

Perspectives

The aim of this research was to contribute to the cultural history of the geographical area under investigation beyond recent centuries. The objective was to collect data through both archaeological and anthropological approaches, and attention was paid to local practices in the villages where archaeological sites were visited.

The geographical area under study was the northern part of riverine Nilotic South Sudan in Upper Nile Province, southern Sudan (now South Sudan). It included the river-bound settlements approximately between Renk, towards the north; Tonga, just west of Malakal by the Bahr el Ghazal River; and Abwong, east of Malakal by the Sobat River (Map 1.1). The project was initiated in the second half of the 1970s but was effectively terminated due to the civil war. Some results were published (Kleppe 1982a, 1982b, 1986a, 1986b, 1989, 1997, 1999, 2000), but the final publication was left unfinished. I do find, however, that my research in the Upper Nile Valley represents a starting point for archaeological research in an almost unexplored part of Africa. Therefore, I decided to make the data from my fieldwork and my interpretations—as far as they go—available to future researchers.

When I started my work, cultural historical knowledge of this geographical area did not extend beyond the time of European explorers, according to the chronological table published by F. Hinkel (1977, Figure 2). James Bruce ([1790] 1972) visited Sennar on the Blue Nile in Sudan in 1772. A. J. Arkell, O. G. S. Crawford, and other officials visited sites in Upper Nile Province in the 1940s and made some archaeological observations in the area (information in the archive of the National Corporation for Antiquities and Museum, Khartoum, Sudan; see also Arkell 1946, [1955] 1973; Crawford 1948, 1951).

In the 1970s, archaeological fieldwork was initiated in Upper Nile, Bahr el Ghazal, and Equatoria Provinces (see Map 1.1). Thus, archaeological surveys and several test excavations associated with carbon-14 (C_{14}) dating were conducted. The results were presented at a seminar organised by the School of Oriental and African Studies (SOAS) in London in December 1980, with the participation of researchers from disciplines such as archaeology, anthropology, history, and linguistics. Most of the papers presented were published a few years later (Kleppe 1982). The seminar dealt with a vast geographical area, and it was both interesting and important to get an update on cultural historical research conducted from the 1970s onwards (see also appendix 1).

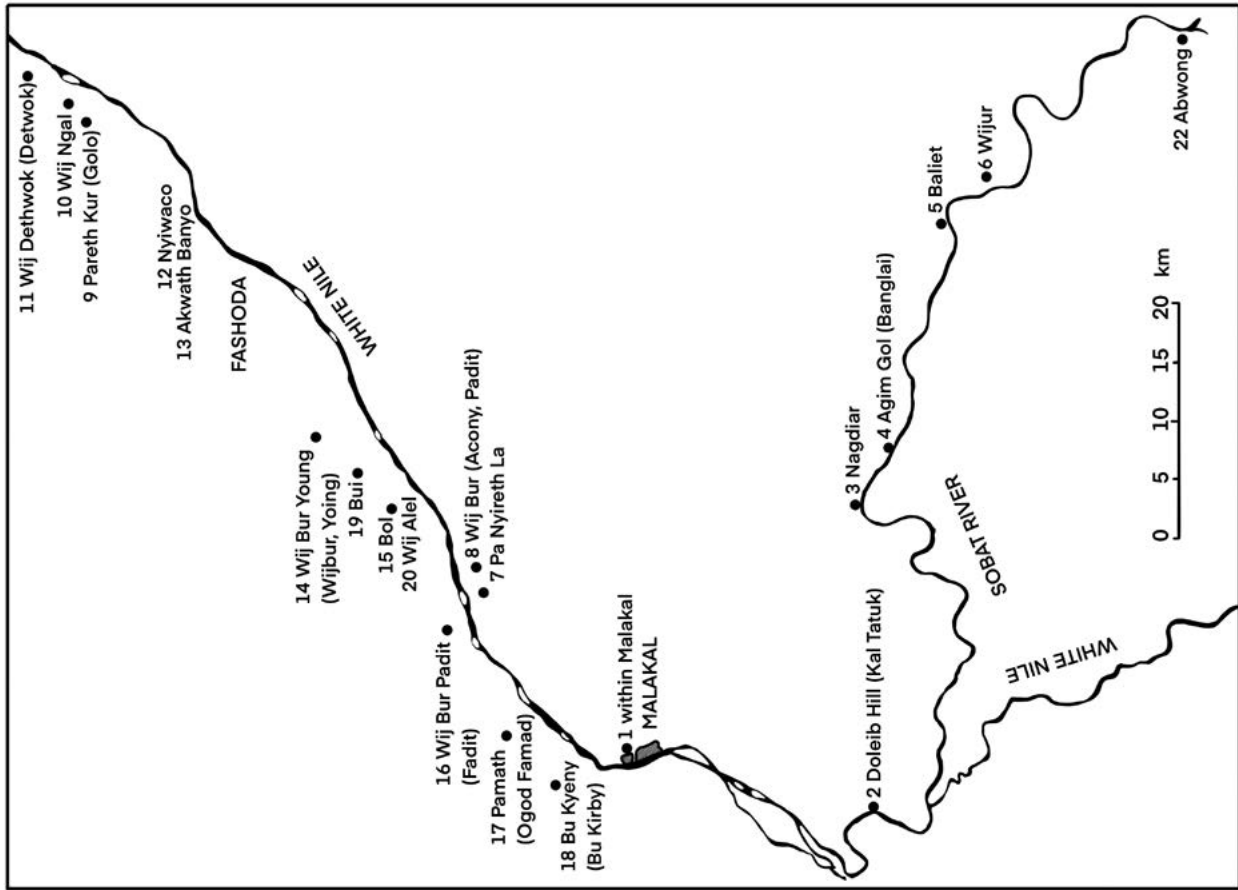
My fieldwork there started in 1975 with a field trip to the area near Renk, together with two colleagues at the

University of Khartoum, a historian and a linguist. This was primarily a practical arrangement since we all wished to do research in the area. No excavation licence was obtained for this initial visit. I visited seven archaeological sites generally referred to as *debbas*, making field notes and obtaining photographic documentation. The term *debba* has conventionally been used to denote a low mound in flat country (Crawford 1951, 2). Such archaeological sites are typically found on natural ridges along rivers. In their highest parts, artificial raises have been formed over time due to leftovers from settlements (Kleppe 1982b). Pottery abounded on the inspected sites.

