Site-Location, Exchange, and Production: The Formation of Houlouf Polity in the Chadian Plain

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Abstract

This paper discusses the formation of the Houlouf polity, through the lens of systematic and coherent analyses of site-location strategies, patterns of exchange, and the production of material goods and craft items. A short review of research on trade in West African archaeology shows that the study of long distance exchange is still mostly focused on provenience analyses. As important as characterization and provenience are for the reconstruction of exchange network, they do not provide access to internal dynamics of the receiving societies. This paper examines the concomitant changes in site-location and settlement patterns, patterns of flows, distribution, and consumption of long-distance trade items, and patterns of craft specialization and production intensification, to show that they were part of interlocked feed-back loops. These deviating/amplifying feed-back loops triggered a dynamic that resulted in the emergence of three successive social formations all along the Houlouf region ca. 4000 years archaeological sequence.

Introduction

The construction of cultural landscapes, the production, exchange and consumption of material goods, play a crucial part in the rise and fall of human socio-political systems. Long term shifts of site-location and patterns of settlements generally result in the build-up cultural landscapes showing how past societies "negotiated" unstable to meta-stable compromises with their environments. The same thing can be said about exchanges and production. The study of prehistoric exchange systems can be very revealing on the dynamics of past societies. It is, however, fraught with extraordinary theoretical and methodological difficulties. Number of

interesting suggestions have already been made in the literature (Renfrew 1984, Torrence 1985). Exchange systems have been arranged after their increasing degrees of complexity, from direct access to central market places via a cascading down-the-line mode in combination with the use of different transportation technologies and systems (Renfrew 1984: 119 - 124).

The transfer of durable goods over long distance is easy to document in the archaeological record. But does any recorded exotic items signal the existence of an exchange system? People moving from Area X to Area Y generally carry part of their material wealth. Such wealth may include items of personal adornment in precious stones and metals as well as many other categories of material goods. If these items end up entering the archaeological record in Area Y, they could very easily be interpreted as evidence of long-distance trade between Area X and Y. In practical archaeological terms, it will be virtually impossible to tell the difference. Differences in sampling procedures and field techniques make comparative analyses extremely difficult. This having been said, the data recorded so far from some of the sites excavated in West Africa provide enough evidence on the existence of long distance exchange networks (Mauny 1961). The Trans-Saharan trade networks connecting the Machrek and the Maghreb to West Africa urban centres is well documented. What is, however, still missing is the understanding of the patterns of flow and use of goods within a well delineated regional context as presented in this case study. Clearly, long distance trade in foodstuff, goods, and prestige items was a key player in the fabric of West African social systems. The focus of investigation is predominantly placed on the identification of origins of raw materials and/or individual finds to trace long-distance connections. The work presented below aims to decipher the underlying regularities in the patterns to be observed, in terms of site location, exchange systems and craft production, in order to understand the mechanisms involved and "gain insight into the economic and social processes at work in the society" (Renfrew 1984: 135) under investigation.

