220kV could be operated at some higher voltage, say 275 kV during the season of no rainfall and very low humidity. As this dry season coincides with the period of greatest power availability at both Roseires and Sennar, the higher transmission voltage would enable the maximum load to be transferred with reduced loss. The economic and technical advantages of variable voltage transmission have been fully discussed elsewhere¹ and would seem particularly applicable to the Khartoum Roseires system. The upper limit of voltage is probably the corona loss—threshold voltage, which would result in increased line loss at the higher voltage, but either the increased loss would be economically justified by the ability to transmit extra non-firm power or alternatively the line could be designed by using a twin conductor, for greater loading at the higher transmission voltage without increased loss.² The advantage of having a variable transmission voltage is a matter of conjecture but it is mentioned to indicate that, in matters of power transmission, there are many unexplored possibilities which may be worthy of consideration in particular local conditions.

The future pattern of power generation and main transmission in this country is even more a matter of policy and planning. In the late 1970s, the Roseires station will no longer suffice at certain times of the year to meet the increased demand and, assuming that the Burri power station has already been fully extended, the construction of a new generating station must be undertaken. The alternatives are a major hydro-electric station at Sabaloka or a new steam power plant using residual-oil as fuel. With the uncertainty of obsolescence due to possible new sources of power and methods of electricity generation and with the high capital cost of the Sabaloka development, there can be little doubt that the thermal station will be chosen. The situation of this great new power station, of an ultimate capacity of 180MW (six 30MW sets), is far more a matter of national planning than engineering. There is always a case for having the main power station of a system at the load

¹ R. L. Chantrill, "Variable Voltage Generation Applied to A.C. Power Systems," *Proceedings I.E.E. Supply Section* (1951), Paper No. S1050.

² F. de la C. Chard, *Power System Engineering*, Cleaver-Hume (London, 1962), pp. 240-50.

centre, to avoid transmission losses, but when all the fuel for such a station has to be carried over a tenuous railway system that is already badly overloaded, the case may be less strong. Again, what is to be the future of the Three Towns? In addition to being the seat of government and the intellectual and financial capital of the country, as well as the greatest conurbation, is it also to become the biggest centre of industry? This mistake has already been made in most of the capital cities of the world and the first consideration now is decentralization of industry and siting it away from the national capital. The greatest contribution of the electric age has been to make this not only socially and economically desirable but also possible. Industrial odours already render some of the best parts of Khartoum less pleasant than they would otherwise be and a large power station on the North bank of the Blue Nile, which is the logical place to put it, would give sufficient sulphur dioxide and other noxious fumes to make the University and residential areas of the South bank untenable. What are the alternatives? Atbara is already a centre of heavy industry where further industrialization could make use of local skills and bring increased prosperity to the region; Shendi is renowned for its ancient skill in textiles. Would it not be better if these two towns should share fully in the future development of this country by becoming the Birmingham and the Manchester of the Sudan? If this is conceded then the site of the new power station is no longer Khartoum but Atbara, with an extension of the 220kV system to that town. Burri power station would then become, in the late 1970s or at the end of its period of obsolescence, a large transforming station, taking supply from Roseires and Atbara, with adequate standby generating plant for use during emergency. It may be objected that the main thermal power station at Atbara still requires the transport of fuel oil over the most vulnerable section of the Port Sudan railway line. This poses a question of purely engineering economics. Is it not more economic, in the long run, to construct an oil pipe-line from Port Sudan to Atbara and relieve the railway of fuel oil transport? A major factor here is the establishment of the oil refinery at Port Sudan and the ability to dispose of the residual product directly to a pipe-line without storage in tanks, loading into trucks and the need to transport it hundreds of miles.

Alternatively is it cheaper to transmit electricity on a high voltage line than it is to pump oil through a pipe? Both involve heavy capital cost and a running charge consisting of losses and maintenance. If the answer is in favour of electric transmission, the new power station should be sited at Port Sudan, with a 330-400 kV transmission line to Khartoum and transformer sub-stations at Atbara and Shendi. Except for the crossing of the Red Sea mountains, much of the route of this line is desert, where the special type of line construction already suggested would result in a great saving of capital cost.

The length of this line, some 420 miles, is approaching the technical limit of transmission with alternating current so with full power transmission it might be necessary to cancel a part of the line reactance by means of a series capacitor installation, in order to retain stability.¹ The extra capital cost involved might well make it an economic proposition to use high voltage direct current transmission.² This involves more expensive and complicated terminal equipment for rectification and inversion but a much simpler and cheaper transmission line, having only two conductors instead of three, reduced line loss due to the absence of line capacitance

¹ Ibid., pp. 206-7.

² Ibid., p. 268.

current and a higher corona threshold voltage. D.C. transmission is already used on some important submarine cable power links and there is little doubt that its use on the long overland power lines, intended for bulk transmission rather than interconnection, is only a matter of time.

All this goes to show how varied are the possibilities and how great the responsibility of deciding the shape of the future power system of this country. A ready-made solution, such as any responsible consultant would propose, will be safe but will leave all the more attractive possibilities unexploited and may well prove to have been misguided in the end.

A "local" solution will need far more engineering skill in experiment, trials and design. It will also involve more risk but it may make engineering history and combine the work of the social planner, the economist, the visionary and the engineer to the greatest benefit of the country.

THE SPECIES OF *PILA* RÖDING OCCURRING IN THE SUDAN

by

S. V. BELL

The genus *Pila* Röding 1798 is commonly known as *Ampullaria* Lamarck 1799, but as a result of the decision of the International Commission of Zoological Nomenclature to recognize Röding's "Museum Boltenianum" as a valid publication *Ampullaria* Lamarck becomes a junior synonym of *Pila* Röding.

The genus was first recorded in the Sudan by the early 19th-century explorers, who described it under the generic name *Ampullaria*. Subsequently the genus was reported under a variety of specific names from various localities in the Sudan. Tothill (1946 and 1948) made the most notable contribution to our knowledge of the occurrence and distribution of *Pila* in the Sudan, but unfortunately failed to provide adequate descriptions or clear illustrations.

Previous authors have erected a large number of species of *Pila* for Africa. This resulted from the haphazard method of collection of specimens by the early explorers, and their subsequent identification in Europe by palaeontologists and zoologists who had little knowledge of the populations from which these animals were taken. Many of these species are now recognized as invalid junior synonyms.