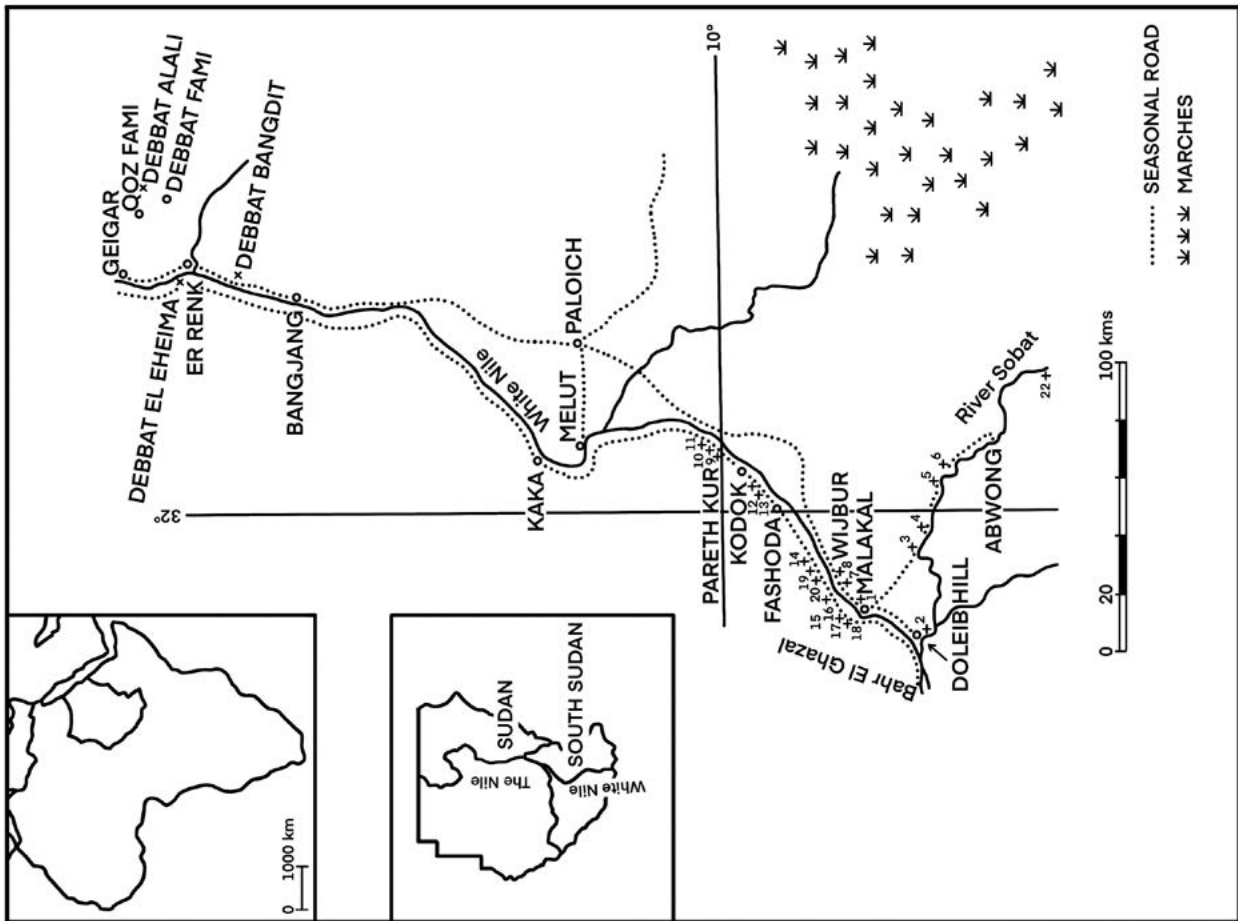
In 1976, I was invited to take part in an initial survey of archaeological sites in the Malakal area, together with Richard H. Pierce. It was thought that the area would be affected by the construction of the planned Jonglei Canal (the project was suspended in 1983). We inspected a total of 20 archaeological sites (Map 1.2), and one more site located at Abwong was reported by E. Grünbaum, a member of the investigation team. The surface scatter on these sites was predominantly pottery, and special features were documented through photos, drawings, and descriptions. Most sites were inhabited, and people living there were also asked about their activities, some of which might have affected the archaeological deposits. Ethnographic information of potential utility for the interpretation was also collected.

A trial excavation was conducted at the Debbat Alali site near Renk in 1977, which was among those visited in 1975. The archaeological site was badly damaged in many places, as rather deep and wide holes had been dug, exposing large quantities of potsherds. The potsherds seemed to have been left behind when the soil was removed from the site. They exhibited a wide range of forms and considerable variation in surface treatment and fabric, and they were predominantly of high quality from a technological point of view. Another striking feature was that many potsherds had decoration only on the interior. Moreover, many potsherds had red polish on the exterior. Several sherds from large, thick-walled pots—possibly water jars—were seen. Debbat Alali is located rather far from the White Nile and other perennial or seasonal waterways (see Map 1.3). The purpose of the test excavation was to collect a sample set of ceramic material to get an idea about changes in pottery material and hopefully to find pottery identified through verbal information as Funj pottery (Kleppe 1982b, 66–67, Figure 4) in a sealed context. The excavation revealed traces of dwellings, fireplaces, many potsherds, osteological material, and some lithic material.