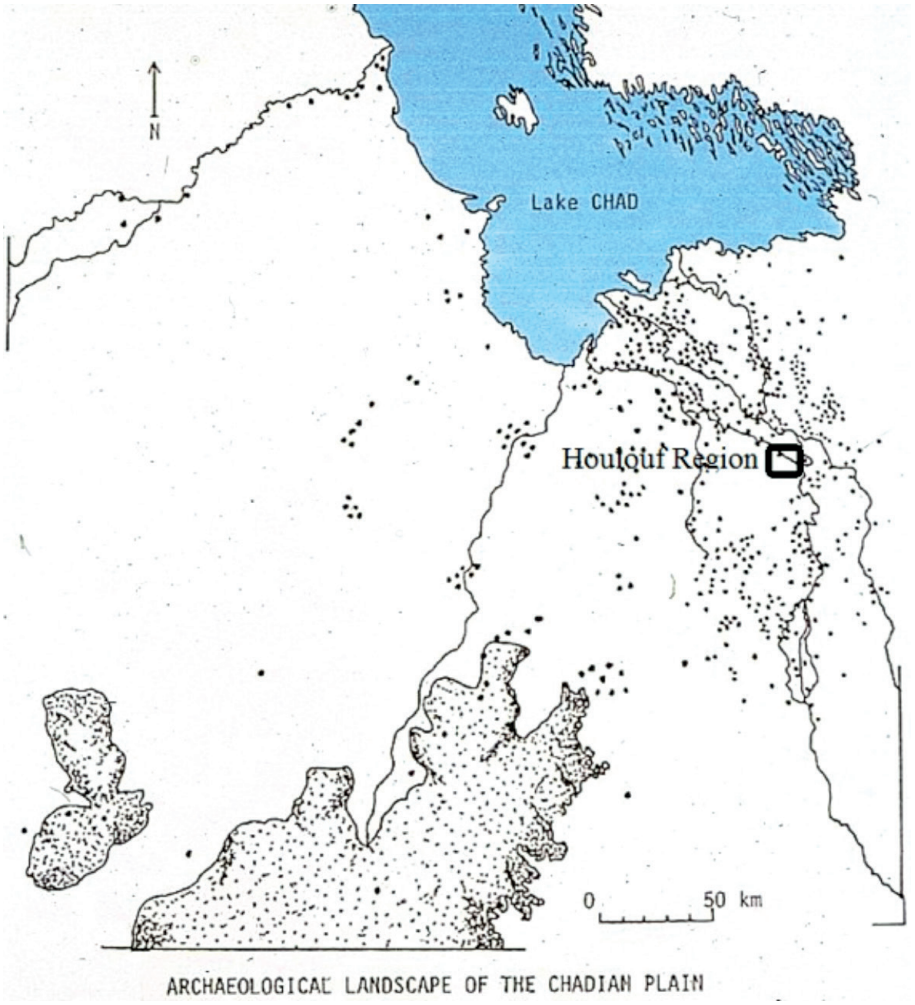

Figure 1: General distribution of archaeological sites from the Chadian plain and location of the study area

1. The Study Area

The research program launched in the Houlouf region in 1980 aimed to reconstruct the regional settlement history and the emergence of central Chadic polities, usually called "sultanate' or "principalities' (Lebeuf 1969), a key component of the Chadian plain cultural landscape. The field component of the Houlouf archaeological project lasted from 1980 to 1991, with one to two field seasons each year. Three nested survey methods were implemented to format the most pertinent socially and politically relevant study area (Holl 1988, 2002). Intensive survey operations were carried out between 11° 40' and 12° 10' North latitude,

14° 50’ and 15° 15’ longitude East, delineating a 400 km^2 territory bounded by the meandering Logone River in the East (Figure 1 and 2), with a total of 18 recorded mound sites. The study area is remarkably flat, with elevation ranging from 290 to 296 m above sea level. It is made of a stretch of land permanently above the annual flood level and low lying depression flooded each year. The former has an arbustive savanna with thorny shrubs and trees, predominantly *Acacia* sp. The latter is rich grassland, prime grazing lands for local cattle herders. Fourteen mound sites recorded within the Houlouf traditional land boundaries were tested (fig. 2).