There are three species of *Pila* recorded from the Sudan: *Pila ovata* (Olivier) 1804, *Pila wernei* (Phillippi) 1851 and *Pila kordofana* (Phillippi)* 1851.

After reviewing the available literature and considering the variation shown by the specimens in the author's collection it would appear that only one species of *Pila* occurs in the Sudan, i.e. *Pila ovata* (Olivier) 1804.

Germain (1923, p. 117) included *Ampullaria kordofana* Parreyss in his synonymy of *Ampullaria ovata* Olivier and noted in discussion of the species that *Ampullaria kordofana* is the common form of *Ampullaria ovata*.

Alderson (1925, p. 94) described *Ampullaria kordofana* Parreyss as a variety of *Ampullaria ovata* Olivier and recognized that *Ampullaria ovata* Olivier, var. *kordofana* Parreyss is the common form of the species *Ampullaria ovata* Olivier. Alderson (op. cit., p. 94) noted that owing to an accident of priority in publication an insignificant variety was given the specific name *Ampullaria ovata*. The variety *kordofana* Parreyss is recorded as occurring in Upper Egypt, Lower Egypt, Nubia, Abyssinia and Central Africa. Alderson (op. cit., p. 90) states that *Ampullaria wernei* Phillippi occurs on the Bahr el Ghazal where it attains a large size, and in Darfur, where it is smaller and stunted. It was also recorded as occurring on the White Nile. Alderson (op. cit.) made no comparison between *Ampullaria wernei* and *Ampullaria ovata* but noted that it bears a resemblance to *Ampullaria gradata* Smith.

Pilsbry and Bequaert (1927, p. 175) reviewed the known species of *Pila* from Africa in their work on the aquatic molluscs from the Belgian Congo. In making reference to *Pila kordofana* (Phillippi) they observed that "this does not seem to differ very materially from *Pila wernei* (Phillippi)."

**Pila kordofana* (Phillippi) was first named *Ampullaria kordofana* by Parreyss and was described by Phillippi in 1851. The species is here attributed to Phillippi.

Tothill (1948) described a single species *Ampullaria wernei* Phillippi from the Sudan, and considered (op. cit., p. 195) that "There is no justification for maintaining *A. kordofana* Phil. as a separate species," and included it within the species *Ampullaria wernei* Phillippi. Tothill (op. cit., p. 196) also regarded *Ampullaria ovata* as being "clearly a distinct species" of which no specimens have yet been recorded from the Sudan. He stated that the species *Ampullaria wernei* Phillippi is "widely distributed in the Sudan where conditions are favourable" (op. cit.).

In a comprehensive work describing the freshwater molluscs of Uganda and adjacent territories Mandahl-Barth (1954) reduced many of the described species of *Pila* from Central Africa to the level of sub-species within the species *Pila ovata* (Olivier), but maintained *Pila wernei* (Phillippi) as a separate species. Mandahl-Barth (op. cit., p. 40) regarded *Pila kordofana* (Phillippi) as being synonymous with *Pila ovata* (Olivier) and that it represented "the normal appearance of the species."

Previous workers have obviously found it difficult to differentiate between the three species *Pila ovata*, *Pila kordofana* and *Pila wernei* and as a solution to these problems have adopted varying synonymies. The author was faced with this same problem when studying specimens of *Pila* collected from Khor Umar (lat. 15° 46' N.;

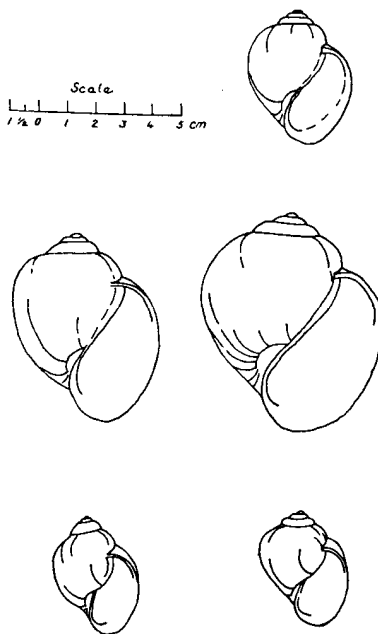


FIGURE 1

Pila ovata (Olivier) 1804

Ampullaria ovata Olivier 1804; *Voyage dans l'Empire Ottoman*, II, p. 39; Atlas, pl. 21, fig. 1.

(For a full synonymy the reader is referred to the works cited in the list of references.)

long. 32° 31' E.) and 7.5 miles East of Umm Shadida (at lat. 16° 27' N.; long. 34° 33' E.). These specimens showed a complete range of variation from a typical form resembling *Ampullaria kordofana* Phillippi to elongate forms representing *Ampullaria ovata* Olivier and giant forms showing the characteristics of *Ampullaria wernei* Phillippi. It gradually became obvious that the specimens studied belonged to a single morpho-species. Therefore in accordance with the Rules of the International Commission of Zoological Nomenclature this species must be named *Pila ovata* (Olivier) 1804, despite the fact that the trivial name *ovata* was first applied to an unusual variant from Lake Mareotis in Egypt. *Pila kordofana* (Phillippi) and *Pila wernei* (Phillippi) must therefore be regarded as junior synonyms.

Phylum : MOLLUSCA

Class : GASTEROPODA

Order : *Prosobranchia*

Family : *Pilidae*

Genus : *Pila* Röding 1798

Genotype : *Helix ampullacea* Linné, as fixed by Dall, 1904,
Journal of Conchology, vol. 11, p. 53

The shell is robust, dextral ; ovate, rounded or sub-globose. The spire is generally low and the aperture large.

Description

Shell ovate to sub-globose, typically with the spire forming approximately one quarter to one third of the height of the shell. Aperture large with thin callus developed along the columellar margin. Whorls are regularly rounded and gradually increase in size. Umbilicus open and narrow.

Discussion

The discussion of the synonymy of the species appears above.

The variation shown by this species in the Sudan is remarkable and care must be exercised in identification, and whole populations must be studied whenever possible. Specimens resembling, and in some cases exactly identical with, specimens previously described as *Pila wernei* exist in the author's collection but a gradation from *Pila wernei* through intermediate forms to *Pila ovata* can be observed when sufficient specimens are available. The variant is not common, however.

Specimens with a high spire resembling the variety on which the species was originally based are present only in small numbers.