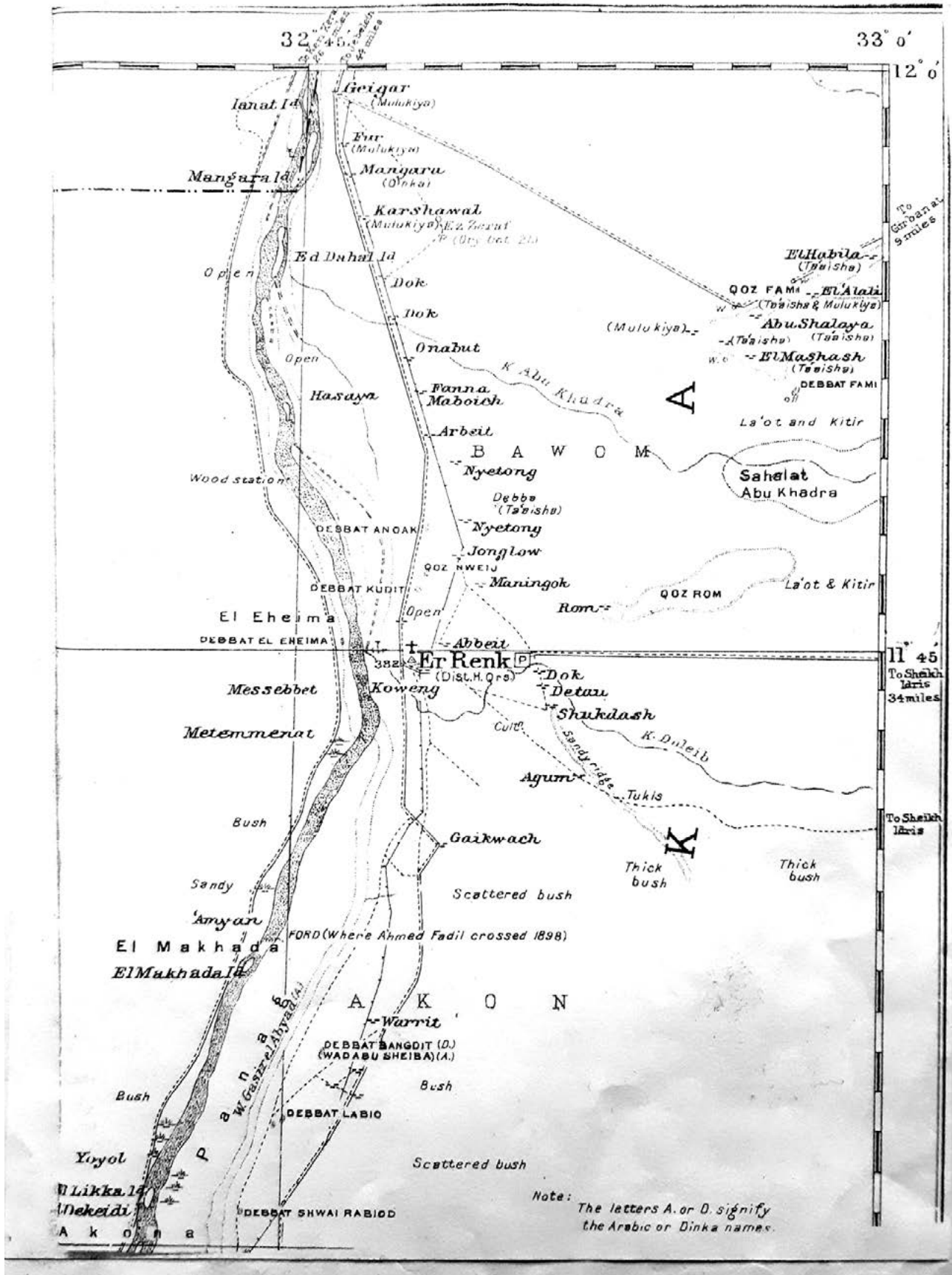
The test excavation functioned as a guideline for further refining the research project (see also Kleppe 1982b). In 1979,



Map 1.2. The Malakal survey of 1976: Locations of the archaeological sites (UN 1-22). The locations of sites UN 12 and UN 13 are approximate.



Map 1.1. Outline maps: South Sudan and Sudan. Locations of the inspected sites in the Malakal area and the three sites where excavations were conducted in the Renk area.



Map 1.3. Map section at a 1:250,000 scale showing the waterways in the area around the three archaeological sites: Debbat Alali (UN 23), Debbat El Eheima (UN 24), and Debbat Bangdit (UN 25) (map compiled by the Sudan Survey Department, 1936).

I conducted ethnoarchaeological fieldwork near Renk and in Geigar. On this occasion, an old female potter was interviewed, who provided information about the marketing of pottery in the area. She also demonstrated how she made a traditional pot. The paper that I presented at the SOAS conference in 1980 was based on this fieldwork (Kleppe 1982a).

Years later, I applied for a grant from the Research Council of Norway (Norges forskningsråd) and was awarded a three-year scholarship (1981–84). My project was entitled *The Funj Problem from an Archaeological and Ethnoarchaeological Point of View: A Study of the Archaeology and Culture History of the Upper White Nile Area in Sudan*. My research on the so-called Funj problem was published in two papers (Kleppe 1997, 2000). The term ‘Funj pottery’ is relevant in this context.