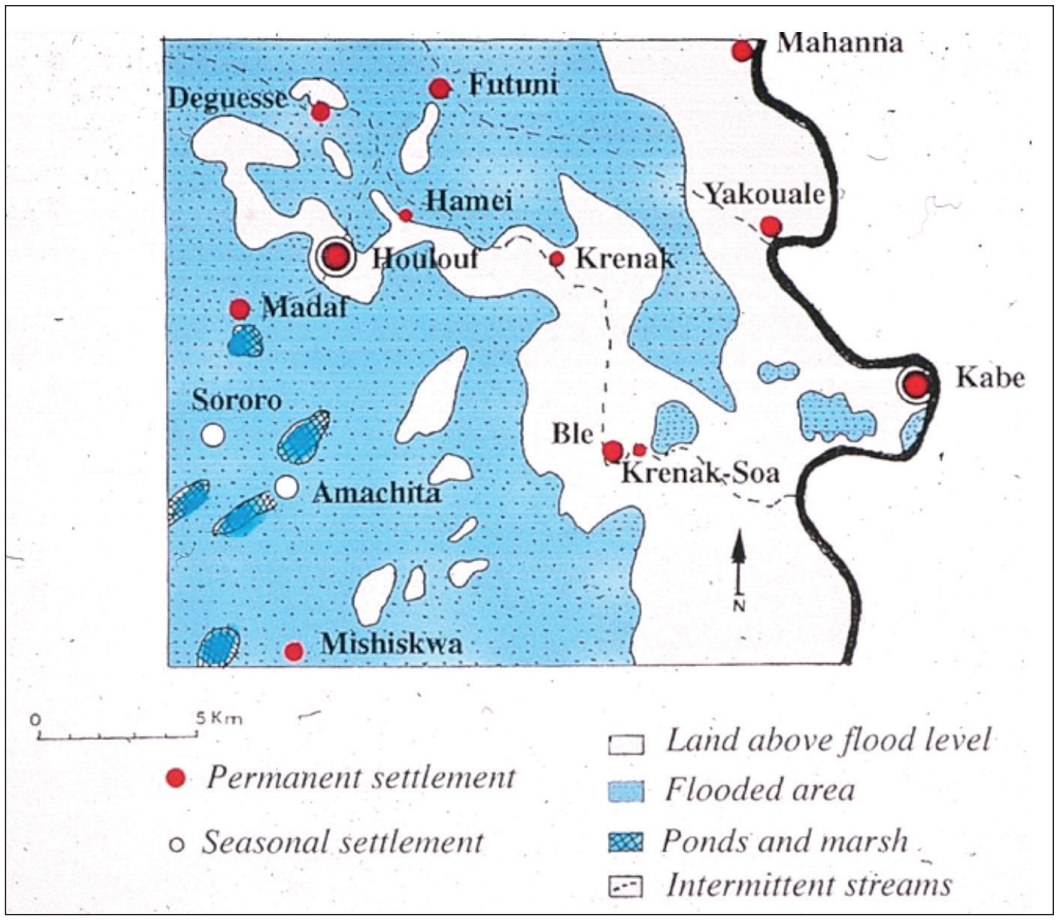

Figure 2: The study area and the recorded archaeological sites

2. The Formation of the Cultural Landscape

The settlement history of the Houlouf region started at the beginning of the second millennium BCE with mobile herder-foragers groups that used to settle on the lake Chad sand islands during the dry seasons. The deposits dating from this period, found at 1.5 to 2 m below the present-day level, are difficult to find, making any estimate of site density unrealistic. This having been said, this Deguesse phase subsistence-settlement strategy was robust enough to last for two millennia, from *ca* 1900 BC to 0. Mobile herder-foragers coexisted with settled autonomous and self-sustaining village communities during the Krenak phase (AD 0 – 500), suggesting a slow but steady population growth. Settlement expanded all over the study area during the Mishiskwa phase (AD 500 – 1000), along with the formation of three distinct kinds of settlement organizations: an isolated autonomous and self-sustaining village community in the South; a tightly clustered multi-mound complex polity in the South-East; and a small territorial polity in the North. The peer-polity rivalry that started to take shape during the Mishiskwa phase peaked during the Ble phase (AD 1000 – 1400), resulting in the rise to primacy of the Houlouf polity, which lasted for the whole Houlouf phase (AD 1400 – 1800). The Houlouf polity was finally conquered by the expanding Lagwan kingdom and turned into the northern border 'district' up to the German colonial conquest at the beginning of the 20th century.