It is possible that environment plays an important part in the development of a species such as *Pila ovata* which is capable of surviving by burying itself when the water of its normal habitat dries up. Alderson (op. cit., p. 90) noted that *Ampullaria wernei* from Darfur is stunted and suggested that the semi-arid conditions which prevail there may be responsible. Unfortunately little is known of the optimum environmental conditions of this species nor of its environmental limits. Tothill (1946, p. 182, fig. 11) has produced a map showing the limits of occurrence of the species (called *Ampullaria wernei* by Tothill) in the Sudan, but the limits of distribution are based upon inadequate data for a country the size of the Sudan.

REFERENCES

- ALDERSON, E. G. (1925). *Studies in Ampullaria* (Heffer, Cambridge).
- GERMAIN, L. (1923). *Results Scientifiques. Mollusques Terrestres et Fluviatiles*, Voyage de Guy Babault dans l'Afrique Orientale Anglaise (Paris).
- MANDAHL-BARTH, G. (1954). "The Freshwater Molluscs of Uganda and Adjacent Territories," *Annales du Musée Royal du Congo Belge* (Tervuren, Belgium); *Sciences Zoologiques*, vol. 32.
- PILSBRY, H. A. and BEQUAERT, J. (1927). "The Aquatic Molluscs of the Belgian Congo. With a Geographical and Ecological Account of Congo Malacology," *American Museum, Natural History*, vol. 53, pp. 69 to 602.
- PRASHAD, B. (1932). *Pila. The Indian Zoological Memoirs on Indian Animal Types*, IV (Lucknow).
- TOTHILL, J. D. (1946). "The Origin of the Sudan Gezira Clay Plain," *SNR*, vol. 27, pp. 153-183.
- (1948). "A Collector's Notes on the Large Land Snails of the Anglo-Egyptian Sudan," *SNR*, vol. 29, pp. 189-205.

CORRESPONDENCE

To the Editor

Sudan Notes and Records

Sir,

In an interesting note in your last issue, Mr Rehfish drew attention to the value of late 19th-century writing on the Mahdiya to the social historian, and this may well apply, not only to Fr. Rosignoli's book, *I miei dodici anni di prigionia in mezzo ai Dervisci del Sudan* (Mondovi, 1898), but even to the books published under the direct influence of Wingate, if carefully sifted. I wonder, however, whether Mr Rehfish is altogether fair to Professor Holt, who did indeed omit Rosignoli and Neufeld from his review of the source material for the Mahdiya, but whose purpose, so far as the European material was concerned, was primarily to identify Wingate's influence and to define his intentions.

In regard to Slatin's *Fire and Sword in the Sudan*, the master version is the English text published by Edward Arnold (London and New York, 1896) and the published German version (*Feuer und Schwert im Sudan*, Leipzig, 1896) is a translation of this. The original German manuscript is not known to exist, and may never have existed, other than in the form of drafts and notes. These are held in the Durham Sudan Archive. It is clear from Wingate's correspondence that he and Slatin worked together over the English text in the summer of 1895 while on leave in London (Durham Sudan Archive, box 260; R. L. Hill, *Slatin Pasha* (London, 1965), p. 39). Wingate's letter to A. P. Watt, his Literary Agent, of 8th May 1895, puts Holt's thesis that they collaborated beyond any doubt, and establishes that the original intention to publish simultaneously versions of equal authority, in German and English, was abandoned at about this time. Wingate's editorial method can be studied more closely in the case of Ohrwalder's book, for which he used the English translation by a Syrian official in Cairo, Yusuf Qudsi (*Ten Years' Captivity in the Mahdi's Camp* (London, 1892), preface, p. iv). This version, together with Wingate's working papers, survives among the Wingate papers at Durham (Sudan Archive, 228); apart from minor variations, the published version is a true paraphrase of the original translation, but loss of spontaneity and other changes of tone and manner bear out strongly the argument that the book as published is a work of propaganda. Wingate claimed to use "the language of simple narration" (preface, loc. cit.), but we can now see that it was the formal language of the English official class. Rosignoli's account was in course of translation by Wingate when Slatin escaped (Durham, pp. 178-9), and Wingate was then already negotiating for its publication (ibid., p. 259), but, because of the greater propaganda value of Slatin's material, and of the natural sympathy between Wingate and Slatin which grew up so quickly and enabled them to work closely together on their text, Rosignoli's work was dropped.

It is true that Rosignoli's later publication in Italian cannot have been intended to influence British opinion. At the same time, it is well to remember that the Wingate propaganda line only developed themes that had already been expressed by Christians resident in the Sudan and hostile to the Mahdiya. These had been given wide circulation in Britain. The seeds of the Wingate view are easily discerned in Gordon's note of stories told him by the Greek Consul in Khartoum (*Journal*, 14th September 1884, Hake's edition, p. 32), and in the early accounts by escaped Catholic missionaries, notably Fr. Luigi Bonomi, and in the statements by Mgr.

Sogaro, which were printed, for example, in Cassell's illustrated *History of the War in the Sudan* (by James Grant, London, Paris, New York and Melbourne, n.d. (1885-6), vol. VI, ch. XI). The development of the Wingate line out of the opinion of refugees can be traced in the printed Cairo Intelligence reports and the Cairo Intelligence papers in the Sudan Government Archive.

Neufeld, of course, wrote after Kitchener's victory, and was defending himself against the disapproval of the Anglo-Egyptian High Command. He could not, for his purpose, question the orthodoxy of the day, and there is no evidence that he wished to do so. (See, for example, his chapter XXIII, "The Sirdar and Savage Warfare," and note the technique of his criticism of Ohrwalder and Slatin in ch. XXV, "How Gordon Died.") It would seem that all the contemporary documents in European languages reveal the same characteristics, and a common bias ; and, though there is indeed information of real value in these texts, the historian who works over them from a new point of view will be well advised to bear Holt's warning constantly in mind.

I am, Sir,

Yours faithfully,

N. A. Daniel

P.O. Box 1253

Khartoum

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BOOK REVIEWS

RICHARD HILL : *Slatin Pasha*. Oxford University Press, 1965. Pp. vii, 163.
Price 25 sh.

