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Agnieszka Mączyńska

Lower and Upper Egypt in the 4th millennium BC. The development of craft specialisation and social organisation of the Lower Egyptian and Naqada cultures

Introduction

The remains of the Egyptian civilization attracted people's attention already in antiquity (*cf.* Herodotus, Strabo). In the modern times people were primarily fascinated by monumental tombs and temples. The Near East was wandered about by wealthy amateur travelers who published reports, memoirs and drawings from their journeys (e.g. David Roberts, Amelia Edwards). Popular interest in monumental relics of the past influenced the character of excavation research, which in the middle of the 19th century was carried out within temple complexes (Giza, Saqqara) as well as tombs (the Valley of the Kings). Numerous researchers of that time, including W.M.F. Petrie, the father of modern scientific archeology of the Near East, denied the existence of an Egyptian civilization before the emergence of a centralized Pharaoh's state. The finds recorded at the Predynastic sites were interpreted as the remains left by the representatives of a "new race", who were believed to have arrived in the Nile Valley towards the end of the Old Kingdom period (Petrie and Quibell 1896).

The progress of research at the turn of the 20th century changed this view. Excavation works at Naqada, Abadaija, Hu, Abydos, Hierakonpolis as well as new publications (de Morgan 1896-1897; Quibell 1900; Petrie 1900-1901; 1901; 1902-1903; Quibell and Green 1902) shifted the beginnings of the Egyptian civilization to an earlier date, thus acknowledging the Predynastic period.

Our present knowledge of the Predynastic Egypt is entirely different from what was known by the pioneers who studied the oldest history of this region. The

abundance of archeological evidence and the application of new research methods allow for much more detailed investigations of this period.

One of the major problems in the archaeology of the Predynastic Egypt is that despite the growing number of data and changing research paradigms, some old and obsolete interpretations are deeply rooted and still commonly accepted by scholars. One of the examples illustrating this problem is the traditional division of the Predynastic societies into two separate units: the Naqada culture in the south and the Lower Egyptian culture in the north. The two cultures are defined in opposition to each other and compared, usually to the disadvantage of the northern societies that appear to have been inferior ones. Simplistic observations of this kind, which ignore the reflection on the nature of archaeological evidence, hinder the progress of research concerning the earliest Egyptian societies.

1. The Naqada culture

Initially the interest in the Egyptian past was focused around Upper Egypt, which became the main region of archaeological investigations. Intensive excavation works carried out at the beginning of the 20th century resulted in the growing number of data, and brought the need of chronological ordering and classifying of the material. The first periodisation of the Predynastic period was established by W.M.F. Petrie (1901; 1921). On the basis of material from his own excavations at Naqada, Ballas and Diospolis Parva, Petrie distinguished three cultural units in the Predynastic Egypt, naming them after eponymic sites: the Amratian culture, the Gerzean culture and the Semainian culture.

In 1957, W. Kaiser proposed a new relative chronology based on pottery from the cemetery 1400-1500 at Armant. In his chronological division of the Predynastic period, instead of the three cultures proposed by Petrie, he distinguished one unit - the Naqada culture - divided into three phases (Stufen) that were to reflect the continuity of cultural tradition and the evolutionary character of development. Although the chronology of the Predynastic period was analysed later by S. Hendrickx (1996) and T. Wilkinson (1996), and subsequently modified by the researchers, its final version has not been established, and the issue is still open to discussion (*cf.* Hendrickx 2011b).

Currently the term "the Naqada culture" is used to describe societies that lived between the 4th and 3rd millennia BC in Upper Egypt (Fig. 1). Geographical range of this culture changed over time. All the oldest Naqadian sites are situated within Upper Egypt, from Matmar in the north to Kubbaniya and Khor Bahan in the south (Midant-Reynes 2000: 47). Although it is generally accepted that during

Naqada II period the Upper Egyptian societies expanded north and southwards (Midant-Reynes 2000: 45), the problem of their expansion to the north is still widely discussed among scholars (Buchez & Midant-Reynes 2007; 2011; Köhler 2008; in press; Mączyńska 2011; 2013; in press c). The last phase of the Naqada culture, often referred to as the Protodynastic period, is believed to have been a time of cultural and political unification of Egypt. Indicative of the cultural unification is the location of the Naqada sites along all the Nile Valley and in the Nile Delta in the beginning of this period. The political unification, which laid the foundation for the early Egyptian state, was to be the next stage of development of the Naqadian societies (Bard 2000; Köhler 2010).