3. Patterns of Exchange and Consumption

In general, there is a sustained increase in the flow of long distance trade items in the study area, shifting from 21 to 1,141 (table 1, fig. 3). The regional distribution and flow of goods present interesting variations. Houlouf and Blé-Mound complex pooled all the goods from all three provenience areas in the Krenak phase (AD 0 – 500), frequency ranging respectively from 12 to 8, with the South-West goods largely predominant. Houlouf took the lead, in terms of total amount as well as diversity of goods during the Mishiskwa phase (AD 500 – 1000). It dwarfed all the other six settlements that had 1 to 13 specimens of long distance trade items. Blé-Mound complex took the leading position during the Ble phase (AD 1000 – 1400) with 161 items representing 10 categories of raw materials from all three provenance zones. The other settlements, Hamei and Mishiskwa, had

1 to 6 coarse stone artifacts predominantly from the South-West with a single specimen from the North-East. The leading position shifted back to Houlouf during the Houlouf phase (AD 1400 – 1800) after the abandonment of Blé-Mound complex at the end of Ble phase. The Houlouf polity and its central settlement monopolized all the prestige goods during this period (fig. 3).

Clearly, there were two distinct spheres of exchange in place. One, articulated on the South-West and North-East zones, dealt with the procurement and transfer of coarse stone material used for the manufacture of heavy duty tools for daily life and crafts activities. The other, linked to the North-West trade, and by and large, linked to the trans-Saharan exchange network, focused on prestige goods used for display of status. The operations of the exchange systems that scattered all the long-distance items reviewed so far in this paper are not known; a number of plausible and realistic models can nonetheless be suggested to make sense of the archaeological record at hand.