Of the many European adventurers who were associated with the Sudan during the 19th and early 20th centuries the most colourful and engaging personality was no doubt Slatin Pasha. Born an Austrian of Jewish descent Rudolf von Slatin became a celebrity throughout Europe, especially in his own country and in Britain as well as in Egypt and the Sudan where he is still affectionately remembered as "Salaṭīn" Pasha. But the Slatin of history as Richard Hill rightly points out was not merely a glamorous military adventurer but a counsellor and administrator of considerable experience and ability whose career spanned the Turco-Egyptian regime, the Mahdiyya and the Condominium Administration until the outbreak of the First World War.

Considering his general standing and background it is somewhat surprising that hitherto there has been no full scale biography of Slatin. Hill, using German, Arabic and English sources (including the Slatin and Wingate papers in his own University of Durham) has now competently filled this gap. The first three chapters survey Slatin's early years and education in Vienna : his debut under Gordon's wing as an Egyptian military administrator in the Sudan, and then as a Mahdist Muslim and prisoner of war—a subject on which Slatin is his own well-known chronicler. The next three chapters describe Slatin's dramatic escape from captivity ; his work, with Wingate, as an Egyptian army intelligence officer under Kitchener, and his first job in the reconquered Sudan when between 1899 and 1900 he was employed as expert adviser with the tribes and intermediary with the Sudan Government by an Exploration Syndicate which, like so many before and since, dreamed of discovering gold and other sources of mineral wealth in the Sudan. Hill is particularly good in portraying the cynical manner in which Wingate and the British officer corps of the Egyptian army used the information collected by the intelligence department and provided by escaped prisoners in preparing a series of articles and books which, including Slatin's *Fire and Sword in the Sudan*, deliberately sought to paint the Mahdiyya "in the blackest possible colours" as a weapon of war propaganda. But the core of the book is chapter seven. This, by far the longest chapter, surveys Slatin's career as Inspector General of the Sudan, a post which was especially created for him and which he held from 1900 until 1914 when the circumstances of the war severed his official relations with the Sudan and thereby ended his active career at the comparatively early age of fifty-seven. The remaining three chapters describe Slatin's life as courtier and husband ; his work with the Red Cross during the war and his years of final retirement from 1920 until his death in October 1932. There are nine interesting illustrations, one map and a useful note on sources. But the latter are only generally related to the text and a reader who may wish to identify the exact source of any particular piece of information is, in most cases, likely to be frustrated. Numerous and complicated footnotes are cumbersome and, in a book of this sort, would be a distraction ; but a few to aid the interested reader are, surely, necessary. Stimulating generalizations are scattered throughout the book but some of these are clearly untenable—for example the remark that

"all the . . . theology . . . , all the homilies, all the sermons" which Slatin had ever heard in the Mahdist Sudan were "heretical or at least unorthodox" (p. 80).

On the whole, however, this is a reliable and informative book and Hill's style is lively, and at times he is distinctly amusing.

MUDDATHIR ABDEL RAHIM

J. C. BUXTON: *Chiefs and Strangers, a Study of Political Assimilation among the Mandari*. Oxford, Clarendon Press, 1964. Pp. xii, 167. Price 30 sh.

Jean Buxton's work on political assimilation among the Mandari of the southern Sudan is primarily a contribution to the field literature on the types of political structure in eastern Africa, that is to say those studies which have abstracted generalized structural patterns for the various indigenous societies, one ideal pattern for each group. From these studies, typologies have been constructed (see for example Fortes and Evans-Pritchard, *African Political Systems* and Middleton and Tait, *Tribes without Rulers*) and comparative work attempted (for example Lucy Mair, *Primitive Government*). *Chiefs and Strangers* is an expanded and illustrated account of the political pattern of traditional Mandari society, presented in its essentials in the same author's article in *Tribes without Rulers*. The book relates the Mandari pattern of small and self-contained chiefdoms to questions of historical and comparative ethnography: for example, to the identity and movements of the basic Bora stock and the other groups of diverse origins which today form the Mandari people; and to the position of the Mandari in the Nilo-Hamitic/Nilotic context. The institution of clientship, central to the Mandari political system, is given careful attention and shown to be of general sociological interest. It has in fact already been given theoretical consideration by Lucy Mair (see for example *Primitive Government*). Jean Buxton shows how the *Mar* of each Mandari chiefdom, head of the land-owning clan, was able to build up the size of his community and its political strength partly through the attachment in a client relationship of outsiders, from other parts of Mandari or elsewhere. In return for protection, these clients and their descendants offer certain services to their hosts. Client families and lineages may be affiliated to the *Mar* or to the head of a collateral land-owning lineage: they are assimilated into the host's kin-group, and thus into local Mandari society, although—as has increasingly been the case—they are not of Mandari origin. They were often originally refugees from famine, epidemics and war who had lost their own kin and homes. Modern administration has disapproved of the institution of clientship, assuming it to be a form of slavery, overlooking the fact that it was a relationship of mutual advantage. It was also one of reciprocal control and influence: for example, although the patron could be said to have political control over the clients, he was in fact dependent on them for his political strength; and they were thought to have mystical power over their hosts. Here may be seen an embryonic situation of the build-up of political power on a basis other than that of kinship, although the client relation is quickly assimilated to the kinship idiom.

Since the author's task was largely one of historical reconstruction, she was naturally unable to document and analyse this process in detail, and has been obliged to give a generalized, ideal-typical picture of the process and its associated pattern of political structure. Its sociological interest, however, is unquestioned; and the ethnographic and historical value of the book is such that no student of the area should neglect it.

WENDY JAMES

S. SANTANDREA : *A Tribal History of the Western Bahr el Ghazal*. Museum Combonianum, Bologna, 1964. Pp. 345. N.p.

From the time that A. N. Tucker wrote his paper on "The Tribal Confusion around Wau" (*SNR*, 1931) the complexity of the ethnic situation in the Bahr el Ghazal has been evident. Tucker said: "Wau has the doubtful advantage over other posts in being established in a part of the country already inhabited by a cluster of small tribes, with the addition of foreign invasion and intertribal war to add to the confusion." In the same issue of *SNR*, Evans-Pritchard writing on "The Mberidi (Shilluk Group) and Mbegumba (Basiri Group) of the Bahr-el-Ghazal" says: "The tribes of the Bahr-el-Ghazal present the appearance of a routed army. . . . The ethnologist is faced with a chaotic puzzle in which many pieces are missing and many are undecipherable."