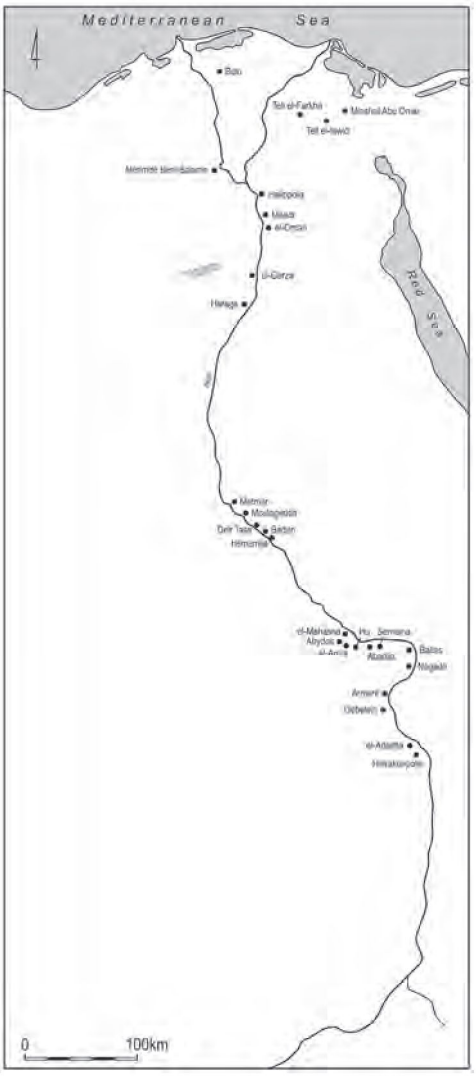


Fig 1. Egypt in the Predynastic period

Our knowledge about the Naqada culture (phases I and II) is based mostly on the data from 85 cemeteries and about 50 settlements. The main focus of research was put on the cemeteries. Little attention was paid to settlement sites, which are known mostly from surface surveys. Many of the data were obtained through excavations and published over one hundred years ago according to research standards different than today (Hendrickx and van den Brink 2002). In consequence our knowledge on the Predynastic societies of Upper Egypt relates more to burial customs than to the whole system of the Naqada culture. A more comprehensive picture of the Naqadian societies may be provided by recently excavated sites comprising both settlements and cemeteries, i.e. Hierakonpolis and Adaïma.

2. The Lower Egyptian culture

For many years Lower Egypt was of no interest to archaeologists studying the oldest Egyptian past. Additionally, due to its environmental conditions the Nile Delta was regarded to have been an almost uninhabitable swampland in the Predynastic period (Butzer 1976: 26). However, in the 1920s and 1930s some scholars abandoned the investigations in Upper Egypt and started the excavation research in the Delta area and at the Faiyum Oasis. That was a period of great discoveries concerning the Neolithic period and the beginnings of early Predynastic times in Egypt. Important sites at the Faiyum Oasis, Merimde Beni Salame or Wadi Hof were recorded and/or excavated at that time (Bovier-Lapierre 1926a; 1926b; Junker 1929-1940; Caton-Thompson and Gardner 1934; Debono and Mortensen 1990).

In the years 1930-1953 O. Menghin and M. Amer carried out excavations at Maadi. The archaeological evidence they revealed differed from the material known from the sites explored in the Delta several years before. Their findings attested that the settlement inhabitants had contacts with Upper Egypt and Southern Levant and, furthermore, they possessed the knowledge of metallurgy (Hoffman 1979: 200-201; Midant-Reynes 1992: 197). The new cultural unit was given the name the Maadi culture, changed to the Maadi-Buto culture after the discovery of similar material at the settlement at Buto. In the 1990s a new name was coined, i.e. the Lower Egyptian culture. Initially it was used interchangeably with the previous names (e.g. Adams and Friedman 1992: 325; Seeher 1992: 225; von der Way 1992b: 217) or added to them: Lower Egyptian Maadi-Buto culture (e.g. von der Way 1992a). Gradually the new term rooted in literature, replacing ones used before (Ciałowicz 2001; Mączyńska 2003: 213-226; 2011; 2013; Hartung 2004: 337). The name reflects a complex, non-homogenous character of this unit and its new quality, distinct as compared to the first Neolithic/early Predynastic cultures.

Extensive archaeological research carried out in Lower Egypt in the 1980s and 1990s brought to light new important sites, e.g. Minshat Abu Omar, Tell el-Iswid, Tell Ibrahim Awad, Tell el-Farkha (Kroeper 1988; van den Brink 1988; 1989; Chłodnicki *et al.* 1991; 1992a; 1992b). At the same time the research was conducted also at the previously known sites (such as Buto), at which the remains of Predynastic and Early Dynastic occupation were expected to find under the ancient cities (von der Way 1997).