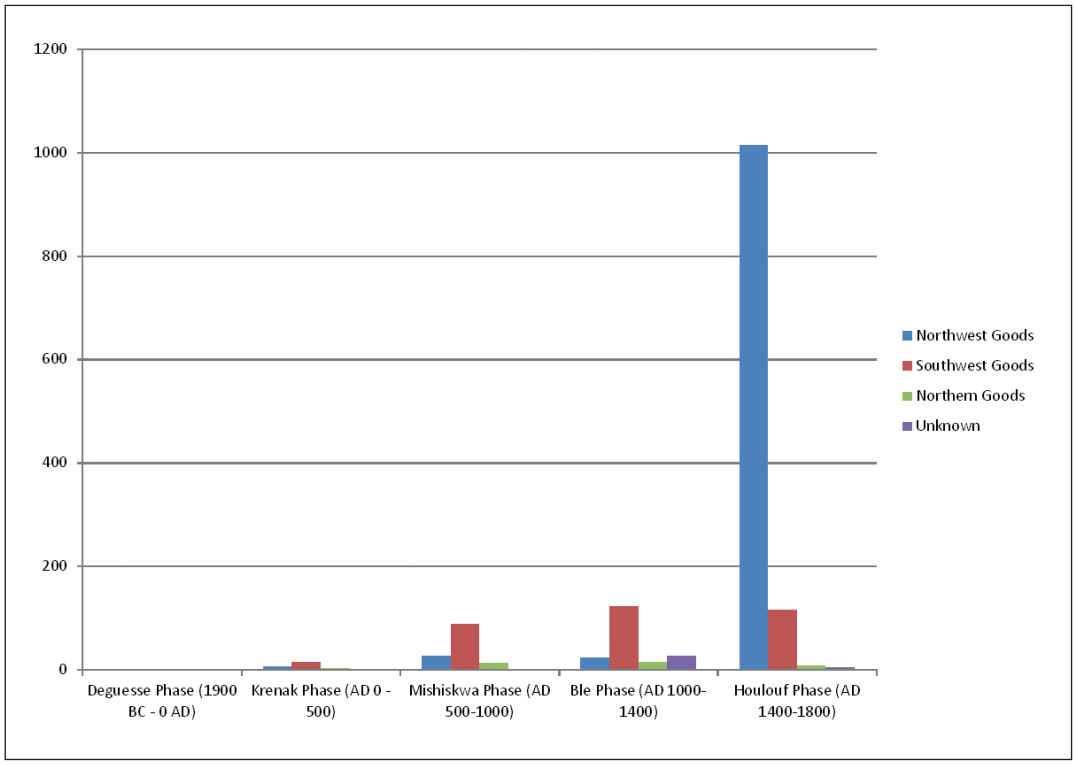

Figure 3: General flows of goods from different procurement areas

The transportation systems used to carry the goods in and out of the study area may have comprised water craft, animal caravans, and humans carriers. Dug-outs may have been used during the rainy seasons. It was, and it is still possible to travel all over the Chadian plain at the peak of the flood season, and this as far South as the Waza National Parc 250 km away. Animal caravans and humans carriers were used during the dry seasons. The peaks of the rainy and dry seasons, with their "flat" demand in labor, were the optimal periods for long distance expeditions and trade activities.

As far as the trade in coarse stone is concerned, numerous quarries and lithic workshop have been recorded along the Mandara-Mora-Waza mountain range and inselbergs in Cameroon and Nigeria, as well as around the Hajjer el Hamis inselberg in Chad Republic (Connah 1981, Connah and Freeth 1989, Holl 1988, 1995, 2002, Marliac 1991). Both procurement zones are located respectively, at 200 km crow flight South-West and 150 km North-East. Direct procurement by people from the study area cannot be totally ruled out. It is, however, highly improbable as it required precise geographic knowledge of the location of exploitable outcrops and skills to quarry rocks that are not part of plain dwellers cultural landscape. A "least cost" strategy for the acquisition of coarse stone material may have consisted in a two-way exchange system with local groups (Holl 1995), with exchange partners convening periodically, during the rainy seasons with their fleets of dug-outs, and/or, in the dry seasons with their animal caravans or humans carriers. Foodstuff, grain, fresh or smoked fish and cloths could have been exchanged for coarse stone, in bulk or already shaped into artifacts.

The "prestige goods" exchange through which alloyed copper, cowry shells, carnelian and glass beads were obtained was connected via Bornu markets to the Trans-Saharan trade. The carnelian beads may have been from West African and Asian origins. The alloyed copper artifacts, analyzed by Bourhis (Holl 2002: 246), were made by local blacksmiths, from recycled, presumably worn-out objects from diverse origins. Copper ingots could have been obtained from Bornu market-places where they were used as currency from the 14th to the beginning of the 19th century (Denham et al 1828, Barth 1965, Nachtigal 1980). From Ble phase A (AD 1000 -1200) onwards, copper ingots could have been imported in

two ways. First, they could be obtained easily in Bornu market-places where they were used as currency in exchange for goods sold by merchants and entrepreneurs from the study area. Denham *et al* (1828) reported a high demand for copper/alloyed copper at Angornu, the largest market-place of the 19th century Bornu kingdom in 1820. They also referred to a significant presence of Kotoko [speakers of Central Chadic languages] merchants from Makari, Gulfeil, Kusseri, Kala and Logone-Birni. "All these merchandises were paid for in slaves or *tobes* [long prestigious robes made of shining black fabric], but these bring money and were readily sold" (Denham *et al* 1828: 235). Second, merchant caravans cruising the study area used copper ingots for payment in a context where they had no cash value. The crossing of cultural boundaries requires translations, here, a re-interpretation of symbols of wealth (Bradley 1985). Consequently, in the study area, the material capital accumulated in foreign currency consisting of copper and alloyed copper ingots was converted into a higher symbolic capital, instrumental in the emergence and consolidation of regional elites (Holl 1988, 1994, 1995, 2001).

4. Patterns of Production

Relying exclusively of the archaeological record at hand, the patterns of diversification, intensification and specialization of the production of goods is strictly synchronized with all the other social, economic, and political indicators discussed so far in this paper. Pottery-making is present right from the first stages of settlement in the study area. Pottery-making, iron-working, fish processing and smoking took root in Krenak phase autonomous self-sustaining villages. Weaving and cloth dyeing and a greater diversification of pottery production were added during the Mishiskwa phase, which witnessed the formation of two competing polities. Special rites are performed in a number of production features, an offering of sheep/goat meat in the Houlouf pottery firing area, a 'medicine pot" and a child cranium under Houlouf forge furnace. The pace of diversification and intensification peaked in the Ble phase with the heightened rivalry between Houlouf and Blé-Mound Complex polities. Children remains are found associated with iron-working features at Mishiskwa, fish smoking "oven" at Blé-Mound D. The production of clay head-rest and terra-cotta figurines is well documented in the Blé-Mound complex as well as intensive fish processing

and smoking activities. Intensive salt making activities with especially made "packaging" containers took place at Houlouf.