Any effort to disentangle this "confusion" must therefore be wholeheartedly welcomed. Santandrea, who spent some thirty years in this area, has an intimate knowledge of its tribes, and some of them were recognized as separate ethnic units by Santandrea himself. He is well-known for his publications in *Annali Lateranensi*, *Anthropos* and *Sudan Notes and Records* and is certainly well qualified to undertake this difficult enterprise. His book is a *vue d'ensemble*—bristling with details—of the history of the Western Bahr el Ghazal tribes. "In . . . other books one will get a bird's-eye view of the whole situation, whereas in mine he will find the details. While other books show the country and its population—so to speak—from outside, my study presents the whole from inside: what is known to the natives and how it is known, together with their reactions to events produced mostly from outside" (p. 8).

This could be a useful standpoint, but the shortcomings of Santandrea's study arise from it. Each ethnic group gives its own selection of events, endows them with its own interpretation, and responds to them according to its own social structure and political organization. If we cannot give whole analyses for every group and then see the historical events as confrontations between groups of differing political organizations, we risk presenting "raw material", disconnected lists of names, meaningless genealogies, places and events. The time has not yet come—and maybe it will never be possible—to produce an integrated tribal history of this area. However, a collection of facts without interpretations does give material to work with later, and in this respect Santandrea's book is an example of scholarly self-discipline.

The plan of this comprehensive work, written with great authority, is simple and straightforward. After a discussion of the foreign regimes in the Southern Sudan, historical notes on the following ethnic groups are given: (1) Golo, Ndogo, Sere, Tagbu and Bai; (2) Belanda (Boor, Bviri); (3) Bongo; (4) Feroqe group and its neighbours (Indri, Togoyo, Feroqe, Ngulgule or Njalgulgule, Mangaya or Manga, Ngbandala or Mandala or Bandala, Dongo or Dango); (5) Kresh Nation (Kresh-Hofra and attached sections, Kresh-Naka and attached sections, Kresh-Ndogo, Aja, Woro or Oro); (6) Binga, Kara, Yulu; (7) Banda (Dukpu, Wundu, Junguru, Vedere, Govvoro, Buru, Wasa, Wadda, Sopo-North Banda, Tangbagu, Togbo); (8) Zande Colonies in the Bahr el Ghazal. It is a pity that the administrative documents on the redistribution of these tribes, carried out in 1930, could not be published in detail. Some misunderstandings creep in, since occasionally "race," "blood" and "culture" are apparently used as synonyms. There are many misprints,

and it is disturbing to see names spelt differently on the same page. The quotations are often unsatisfactorily cited. The elaborate index facilitates the scientific use of this book. Some more historical maps would contribute largely to the better understanding of the complicated tribal movements and linguistic correlations. But these are only minor formal defects, which a more careful editor could have avoided. Santandrea's book will keep a lasting place as one of the main books of reference for anyone interested in the Southern Sudan.

ANDREAS KRONENBERG

M. J. L. HARDY : *Blood Feuds and the Payment of Blood Money in the Middle East*. Leiden, E. J. Brill, 1963. Pp. 106. N.p.

The author of this interesting little book is a barrister of Gray's Inn who worked for some time as legal officer to the U.N. Relief and Works Agency for Palestine refugees. He attempts to follow the development of certain aspects of the subject, but the result is not so much a history as a search for the sources of law and custom relating to vengeance and blood money. Although the practices (where they are carried on amongst Muslims) can be traced back to pre-Islamic Arabia, and have in the course of history been the concern of Muslim jurists, there is now a very large variety of ways in which they are carried out in different tribal societies.

Although the Sudan is not mentioned the problem discussed is one which from time to time has given rise to heated discussions amongst administrators. For the modern type of state is not content to leave to individuals and kinship groups the resolution of cases arising from homicide or grievous bodily harm. It exerts its authority to spell out the fact that these are crimes. It has a criminal code which it tries to apply evenly. In its eyes the payment of blood money is a way of compounding a crime without due punishment for the guilty party. And a vengeance killing is to it not what it is to an aggrieved party, simply the evening out of scores ; but it is another murder to be dealt with in turn. At the same time the state has to admit that blood money does have the important function of creating a measure of peace between two hostile groups, and thus plays its part in the maintenance of public security. The state's problem is thus how to reconcile the existence of blood money with its own authority in the face of homicide. For tribal—and particularly nomadic—society, the institution is too useful a method of social control to be dispensed with. In the Sudan there is the additional problem of creating a uniform treatment amongst so many different groups that have the institution—including, here, the Nilotes where the practice presumably comes down from their own, and not from the Arab, past. Criminal Court Circular 18, which deals with the problem, is couched in such general terms that a great deal of discretion is left to the courts in the light of the circumstances as they see them.

Hardy's discussion of the way Ottoman law attempted to deal with the practices in the 19th century shows clearly the difficulties and logical inconsistencies that can attend the attempt to accommodate state law and traditional practice. Is homicide a crime or a sin ? Does blood money represent punishment or compensation ? What should blood money consist of in days of quickly changing values ? Should the payment of blood money be considered as a reason for shortening the normal sentence on a killer ? Should blood money be payable even if a killer has suffered

sentence of death? Should a claim for blood money be enforceable in the courts? If blood money is paid for a wounding can the victim be awarded compensation above this for loss of earnings? Questions of this kind are always difficult to answer and fall awkwardly between modern ideas of justice and traditional ideas of what blood money is about.

The book starts with a description of what is known of the relation between homicide, vengeance and blood money in pre-Islamic Arabia. It then deals with the philosophy of the customs as understood by Islamic jurists and their development under the classical Shari'a; discusses the impact of western ideas of jurisprudence on the practice; and records interviews with notables of the Beni Sakhr and Terabin tribes to show the position among these at present. The author concludes that although the tendency is for the substance of blood money payments to change, the outward forms—the actual collection and redistribution of wealth—persist and through them blood money continues to carry out its old function of restoring peace.

I. CUNNISON

E. E. EVANS-PRITCHARD: *The Position of Women in Primitive Society and other Essays in Social Anthropology*. London, Faber and Faber, 1965. Pp. 260. Price 35 sh.