The framework of my project was restricted by both monetary resources and time. The excavation licence which I was granted included sites in both the northern and southern parts of Upper Nile Province. The northern sites were Debbat Alali (11°45′ N, 32°46′ E), located east of the White Nile and some distance away; Debbat El Eheima (11°45′ N, 32°46′ E), located near the river’s west bank; and Debbat Bangdit (11°35′ N, 32°46′ E), located near the waterway Wadi Gazir el Abyad, close to the White Nile’s east bank. This wadi runs almost parallel to the White Nile for a stretch of approx. 40 km. The two other sites included in the excavation licence were Pareth Kur (9°57′ N, 32°09′ E) and Wij Bur (9°36′ N, 31°48′ E), located further south on either side of the White Nile and not far from the river (Map 1.2). These two sites were included in the Malakal survey (Kleppe 1976b) but were not investigated further since the civil war abruptly ended my fieldwork in 1983.

My work represents only a starting point for archaeological research in this part of Africa. The C_{14} dates obtained indicate a considerably wider span of time than expected (appendix 2). The interpretations and discussion of the collected data ought to be understood with reference to my approach, including theoretical considerations. The political situation also influenced the project, as some planned fieldwork could not be conducted.

1.1. Approach and theoretical considerations

Some archaeologists regard reconstructing cultural history as their main task. The concept of *reconstruction* implies a degree of confidence based on clear and unambiguous evidence. However, facts about cultural history are scarce. Most of what we term ‘facts’ are merely probabilities. They are constructions based on empirical evidence meant to be relevant for arguments and supported by analyses and tests. My archaeological discussion rests on inductive reasoning, implying that it is open to renewed verification or falsification as empirical evidence, propositions, and/or new theories are tested.

The direct historical approach and the use of analogy were central to my discussion since my aim was to seek

knowledge of cultural history. The use of the direct historical approach implies that the researcher proceeds from the ethnographic present to the archaeological past and makes inferences based on observed behaviour through material culture in context. This, however, is a delicate research procedure, and one must constantly be aware of the possibility of merely projecting the present onto the past. This approach requires careful handling of data and awareness that the argument must not be controlled by a political agenda. Ethnohistorical studies require an anthropological approach to the interpretation of archaeological data. Analogy, both formal and relational, is considered when thought to be relevant to specific discussions. However, it is an approach that must be handled with care. Relational analogies are used in the discussion when ethno-culture is considered for specific interpretations of archaeological data.

My approach was inspired by Shilluk traditions and, from a broader perspective, Dinka culture. The Shilluk form an ethnic group, while the Dinka see themselves as several subgroups, and those reported in the Renk–Malakal area are but a few of 20 or more subgroups. These subgroups are today united through language, adaptation, subsistence economy, and social organisation. The Dinka and the Shilluk rely on both breeding cattle and growing crops. Shilluk practices have been documented in my research (Kleppe 1999, 59–64). The Dinka traditions brought into the discourse are seen as part of a great tradition. The concept of *great tradition*, characterised by shared structural and organisational features, was reintroduced by Knut Odner (2000; see also Kleppe 2005b, 239).

The use of analogy is a general research method in archaeological interpretation, but it is not unproblematic. Gould (1980, 29) argued that ethnographic analogies often encourage us to assume what we should try to find out about human behaviour by other means. In my understanding of the subject matter, the use of analogy in archaeological interpretation cannot be avoided. In my approach, I also used my own ethnographic observations and ethnoarchaeological documentation as a research strategy. This approach has offered new perspectives on the scope of archaeology (see, e.g., Hodder 1982, 31–46) and has saturated my interpretation of my archaeological fieldwork in the Upper Nile Valley.

Cultural history is approached differently by researchers from disciplines that I consider central to such studies. Historians, anthropologists, and archaeologists rarely deal with the same questions, not because they do not have shared interests in their endeavour to learn about past or present humans but, I think, primarily because of what they consider to be inherent limitations to different kinds of source material. Crossing the conventional boundaries between these disciplines has provided new outlooks and results. The multidisciplinary research tradition is also brought into the present context as a matter of course. It is a long-standing practice in Sudan studies within the arts and social sciences that scholars from various disciplines have

followed to tackle problems of interest—for example, the discourse on Funj origins, which was initiated as early as around 1920 and was, to my knowledge, the first academic discourse based on field studies in southern Sudan.

A multidisciplinary approach was important to this study, primarily based on archaeology and ethnoarchaeology. I have explained the latter elsewhere (Kleppe 1999, 6–10). The fact that I lived in Sudan and worked with Sudanese people at the University of Khartoum for five consecutive years in the second part of the 1970s also contributed to shaping my approach.

Various sub-disciplines have lately been introduced into history, anthropology, folklore studies, and archaeology. I will briefly offer explanations or definitions of some of these, which I used in my research. The concept of *oral tradition* has often caused confusion. Jan Vansina ([1961] 1965, 19) defined it as ‘all verbal testimonies which are reported statements concerning the past’. I refer to most of the information that I collected from local people during my fieldwork as verbal information, meaning statements obtained from and confirmed by at least two independent informants.

The concept of *time* is important for any archaeological study, and ‘chronology there must be if there is to be history’ (Vansina 1985, 173). It is important to bear in mind that concepts such as *long*, *short*, *seldom*, *often*, *old*, and *young*—to mention some of the most frequently used time-related concepts in the Western world—tend to be culture-specific. According to Vansina (1985, 132–33), it is relevant to ask whether cited numbers are to be taken literally or in the sense of a particular ‘number theory’. Western concepts do not always coincide with those found in African or other traditional societies. During my fieldwork, I collected a list of words related to time, which require some comments (Table 1.1). The Shilluk word *runidjok* literally means ‘years of God’. It is often used when talking about the time of Nyikang, the mythological first king of the Shilluk people who founded their kingship and ruled over them at the beginning of the 16th century CE, according to their oral tradition. The Abyalang Dinka used the term *uan tiir* in their oral tradition when talking about the time of Funj presence in the area. This information proved useful for determining the relative age of some of the pottery found among the surface material

on the archaeological sites visited. Time-related concepts are worth bearing in mind.