With the rise to regional primacy, all the major productive activities are still present, but at a lesser intensity in the case of salt production. The ritual protection of some production features is documented by the "medicine pot" of Sororo fish-smoking pit, and the Houlouf forge furnace, as well as the mother and baby hippopotamus figurines from Houlouf brine filtering installations. Metal working installations from Houlouf are located in the North-East corner of the excavated unit. The uncovered blacksmith workshop found next to an "elite" cemetery includes three features. The furnace base filled with large sherds measures 0.80 m in diameter. Its wall, 5 cm thick on the average, was preserved up to a height of 10 cm. The forge hearth was built against a crescent-shaped wall 0.20 thick and 1.10 m long. It is circular and measures 0.60 m in maximum diameter, with the *tuyeres* made of recycled large jug necks still in place in the east. A "medicine pot", a small elongated vessel was found buried in the northern side of the hearth. And finally, a horseshoe-shaped hearth, 0.50 m by 0.40 m by 0.20 m deep, with a 0.15 m thick wall. A few iron and copper slag, 280 g, were collected in the deposit, indicating that imported copper or worn out objects in alloyed copper were recycled by local blacksmiths. All the copper artifacts recorded in the study area were made with the lost wax technique. This suggestion is supported by metallographic analyses carried out on a sample of 19 artifacts collected from the Houlouf cemetery (Holl 2002: 246, table 43).

Beside copper (Cu), tin (Sn), lead (Pb), and zinc (Zn) are the three main components with proportions higher than 1% found in all the studied artifacts. The copper (Cu) component varies from 61.2% to 89.45%. The variability recorded in metal components fits no pattern either in specific types of artifacts, or the archaeological context of the find. All the studied artifacts are tertiary alloys, Cu-Zn-Sn-Pb and Cu-Pb-Sn-Zn as major combinations, with, in some cases, a surprising amount of Iron (Fe) and Arsenic (As). According to Bourhis (pers. comm 1990) who made the analyses, the recurrent presence of iron is due to the use of standard iron-working installations, with the variability of metal components combinations resulting from systematic recycling. He further specifies that "considered from the side of their heterogeneous composition, it is probable that Houlouf objects

were obtained through re-casting of worn-out items from diverse origins." In a case like this one, metallographic analyses are of little help in provenience studies, but point instead to the skills of local craft people.

Phase	Number of Settlements	Northwest Goods	Southwest Goods	Northern Goods	Unknown Goods	
Deguesse (1900 BC – 0)	2	-	-	-	-	-
Krenak (AD 0 – 500)	6	5	14	2	-	21
Mishiskwa (AD 500 – 1000)	11	27	88	12	1	128
Ble (AD 1000 – 1400)	10	23	122	15	26	186
Houlouf (AD 1400 – 1800)	7	1,014	115	8	4	1,141
Total	**2 – 11**	**1,069**	**339**	**37**	**31**	**1,476**

Table 1: Long-term flows of long-distance trade items

Some of the goods manufactured in the Houlouf region such as salt, sundried and smoked fish, clay head-rests, and dyed cloths could have been the out-going commodities, part of a dynamic regional economy as suggested by the 19th century historical record (Barth 1965, Denham *et al* 1828, Lovejoy 1986, Nachtigal 1980).