This second collection of Evans-Pritchard's essays is as welcome as its predecessor.* Like the former volume it rescues from the dust and oblivion of back runs of library journals a varied and vigorous collation of previously published articles. These admirably illustrate the author's brilliant command of different styles of sociological analysis and the impressive width of his field-work. Only the title article, the Fawcett Lecture for 1955, delivered at Bedford College, London, is here published for the first time. This discursive address reveals the paucity of genuine sociological research into the position of women in modern industrialized societies, although the work of Elizabeth Bott and other recent writers seems to have escaped the author's attention. The situation in tribal societies appears, by contrast, to be relatively well-documented. However, despite the limitations necessarily imposed by this imbalance, Professor Evans-Pritchard launches forth into a spirited exposition of his view that, appearances notwithstanding, women in tribal societies have in many respects a more enviable lot than their enfranchised sisters in urban communities. He thus broadly endorses the conclusions reached by Dr Phyllis Kaberry in her examination of the problem in Aboriginal Australia and the Cameroons, and provocatively claims that ultimately the status of women raises moral or ethical issues which are not capable of resolution by sociological analysis. Moreover, the position of women cannot be viewed in isolation from that of men, or from the overall structure of society.

The other essays in this collection span a lengthy generation. The earliest are "The Dance" and the methodologically related but more interesting paper on "Some Collective Expressions of Obscenity in Africa", the first published in 1928 and the second a year later. Both are strongly influenced by the Radcliffe-Brown of *The Andaman Islanders* period, and seek to establish general sociological conclusions about the functions of customs and institutions. In the latter, on a basis of his own

* *Essays in Social Anthropology* (1962).

Zande material and comparative data from the Ila, Thonga, and Kamba, Evans-Pritchard is able to demonstrate convincingly how the permitted and collective expression of obscenity serves to emphasize particular values, to ease difficult and irksome tasks, and in other contexts helps to canalize emotions in a prescribed fashion at times of crisis. Such obscenity, thus, is neither vicarious nor fortuitous, but fulfils a particular social function.

The same functional thread runs through the argument of the early (1934) essay "The Social Character of Bride-wealth, with Special Reference to the Azande." This essay, aimed partly as a corrective to what the author regarded as current misconceptions, on the functions of marriage payments, emphasizes that such marriage gifts should not be viewed primarily as economic transactions. Nor should the stability of marital relations be seen merely as a reflection of the magnitude of the bride-wealth involved. For "it is morals that censure divorce and law that refuses to recognize grounds for divorce which ensure the stability of the union of husband and wife." This conclusion is unlikely to be challenged today; though law and morals clearly change with changing economic conditions, and there is now evidence that in some tribal societies at any rate economic factors are of paramount importance in marriage payments. More prophetically, perhaps, the article ends with a few lines on the exchangeability of wealth and women which sketch out one major direction which subsequent studies of tribal marriage have followed.

As well as slighter articles on Dinka cattle-names and daily life in Nuer dry season camps, the volume also includes Evans-Pritchard's material on the Luo of Kenya, the fruit of a few brief weeks' intensive survey, which it is extremely useful to find together in one place. "Nuer Modes of Address" (1948) showing how Nuer vary the fashion in which they address others according to their social relationships, is also reprinted, as well as the more substantial comparative essay on "The Political Structure of the Nandi-speaking Peoples of Kenya" (1940). This essay while admirably setting Peristiany's material on the Kipsigis in a wider context also suggests the sociological conditions in which age-sets may be expected to be invested with political functions, and has in fact exerted a germinal influence on the study of age-set systems. Amongst more recent material, "Zande Cannibalism" (1960) makes a reappearance which some will consider more inevitable than welcome, as well as "The Zande State," the Huxley Memorial Lecture for 1963, Evans-Pritchard's fullest and most satisfying account to date of the central Zande polity. This article is a miniature masterpiece in the genre of ethnographic history.

The increasing absorption in detailed ethnographic analysis reflected in these latter articles, a far cry from the confident comparative sociology of the thirties, receives, in effect, its philosophical apologia and justification in the most recent article with which the book opens. This is "The Comparative Method in Social Anthropology" delivered at the London School of Economics in 1963 as the Hobhouse Memorial Lecture. By many no doubt this essay will be considered as marking a disappointing climax to so many years of brilliant research and publication, for the author records his judgment that comparative sociology has so far yielded little. He sees no established general propositions or correlations between institutions, far less general laws, brought to light by the mass of work which has been undertaken in this pursuit. No doubt in a general sense this negative conclusion is not unjustified; but the reader must question whether, at a more mundane level, correlations have not in fact been satisfactorily established between a number of tribal institutions and institutional complexes. Certainly, the review of research

in social anthropology upon which the author bases his findings seems unusually cursory and scarcely does justice to such progress as has been achieved in the many lines of enquiry which his own work has sparked off. Nevertheless, he does not consider the issue finally closed, nor does he deny the virtue of a continued search for valid correlations and general propositions. For even if the future holds out no prospect of success in this direction, at least the work done in the process will have led, as he puts it, to a deeper understanding of human society. And that, after all, is the basic aim of social anthropology.

I. M. LEWIS

W. B. EMERY : *Egypt in Nubia*. Hutchinson, London, 1965. Price 50 sh.

Professor W. B. Emery, now Edwards Professor of Egyptology at University College, University of London, was Director of the 1929–35 Archaeological Survey of Nubia carried out on behalf of the Egyptian government, and from 1957–63 was in charge of the British Egypt Exploration Society excavations at Buhen in Sudanese Nubia, near Wadi Halfa, and at Qasr Ibrim in Egyptian Nubia. He has also excavated extensively elsewhere in Egypt since 1921, notably at the tomb of Ramose in Thebes, at Armant and on the early dynastic tombs of Saqqara. Since he is undoubtedly the most experienced living excavator in the field of Nubian studies, his book *Egypt in Nubia* is extremely welcome. Unquestionably it gives a far better and more balanced picture of the three archaeological campaigns in Nubia of 1907, 1929 and 1958 than any previous popular general work. The excellent and copious plans, drawn with the author's usual meticulous precision, make the narrative much clearer than could be done by infinite verbal description. Naturally details of the present campaign, still uncompleted and largely unpublished, can be given only in outline, apart from Professor Emery's own work at Buhen, but the major projects are described succinctly.