Part of my project was bound to be concerned with absolute and relative chronology in this almost unexplored geographical area. Sociocultural generalisations cannot be made without some idea of chronology. However, to me, chronology per se is not an aim; it is and should remain only a means. My aim was to study village life in the past, including settlement patterns, economy in relation to ecology, and surplus economy. Did people inhabiting this area have contact with other areas, and was it possible to identify the ethnicity of people living there in the past? I considered ritual and other symbolic expressions—not least those related to death, graves, and burials—through material manifestations. Such evidence might shed light on different age groups of people. The archaeological material that bears on these issues is limited, not least due to the scale of the excavated areas.

1.2. Propositions and data

The observations made during my visits to archaeological sites were important for understanding how the archaeological deposits might have been formed and for deciding where to locate the excavation trenches. The outskirts of the archaeological sites are generally sloping. Today, they are the preferred places for dumping rubbish. This may also have been the case in the past (Kleppe 1976a, 1982b). The topography of the archaeological sites visited supports this argument. Downcutting—for instance, for graves dug into habitation deposits—constitutes a feature complicating the interpretation (see chapters 3–5).

Nicholas David (1981) raised the issue of excavating small, restricted areas. His point was simply that excavations are often too small. This also applies to my work in Upper Nile Province. My argument, however, is that the archaeological material revealed was copious and varied, and I found it adequate for my initial study in the Upper Nile Valley, where hardly any archaeological research had been conducted.

Of the three archaeological sites in the Renk area where my excavations took place, Debbat El Eheima revealed the oldest settlement, while the Debbat Alali and Debbat Bangdit sites seemed to have been inhabited much later. All three sites were inhabited at the time of my fieldwork. However, Debbat El Eheima had been reinhabited around 1957, when the people we found living there occupied the place. The earliest arrivals were Shilluk, we were told. It is of interest that Crawford included this site in a map of ‘Debbas on the White Nile’ in his book *The Fung Kingdom of Sennar* (Crawford 1951, 160, Figure 24). This, together with observations made by Arkell (1946, [1955] 1973) and Chataway (1930), formed the point of departure for my research.

Osteological material, including bones, shells, and human skeletal remains, was found. All animal bone material and

Table 1.1. Shilluk and Abyalang Dinka concepts related to time

Shilluk	Abyalang Dinka	English translation
<i>Nyan</i>		New, recent
<i>Kakadong</i>	<i>Boan</i>	About 10 years old
	<i>Uan tiir</i>	100 years old; time of great grandfather
<i>Runidjok</i>	<i>Asjong kotch</i>	Very, very old

shells were studied by experts (Gautier & Van Neer 1997). The analysis of human remains was performed by Berit Jansen Sellevold (appendix 3). A specialist study of some of the tooth material from Debbat Bangdit was conducted by two odontologists, Gisle Bang and Kjell Bjorvatn (Bjorvatn et al. 1988). Lumps of dried clay from hut walls, generally referred to in the literature by the Arabic word *galous*, were also present in the archaeological deposits. Further details about the archaeological material are provided in the following subsections.

1.2.1. Ceramics

Potsherds were by far the most numerous finds at the excavation sites. Some complete pots found in situ were left there since they extended beyond the excavated areas. Potsherds were fitted together, and shapes were reconstructed. The shapes, thickness, sizes, clay mixtures used, and surface treatments varied. Such features may be related to practical, functional uses but may also reflect ethnic or other sociocultural affiliations.

Differences in decoration and other surface treatments of ceramics are interesting, and ethnographic observations may be relevant for the archaeological interpretation. A noticeable feature is the variation in decoration and other surface treatments of pots made for a local market, pots ordered by someone from a household located near a potter, and pots made for a potter's own domestic use. Pots made for a local market may be undecorated or bear a much simpler decoration than those used by the local community. A potter's own pots may be of even higher quality, I was told, and this is a topic of further interest. Shape and clay-tempering composition are often shared features. The use of pottery as grave covers, primarily documented through potsherds, is a unique feature. The issue of primary and secondary uses of pots and potsherds is a central topic in this discourse (see chapters 4 and 5).

The surface collections from the survey of the Malakal area also include ceramic objects, such as fragments of upper and lower grinders. The 'ceramic grinder' archaeological type has been identified through ethnographic analogy (Evans-Pritchard [1940] 1980, 170, Figure 12). My interpretation is that they were invented in response to the scarcity of stone material suitable for making such objects in the area.

Ceramic pipe head fragments found on the sites resemble pipe heads currently in use. They are made of chamotte-tempered, coarse fabric tolerating an open fire and are today smoked using charcoal. Both Shilluk men and elderly women smoke pipes. Women use smaller pipes with short stems and rather small pipe heads. Men and women make their own pipes, we were told. If found in sealed contexts, pipes provide a terminus post quem since we know from historical sources that tobacco and pipes were first introduced to this part of Africa c. 1600 CE (Crawford & Addison 1951, 96). Some other unusual fragments of ceramic objects were also found at the sites in the Renk

area—specifically, fragments of ceramic bracelets or rings at Debbat El Eheima. Such items have also been recorded at Jebel Moya. Addison (1949, Plate 53, 13–22) provided depictions but offered no comments on them.

Ceramic beads and other personal adornments were also recorded. A few larger bead-like ceramic objects—perhaps spindle whorls—were recorded among the surface material at both Debbat Alali and Debbat El Eheima. A few ceramic game pieces were found at Debbat Bangdit.