5. Genesis of the Houlouf Polity

Changing settlement patterns, craft specialization and socio-political transformation interacted to produce time-specific world-views, supporting, more or less, stable social formations. Folk perception and assessment of different kinds of constraints and opportunities are the predominant forces driving social change. "As a consequence of our capacity to retain a pattern of continuities and discontinuities in our minds, even after the disappearance of the material and/or energetic substrate from direct contact with us, information is the only one of the basic commodities which could be responsible for the patterning of

human behavior, for the structuring of human institutions, etc. (Van der Leeuw 1981: 234). As is the case for the concept of "Mode of production", that of "social formation" is not easy to define (Seddon 1980, Friedman and Rowlands 1977). For our purpose, and to avoid being mired in a terminological debate, a social formation like the Braudelian conjuncture (Braudel 1962) is a specific space/time concatenation of overlapping political, social, ideological, technological, and economic characteristics which differentiates segments of human historical experience.

Three main social formations have been identified in the Houlouf region 4000-year-long archaeological sequence. The earliest one is practically unknown. Archaeological evidence from the Deguesse phase is too elusive to allow any convincing characterization. Two settlements, Deguesse I-II and Krenak I, with thick dung deposits were situated in a lacustrine environment and inhabited by groups of herder-collectors. These camps located on sand islands may have been visited intermittently during that almost 2000-year-long period. From where, with what frequency, and for how long, remains unknown.

In Krenak phase A (AD 0 – 250), Deguesse, Krenak and Houlouf, three almost equidistant small villages or hamlets confined to the North-Western part of the study area were inhabited by sedentary mixed farming communities. They were probably part of a social formation of autonomous self-sustaining, iron-using peasant communities. Connection to long distance trade networks was initiated during that time. Actual socio-political systems may have comprised of equal household heads under the non-constraining leadership of a primus inter-pares. Settlement expanded farther South-East with the foundation of three new villages at Blé-Mound A, B, and D in Krenak phase B (AD 250 – 500), this time with the beginning of site clustering. The process of site clustering was amplified in Mishiskwa phase A and B (AD 500 – 1000), leading to the emergence of a new bipolar social formation. Each pole was comprised of five settlements: Blé-Mound A, B, D, E and Krenak-Sao in the South-East, Deguesse, Houlouf, Krenak, Madaf, and Hamei in the North-West, and disembedded autonomous village at Mishiskwa in the South. Settlement sizes are unknown. It can however be hypothesized that actual site hierarchy may have consisted of a relatively large central village, Houlouf in the North-West and Blé-Mound A in the South-East,

surrounded by smaller villages and hamlets. The socio-political systems may have comprised of new higher-level decision-making units above the hamlet-village levels to cope with regional and sub-regional issues. The same social formation persisted in the Blé phase in a context of exacerbated rivalry between both settlement clusters. Stronger socio-political pressure toward tighter and more centralized systems as well as fiercer competition for access to long-distance trade networks, had generated a reorganization of settlements around dominant sites. Krenak and Krenak-Sao were abandoned. A new settlement was founded at Blé-Mound C. Similarities in pottery shapes and decoration seem to indicate that Mishiskwa, previously an autonomous village, was enrolled in the Houlouf sphere of influence. There are signs of the development of warrior identity, as well as evidence of warfare. Houlouf was raided during Blé phase B and probably retaliated with the sack of Blé-Mound complex. The amplification and broadening of craft specialization, sustained intensification of production and increased exchange flows are clearly visible. Houlouf ruling groups were able to launch massive labor mobilization for the construction of the city defense, which included a moat and an earthen rampart and the ruler's palace complex. With the demise of Blé-Mound complex, Houlouf rose to regional primacy at the end of Blé phase, ca. AD 1400.