The historical section in the latter part of the book, treating the fortunes of Nubia from the A-Group to the end of the X-Group period and the introduction of Christianity, is highly competent and interestingly worded, though one feels a slight regret that the Christian Nubian stage has not been described even briefly. It is possible to take issue with only a few points, mostly of minor importance. For example on pages 157–8 Professor Emery translates *Nehasi* as "Negro"—though stating that this rendering is unsatisfactory—but very probably *Nehas* is related to the modern "Mahas," meaning an inhabitant of the Dongola region, without any reference to the colour of his skin. On page 182 Ptolemy II should read Ptolemy IV. On page 203 the author is inclined to identify the Viceroy Seti with King Sethos II, but in Egyptian modal letters a Crown Prince Seti, son of king Merenptah, is mentioned a number of times, and it is much more likely that this was the future king Sethos II, and that he reigned immediately after his father, not after the problemetical Siptah.

A more important omission is that on page 206 the research work published by Sir Alan Gardiner in *Egypt of the Pharaohs* (Clarendon Press, 1961), pp. 300–15 regarding the careers of Penhasi, Hrihor, the high priest Piankh and the scribe of the tomb Dhutmose, which throws a rather different light on the fall of the New Kingdom in Nubia, has not been utilized. On p. 208 Professor Emery appears to contradict himself by postulating at once the descent of the Napatan kings from Hrihor, and their purely Cushite background and possible descent from the ancient

chiefs of Kerma. On p. 222 the view of A. J. Arkell is reiterated that Cush was ready to attack Egypt, when really it is certain from the "Election" Stela that the "army" was at Napata at the accession of king Aspetla, as J. Černý rightly assumed, without comment, in *A Saite Oracle Papyrus from Thebes* (R. A. Parker, Brown Egyptological Studies IV, Providence, R.I., 1962), p. 38. (This point is discussed more at length in my unpublished thesis *The Foreign Relations of the Napatan-Meroitic Kingdom in the Sudan*.) On p. 227 it would be better to mention that the majority of Meroitic tomb inscriptions come from the last two centuries of that kingdom's existence (A.D. 100-300), which shows that, at least in Lower Nubia, prosperity persisted to the end. The king's name given on p. 233 as "Tereremen" can be read more exactly from the Meroitic as "Tegerideamani."

These points, however, amount to but minor blemishes on what is a *tour de force* of compression and lucidity, and presents the Nubian campaigns and the ancient history of that region in a most informative way. It is imperative in a world of ever more rapid change, in which all monuments of the past are threatened with mechanized annihilation, that archaeology should be popularized—not treated as a dry-as-dust subject of interest only to the specialist—if the archaeologist is to have the indispensable public understanding and support which he needs in his world-wide task of excavation, recording and preservation. For his effort in preparing this book both the expert and the layman owe Professor Emery their thanks.

The quality of the paper, type and presentation is excellent, and sets a standard which other publishers should seek to emulate, but one must trust that in due course a cheaper edition will appear, more easily accessible to students and others of limited means.

BRYAN G. HAYCOCK

WILLIAM REED: *Red Sea Fisheries of Sudan*. Game and Fisheries Section, Ministry of Animal Resources, Sudan Government, Khartoum, 1964. Pp. 116, 67 text-figs., 1 map. 60 PT.

Although marine fisheries in the Sudan are not of great economic importance, the total catch is about 300 tons per year. With improvements in gear and the introduction of motorized boats, production could probably be increased to 2,000 or 3,000 tons. At the same time, sports fishing and underwater swimming are becoming increasingly popular. Consequently, as better facilities become available, it is almost certain that more local and foreign tourists will be attracted to the Red Sea coast.

Red Sea fishes are also of great interest to taxonomists as it was in these waters that the famous Danish naturalist, Forskal, made his collections during the 18th century. In many instances Forskal used the Arabic names of these fishes as scientific names.

Despite their interest and scientific importance, there is no accurate modern account of the fishes of the Red Sea. The book under review is therefore no mere compendium of popular knowledge: the descriptions and illustrations have been prepared from living or freshly caught fishes and the author writes from detailed personal knowledge and experience, enriched by many conversations with Sudanese fishermen.

Mr Reed first came to the Sudan in 1958 as FAO shell-fisheries expert. His primary task was to establish a mother-of-pearl oyster farm in Donganab Bay—the only one in the world—but he has also done much to improve the fresh fish industry in the Red Sea. For developmental work such as this scientific knowledge, based on correct specific identification, is quite essential. It was the absence of any adequate guide to identification that encouraged Mr Reed to produce this valuable monograph whose interest is enhanced by accounts of various fishing zones, descriptions and notes on the habitats, ecology, behaviour and edibility of most of the commoner and more distinctive fishes of the Red Sea.

Although printing errors are rather too numerous and fig. 58 has been inserted upside down, the general standard of production is reasonable. The book will probably see many years' service before it is superseded.

J. L. CLOUDSLEY-THOMPSON

PHILOSOPHICAL SOCIETY OF THE SUDAN

P.O. Box 526, KHARTOUM

HON. SECRETARIES' ANNUAL REPORT

For the period 1ST OCTOBER 1964 to 31ST DECEMBER 1965

1. *Membership*

Membership increased slightly during this period from 180 to 182. Arrears in subscriptions became an acute problem although keen efforts were made to overcome it. Members with subscriptions in arrears were 40 compared to 63 in 1963/64.

2. *The 20th Annual General Meeting*

The 20th Annual General Meeting was held in Room 102, Faculty of Arts, University of Khartoum on Saturday, 13th February 1965. The following members and officers of the Council were elected for 1965.

President	Dr El Hadi El Nagar
Vice-President	Mr L. Berry
Hon. Treasurer	Sayed Abdel Rahman El Nasri
Joint Hon. Secretaries	Dr Salih Muhammad Nur Dr Yusuf Fadl Hasan
Members of Council	Sayed Yusuf Bedri Prof. I. G. Cunnison Sayed Muhammad Ibrahim Khalil Dr Kamal A. Agabawi Dr Taha Baasher Prof. F. de la C. Chard Sayed Charley Antoun
Past Presidents ex-officio members of the Council :	Sayed Mohd. Ibrahim El Nur, Prof. G. N. Sanderson, Miralai Abdel Rahman El Faki, Prof. Mekki Shibeika, Capt. G. W. Ogden, Dr Muhammad Said Bayoumi.

Owing to the departure of Mr L. Berry in April, Sayed Abdel Rahman El Nasri was elected Vice-President in addition to his office as Hon. Treasurer.

The Annual General Meeting also amended the Constitution for the election of members ; the quorum and subscription fees were raised to £S1.750 instead of £S1.500m/m. Details of the amendments were already circulated to members on 28th February 1965.

3. *Council*

The Council met three times during the period under review, in November 1964, February and March 1965.