All studied ceramic objects were classified according to a standard scheme for ceramic materials. It should be noted that all objects were handmade and most likely local products. This observation was decisive for formulating the following propositions tested through the analysis of ceramic material:

1. Chamotte (also termed 'fireclay' or 'grog') was widely used as a tempering material in ceramic objects. It was easy to obtain by using broken pots.
2. Local potters were in control of ceramic pots for both domestic use and exchange in local markets.
3. Decoration and other surface treatments may be decisive for determining how pots were circulated and used, as such features might indicate a specific ethnic or family-related affiliation, i.e. uses beyond mere practical-functional purposes.
4. Different ceramic containers were used for different practical-functional and/or sociocultural purposes.

The presence of fragments of upper and lower chamotte-tempered ceramic grinders led me to formulate the following proposition:

Proposition 1: Pyro-technology was used in innovative ways.

1.2.2. Lithic objects

Lithic objects were found at Debbat Alali, Debbat El Eheima, and Debbat Bangdit. A conventional classification was followed, with raw material used as the most important criterion. Distinct types included fragments of stone grinders, which are of special interest, as stone used for this purpose is not found naturally in the Renk–Malakal area.

1.2.3. Iron objects

The presence of small iron objects in the excavation at Debbat El Eheima was associated with rather early C₁₄ dates. New calibrations were made by my colleague Lotte Selsing in 2016. These calibrations differ somewhat from those published previously using an earlier calibration scheme (Kleppe 1986a, 111). Further discussions are provided in chapters 4 and 5. Iron objects were also present at Debbat Bangdit. The presence of small iron objects in an early carbon-dated context led me to formulate the following proposition:

Proposition 2: The use of iron objects in the Upper Nile Valley has ancient roots.

1.2.4. *Personal adornments*

Most of the objects classified as personal adornments were ceramic. Such objects were primarily associated with burials and graves. A few bone and shell objects were also present. One bead or pendant of a cowry shell was found at Debbat El Eheima, indicating contact with the Red Sea area.

1.2.5. *Miscellaneous*

Some fragmented objects with rough surfaces bearing U-shaped grooves were made of stone, a conglomerate, and hard ceramic material tempered with chamotte. It has been suggested that the grooves were formed through the shaping of ostrich eggshell beads (Rudolph Kuper, personal communication). This could indeed be part of the explanation, but I find it plausible that the grooves could also reflect the shaping of other objects.

Galous pieces were also found in the excavations. These are lumps of dried clay with mixed-in organic and other casual materials, such as random potsherds and lithic objects, and are remains of housebuilding material. Hut walls in both the Shilluk and Dinka villages visited in the area clearly document the origin of this material (see also Kleppe 1982b, 62–63). Bone and wooden objects were very few and need no further commenting here.

Kankar was found throughout the excavations at Debbat Bangdit. *Kankar*, or *kunkar*, is an Indian term used for precipitated white-to-greyish calcium carbonate nodules that look like cement. Such material occurs naturally in porous sediments and as a coating on pebbles. The identification of this material was confirmed by geologists working in Sudan when my fieldwork took place. It may have been naturally present at the site, or people may have brought it there.

1.2.6. *Osteological material*

Osteological material is of two kinds: remains of objects worked into artefacts or primarily leftovers from food. Few archaeological objects of bone or shells were identified, except for ostrich eggshell beads, which were rather numerous. The overwhelming part of this material was identified as food scrap or natural waste fauna. Such material was present at all three sites. Expert studies of the osteological material from Debbat Alali were conducted by Ali Tigani el Mahi (Kleppe 1982b, 63–64), and from Debbat El Eheima and Debbat Bangdit by Gautier and Van Neer (1997; see also chapter 4). The osteological material was thought to elucidate issues such as the following:

1. Osteological material may indicate changes in ecology and/or ecological adaptation. Changes in the faunal assemblage may indicate cultural and/or ethnic changes.

2. Specific osteological features may indicate whether village settlements were seasonal or permanent.
3. Domesticated animals were kept for milk, blood, and meat. They may also have been used for ritual purposes.
4. Shells may represent food remains, but some may have been used as tools—for instance, for pottery making.
5. Specific shells may indicate long-distance contacts.

1.2.7. *Human skeletal remains*

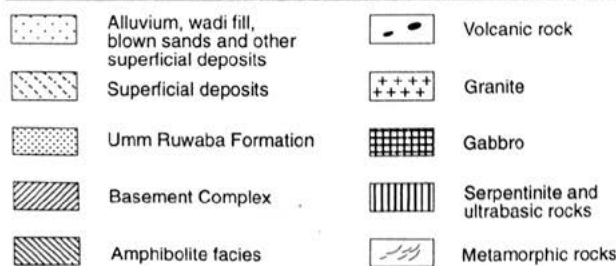
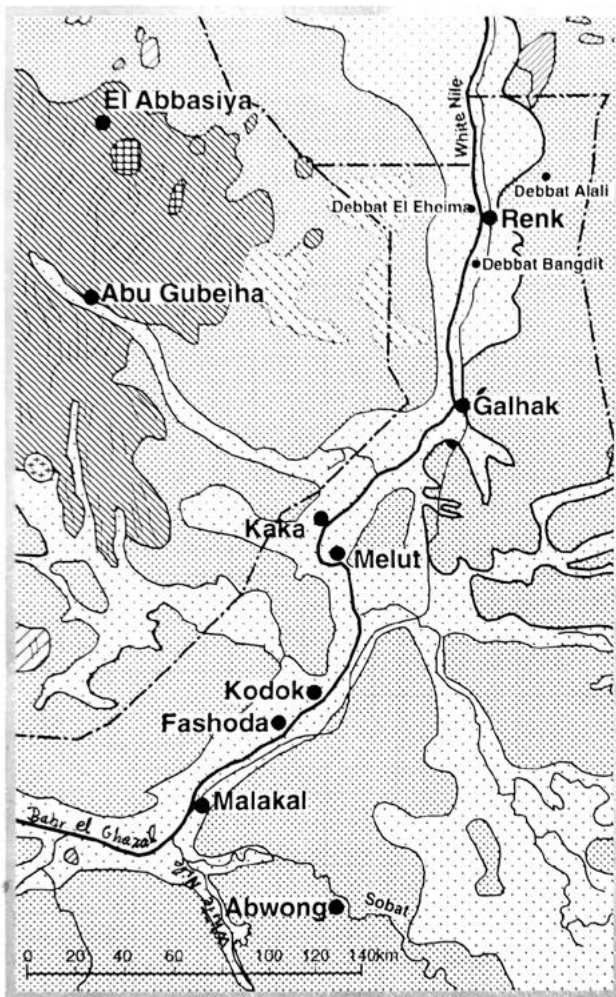
Only one complete grave, located at Debbat Bangdit, was excavated. Sections of graves located in the dug trenches were documented at both Debbat El Eheima and Debbat Bangdit (see chapters 3–5).