The third social formation, the Houlouf polity, emerged in the Houlouf phase A (AD 1400 – 1600). The number of settlements dropped first from ten to three, confined in the North-West of the study area and arranged along a North-South axis of Deguesse – Houlouf – Amachita. It then increased from three to seven in Houlouf phase B (AD 1600 – 1800). Previously abandoned settlements like Madaf, Hamei and Mishiskwa were inhabited anew. A new fishing site was created at Sororo. The new settlement system characterized by a three-tiered site hierarchy was now focused on the *Yaéré*, the hinterland depression. The socio-political system comprised a chief, guaranteeing the unity of the land, who was probably represented by the effigy jar at the center of the Houlouf elite cemetery. A diversified elite comprising of prestigious groups of warrior-horsemen, archers, administrators and ritual specialists organized into presumably competing factions/descent groups, jockeying for power and prestige, succeeded in monopolizing access to long-distance traded luxury goods (Holl 1988, 1994,

2002). A sizeable number of craft specialists developed, which included masons, carpenters, potters, blacksmiths, weavers, merchants, salt producers, boat builders, etc. The maintenance of the city gates, earthen rampart, and ruler's palace were probably based on a kind of periodic *corvée* labor prestations. How the polity apparatus was financed remains unknown, but it can be guessed that different systems of taxation may have been developed. Arab pastoralist who entered the Land of Houlouf had to pay an annual tribute. Merchants caravans and dug-out fishing crews and/or patrons, probably had to pay fees for safety and permission to exert their commercial activities. According to ethnohistorical records, city officials, depending on their rank, had shares of grain harvests, honey, any butchered animal, hunted game and products of fishing parties. They were also granted labor crews to work on their estates. Three important socio-political offices, constituting the apex of the local political systems were already in place and probably in the Houlouf phase (Denham *et al* 1828, Barth 1965, Nachtigal 1980, Lebeuf 1969). This political triad consisted of the ruling chief (*Mra* or *Miarre* in the Lagwan language, translated as *Sultan* in Arabic). Under him were the equally ranked chief of land (*Galadima* at Houlouf today) and the Chief-Sacrificator. The former was in charge with matters of subsistence and land allocation, granting permits for fishing, hunting, honey gathering and wild plant and mineral resource exploitation. The latter dealt with a broad range of ritual performance including circumcision, rites of passage, and religious as well as propitiatory rituals (at the beginning of the excavation at Houlouf, the person who then filled the office sacrificed a mature white ram and spilled its blood on the spot to be excavated). These offices are hereditary and pass from one generation to next, through primogeniture along the male line. Even though seriously impacted by successive wide-scale political and administrative changes, particularly from the colonial period to the present-day modern Cameroon, this part of the ancient Houlouf polity organization was still alive in the 1980s. It did, however, collapse with the death of the more than 80-year-old Sultan Hassana, in 1988.

In Houlouf phase B, at an unknown date between AD 1600 and 1700, the Houlouf polity was conquered by the expanding Lagwan kingdom (A.M.D. Lebeuf 1969). This kingdom belonged to the widespread African tradition of "sacred and

secluded kingship". The king was invisible to his subjects, and lived secluded in his palace. In his weekly public audience day, he was hidden behind a reed curtain and addresses his audience through a spokesman. The enthronment ritual required the prince to live in total seclusion for 40 days. During this time, his human body would metamorphose into the incarnation of the eternal unity of the kingdom. He died as human to be reborn a king. According to ethnohistorical records confirmed by ethnographic research (Lebeuf 1969, Holl 1988, 2002), the socio-political organization of the formerly independent Houlouf polity was not altered following its annexation in the Lagwan kingdom. The new territories were granted a special status based on almost total autonomy. Their rulers only had to visit their paramount for hommage once a year, during the "annual festival day".

Concluding Remarks

The formation and evolution of the Chadic polity of Houlouf point to the succession of different social formations, from the initial stage of scattered and mobile herder-collectors to a tightly ranked society, via an autonomous self-sustaining mixed farming villages, competing peer-polities and centralized chiefdom. Prestige goods obtained from long-distance exchange networks more or less connected to the trans-saharan trade appear to have played an important role in the emergence and consolidation of local elites. The out-going counter-parts to these in-coming goods were very likely sundried and smoked fish, salt, clay head-rests, and dyed cloths. The intensification and diversification of local production systems that may have been under the control of the local elite appear to have been directly connected to the accelerated in-flow of long-distance traded items from both the "utilitarian" coarse stone material and "prestige goods" spheres of exchanges.

Acknowledgments

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