4. *Executive Committee*

In addition to the five officers of the Society, the following were elected to the Executive Committee : Dr Kamal Agabawi, Sayed Yusuf Bedri, and Prof. F. de la C. Chard. The Committee met four times, in February, March, August and November 1965.

5. *Thirteenth Annual Conference*

The 13th Annual Conference was held in conjunction with the Sudan Agricultural Society from 3rd to 6th December 1965 on the theme, "Agricultural Development in the Sudan." The Convenors were Mr D. J. Shaw and Dr Abdallah Ahmed Abdallah.

The Conference was opened by His Excellency Sayed Ismail El-Azhari, President of the Supreme Council of State, and was attended by over 200 participants. The Conference consisted of eight sessions at which papers were read and discussed and also five Discussion Groups which met throughout the Conference period. Papers were read by : Professor D. S. Thornton, Dr Hussein Idris, Sayyid Hasan Mutwakkil, Dr Kamal Agabawi, Mr A. de Vajda, Mr B. P. Potheary, and Prof. I. G. Cunnison with Mr T. Asad and Mr L. G. Hill. A major recommendation of the Conference was for the setting up of a National Research and Planning Council.

6. *Ordinary Meetings*

Nine ordinary meetings were held during the session :

124th Meeting : 30th November 1964. 65 members and guests present.

Chairman Mr F. Coleman
Speaker Dr Kamal Agabawi
Subject "Some aspects of rain-fed agricultural development in the Sudan."

125th Meeting : 28th December 1964. 45 members and guests present.

Chairman Prof. I. Cunnison
Speaker Mr Talal Asad
Subject "Seasonal migrations of the Kababish."

126th Meeting : 25th January 1965. 40 members and guests present.

Chairman Prof. G. N. Sanderson
Speaker Prof. A. P. Cavendish
Subject "Philosophy and social change."

127th Meeting : 15th February 1965. 21 members and guests present.

Chairman Mr L. Berry
Speaker Prof. F. de la C. Chard
Subject "Technical and economic aspects of electric power transmission."

128th Meeting : 8th March 1965. 18 members and guests present.

Chairman Dr Salih Muhammad Nur
Speaker Mr Jean Morillon
Subject "The philosophical system of Père Teilhard de Chardin."

- 129th Meeting : 24th March 1965. 55 members and guests present.
 Chairman Prof. G. N. Sanderson
 Speakers Prof. G. N. Sanderson, Ustaz Ibrahim Fadl and Ustaz Isma'il Hussein
 Subject "Symposium on Wadi Halfa Resettlement."
- 130th Meeting : 30th August 1965. 85 members and guests present.
 Chairman Dr El Hadi El Nagar
 Speaker Dr Muddathir Abdel Rahim
 Subject "Early Sudanese Nationalism, 1900-38."
- 131st Meeting : 15th September 1965. 45 members and guests present.
 Chairman Dr Salih Muhammad Nur
 Speaker Dr Y. W. Adams
 Subject "Continuity and change in Nubian cultural history."
- 132nd Meeting : 1st November 1965. 50 members and guests present.
 Chairman Dr Salih Muhammad Nur
 Speaker Miss W. James
 Subject "Illegal Deims at Port Sudan."

7. *Special Meetings*

There were two special meetings :—

- 22nd February 1965. 34 members and guests present.
 Chairman Dr El Hadi El Nagar
 Speaker Sayed Hasan Nur Suwar-al-Dahab
 Subject "The Managil Extension."
- 8th December 1965. 25 members and guests present.
 Chairman Dr Yusuf Fadl Hasan
 Speaker Prof. S. P. Chatterjee
 Subject "Regional planning in India."

8. *General*

Attendance in ordinary meetings continued to be rather poor. (Members are kindly requested to suggest new topics for papers ; offers to read papers would be a great help.)

The Annual Conference aroused keen interest which was reflected in the satisfactory attendance, discussions and effective resolutions.

130th Ordinary Meeting recorded a vote of thanks to Professor G. N. Sanderson and Mr L. Berry, who left the Sudan, for the great services they rendered to the Society.

13th February 1966

YUSUF FADL HASAN
Joint Hon. Secretary

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2nd	Food and Society in the Sudan	..	..	..	..	150 Piastres 30/-
3rd	Physical Science in Sudan (SNR, xxxvi, 1955)					
4th	Conservation of Natural Resources in Sudan (SNR, xxxvii, 1956)					
5th	Transport and Communications in the Sudan	..	..			Out of print
6th	Population of the Sudan	..	..	..	..	Out of print
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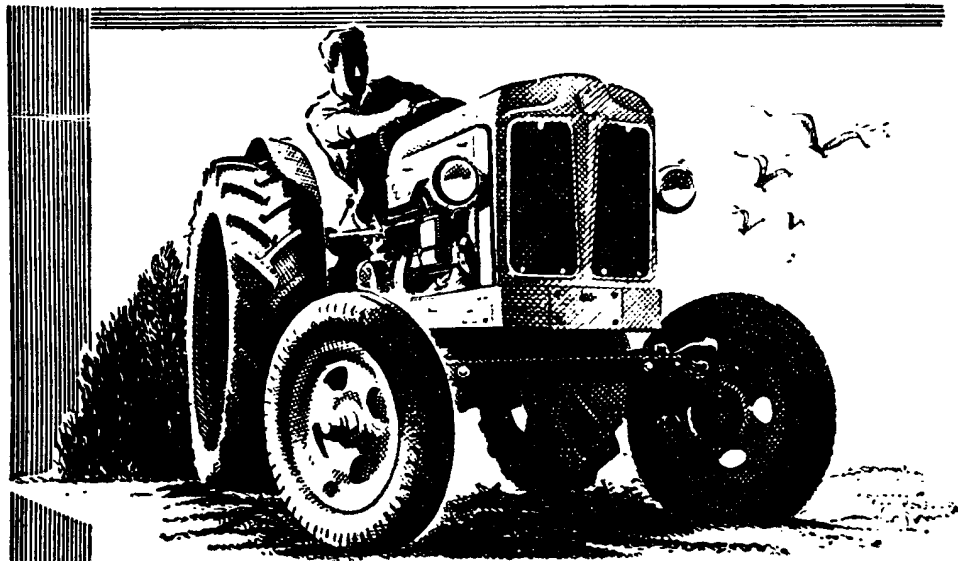
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