The handling of human remains from archaeological sites was considered unproblematic during excavation, identification, and further curation, and emic and ethical considerations were hardly ever brought into the discourse when my archaeological excavations took place in the Renk area between 1977 and 1983. This issue was put on the agenda of the World Archaeological Congress (WAC) and became a personal concern later (see also Kleppe 2018).¹

1.3. *Ethnographic and ethnoarchaeological documentation*

The use of chamotte in pottery making was a general feature in the Upper Nile area. The potters and pot users were probably familiar with the fact that by using chamotte as a tempering agent, the objects could be made fire resistant. A potter in the village of Obyyo near Kodok (Map 1.4) told me that she always used broken pots or old potsherds which she collected within the village area. She crushed this material and mixed it with clay when making new pots. A person ordering a new pot from her would often bring the quantity of potsherds needed to make the required chamotte. While excavating at Debbat El Eheima in 1981, we observed one day a Shilluk woman from a nearby village coming to the village to collect potsherds for chamotte. The woman told us that the potsherds at Debbat El Eheima were of high quality. She collected potsherds in a systematic way. She found a suitable place and squatted between two areas that she cleared from this position. She collected potsherds down to a depth of approx. 3 cm using

¹ Etic and emic aspects of excavating human remains were clear to me when I conducted these excavations, but I did not problematise them at the time. No one questioned the way in which archaeologists handled these finds in the early 1980s. Changes in attitudes took place among archaeologists and those working in and with ethnohistorical settings a few years later. This led to a revision of legislation for archaeological excavations and placed emphasis on curation, including the handling of human remains and reburial issues in many places, not least due to the involvement of local people and their concerns about their own traditions. The issue had already been put on the agenda at the first WAC in 1986 (see also Hubert 1989) and became part of current archaeological discourse after the so-called Vermillion Accord on Human Remains was adopted by the WAC at its first inter-congress in 1989 (McKeown 2013, 53). The human skeletal remains from Debbat El Eheima and Debbat Bangdit are not part of this discourse since some data have already been published without taking such concerns into consideration.



Map 1.4. Geology and soils of the Renk–Malakal area based on J. R. Vail's (1982) work.

a small spade-like iron tool with a short wooden handle (Figures 1.1–1.3). She then carried the potsherds away wrapped in the lower part of her traditional dress (*lawo* in Shilluk). The bundle she carried had a diameter of 35–40 cm.

Not all ethnic groups living in the Upper Nile Valley made their own pots at the time of my visits. Whether this was also the case in the past is an open question. Dinka living in the Renk area today buy the pots they need from Shilluk potters living on a nearby island. I was made aware that the Shilluk potters preferred the market in Geigar, the largest in the area, to trade pots.

What locals identified as Funj pottery is a distinct ceramic type, as indicated by verbal information obtained from

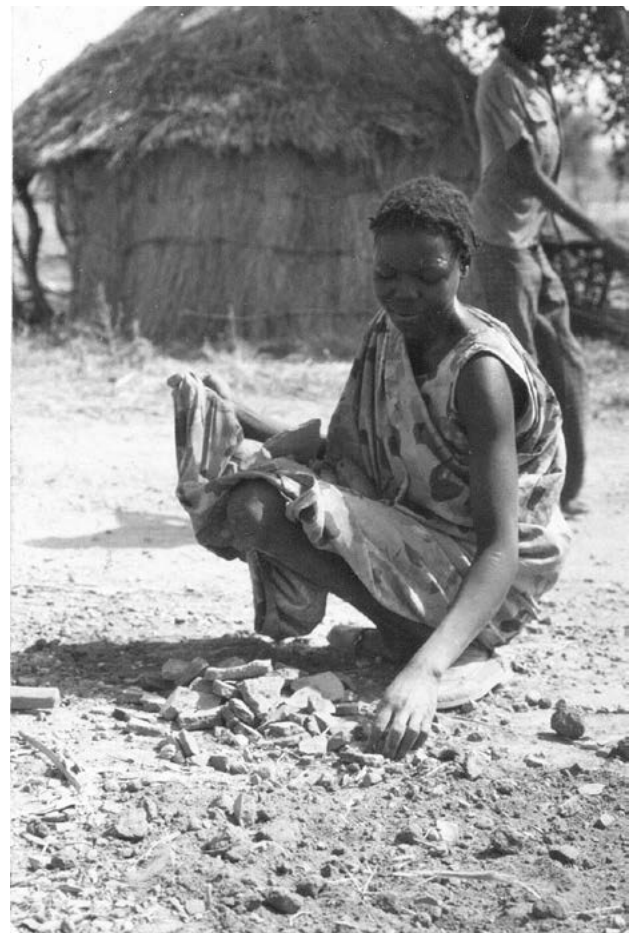


Figure 1.1. Debbat El Eheim: Female Shilluk potter selecting potsherds for chamotte.

both Shilluk and Dinka people living in villages within the archaeological sites visited in the Renk and Malakal areas (see also Vansina 1985, 187). The pottery of this distinct type is characterised by an impressed band of rocker decoration just below the rim (Kleppe 1982b, Plate IV and Figure 4) and a polished exterior surface. It should be clarified that the term ‘Funj’ as used by local people simply refers to something, an event or object, not associated with their own past and thus considered foreign. However, the term ‘Funj pottery’ as used by archaeologists has a completely different meaning. I have discussed this issue elsewhere (Kleppe 1982a, 64–65; 2000), and I discuss it further here in chapter 5.

Most of the archaeological sites visited were inhabited, and people living there were asked about activities which might have affected the sites. The ethnographic data collected were basically of two kinds: information about hut-building activities and about pounding and grinding activities. Wooden building material used as wall and roof support was reused, as such material is in short supply in the area. Otherwise, abandoned huts were generally left to collapse by themselves. Soil-digging activities involved moving deposits, including new depositions—a factor that further complicated the interpretation of the archaeological sites. Pounding pits were documented on the outskirts of a Shilluk village visited, and the working procedure



Figure 1.2. Debbat El Eheima: Two areas cleared to collect potsherds for chamotte.

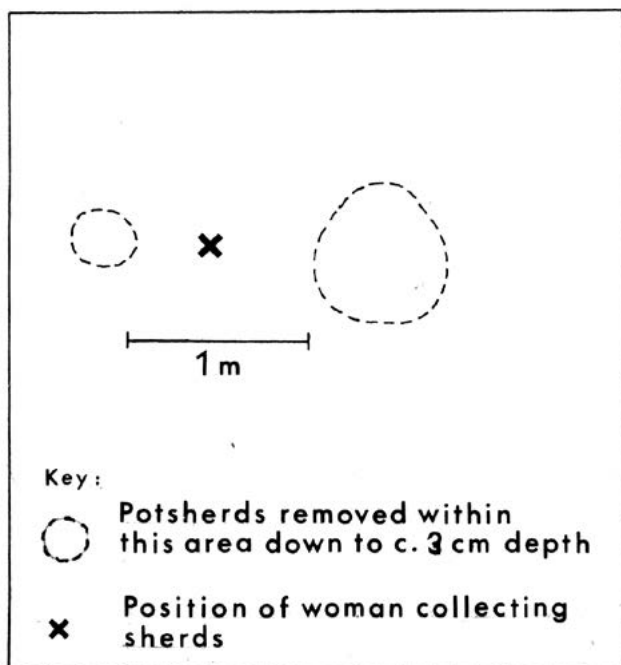


Figure 1.3. Debbat El Eheima: Plan showing the size of the areas cleared to collect potsherds.

associated with this practice was recorded. These pounding pits caused further damage to the archaeological sites, further complicating the interpretation of the archaeological deposits (Kleppe 1982b, 62–63). In several Shilluk villages, holes approx. 12–15 cm wide and approx.

25 cm deep were noticed in the slightly elevated areas on the outskirts of the villages, generally corresponding to the outskirts of the high ground. The holes and the areas extending from their edges approx. 10 cm outwards were plastered with clay. These holes were used for pounding durra (a *Sorghum* sp.), as we witnessed and documented. A pounding hole would normally be used for two and a half to three years before it was abandoned, as the edge would become too damaged for further repair. A new hole would then be dug elsewhere on the outskirts of the village (Kleppe 1976b, 1982b).

A striking feature observed in the villages on the ridges was that the ground near living areas was always kept clean, leaving a hole in the ground. The clay-lined floors and clay-surfaced areas in front of the huts were swept clean of casual rubbish, and dust was removed more than once a day. Household rubbish was generally discarded on the outskirts of the villages. Edible rubbish was consumed by animals. Dogs were always hungry, but other animals also fed on it.

As previously mentioned, when building a new hut, the soil used as building material was generally taken from within the village area. Some details on this practice were recorded at Debbat Mong Deng and Debbat Bangdit, where such work was underway at the time of our visits. In both cases, the holes dug were approx. 1.6 m deep, and their width varied between 2.2 and 3 m. At Debbat Mong Deng, such a hole was located close to where a hut was being

built. Inspecting the hole, we noticed that archaeological material was present down to a depth of 1.1 m. We also noticed potsherds and other archaeological material in the walls of the new hut.

The people living in Debbat Mong Deng at the time of our visit were Abyalang Dinka. A new hut was under construction when we conducted our excavations at Debbat Bangdit in 1983. The hole made after removing soil for the walls was approx. 3 m wide. By the time we left the village, it had only been dug down to a depth of approx. 70 cm, and the construction of the hut had not been completed. This practice of hut building may have caused considerable damage to the archaeological sites of the area, further complicating the interpretation of the sites' stratigraphy.

Many fireplaces were seen in villages inhabited by both Abyalang Dinka and Shilluk. Indoor fireplaces were normally kept in one place close to the wall and away from the door, but outdoor fireplaces were moved around. The outdoor fireplaces were used for two purposes: cooking and burning fuming fires overnight to keep insects away from the people and, not least, their animals.

The overnight fireplaces are normally larger than those used for cooking. A cooking fireplace is often moved depending on the wind's direction, and it is rarely a permanent construction. Three to four stones of nearly the same size (approx. 15 cm across) are used as firedogs. These firedogs are moved closer together or further apart depending on what support is needed for cooking: far apart if a large pan is put on the fire and close together if a small pot is to be used. A fifth firedog is generally kept within reach in case extra support is needed. The many moving fireplaces leave larger and smaller areas of ash-rich soil within a habitation area, including homestead areas. Even large fireplaces regularly used over long periods may appear only as shallow depressions, with very little ash and charcoal. The wind almost always blows, dispersing this light material. This implies that archaeological traces may be vague or even absent.