The Lower Egyptian culture is the term describing communities that inhabited Lower Egypt in the first part of the 4th millennium BC (Fig.1). Radiocarbon dating allows for locating the culture in the range between 3800 and 3300/3200 BC, which corresponds to Naqada IA - Naqada IIIA1 periods in the relative Upper

Egyptian chronology (Ciałowicz 1999: 46; Watrin 2000: 170-173). By now, a total of 22 sites of this cultural complex have been identified and more are expected in the near future (Mączyńska 2011; 2013). However, only 7 of the sites have seen a comprehensive publication of all materials. These are: Maadi – settlement and cemetery (Rizkana & Seeher 1987; 1988; 1989; 1990), Buto settlement (von der Way 1997; Faltings 1998a; 1998b; Köhler 1998), Tell el-Iswid (van den Brink 1992), Tell el-Farkha (Chłodnicki et al. 2012) and cemeteries at Wadi Digla (Rizkana and Seeher 1990) and Heliopolis (Debono and Mortensen 1988). A considerable delay between the excavations on the one hand and the corresponding publications on the other, result in certain difficulties, which are the cases of Maadi, Heliopolis and es-Staff sites (Debono and Mortensen 1988; Habachi and Kaiser 1985; Rizkana and Seeher 1987; 1988; 1989). Some materials from the most recent research projects still await publication and are currently only available in the form of excavation reports, e.g. Tell el-Masha'la (Rampersad 2006), Kom el-Khilgan (Midant-Reynes *et al.* 2004; Buchez and Midant-Reynes 2007; 2011), Sais (Wilson 2005; 2006; Wilson and Gilbert 2003; Wilson *et al.* 2014); Tell el-Iswid[1] (Tristant *et al.* 2011; Midant-Reynes and Buchez 2014).

The Lower Egyptian culture is represented by settlements and cemeteries, with a considerable majority of the former. The data from both the types of sites allow for obtaining a more comprehensive picture of the societies than in the case of the Upper Egyptian culture, which is known mostly from funerary contexts. However, a relatively small number of Lower Egyptian sites as compared to the Upper Egyptian ones pose some interpretational problems. There are many unanswered questions concerning e.g. the development of the Lower Egyptian society, the Lower Egyptian-Naqadian transition, and the character of the Naqadian presence in the north. The sites vary in terms of chronology, showing different stages of development of the Lower Egyptian culture societies, which makes their comparisons difficult.

Archaeological investigations have revealed that some elements of the Naqada culture began to appear more frequently at the Lower Egyptian sites in Naqada IIC–IID period. This fact has been and still is interpreted through the prism of a so called Naqadian expansion. Most of the authors who refer to this problem assume that the appearance of southern influences in the north must have resulted from some movement of people and the arrival of Upper Egyptians to Lower Egypt. Since Naqadians are seen as the dominant party in this process, their culture is

1 Excavations of the French Institute of Oriental Archaeology in Cairo under direction of M. Beatrix Midant-Reynes.

believed to have influenced or even replaced the local one. In consequence of this process a single cultural unit – the Naqada culture - evolved in Egypt at the beginning of Naqada III period (*e.g.* Bard 2000: 58–59; Buchez and Midant-Reynes 2007; 2011). However, it should be emphasized that the presence of newcomers from the south has not been confirmed at any Lower Egyptian site. The archaeological evidence rather points to some interrelation between these two regions, especially in the second half of the Naqada II. In this period the Lower Egyptian and the Naqada cultures underwent many social, economic and ideological changes that resulted in the emergence in all the Nile Delta of centres markedly similar in many aspects of their culture.

There are several expeditions working in the Nile Delta, including Tell el-Farkha, Tell el-Iswid, Sais, Buto. The research carried out at those sites allows for verifying the existing views on the Lower Egyptian culture and for supplementing the knowledge about human activity in the region in the Predynastic period.

3. The Naqada culture vs. the Lower Egyptian culture

In the traditional view of the Predynastic period the Naqada culture and the Lower Egyptian culture are placed in opposition to each other. The Naqada culture is always seen as 'better', being more technologically developed and socially stratified. By contrast, the Lower Egyptian culture is considered unspectacular with its egalitarian social system, simple, poor burial customs and household production. The only 'advantage' this simple farming society had was its participation in the exchange network with the Southern Levant (Mączyńska 2006; 2011; 2013). The grounds for such comparisons have been questioned by E. Ch. Köhler (2008: 526-527) who stated that there is „a methodological and evidentiary imbalance" between the data from Upper and Lower Egypt. The Naqada culture, known mostly from funerary contexts, cannot be compared in a simplistic way to the Lower Egyptian culture, known mostly from settlement sites. Moreover, in recent years scholars have paid more attention to the regionalism within the Naqada culture, which points to the lack of one homogeneous unit in the south (Friedman 1994; Savage 2001; Köhler 2008: 523; 2014). In the light of the current state of research the Lower Egyptian culture seems to have been internally differentiated, as well. Therefore the two units in question should be compared very carefully, with regard to the nature of the archaeological evidence characteristic for each one.

Knowing all the above limitations the author of this paper has decided to compare two aspects of the Predynastic societies settled in Upper and Lower Egypt during Naqada I and II period, namely the level of craft specialisation and social

complexity. The choice to address these issues is not chance, as the problems concerning craft specialization and social organization in the north are rarely mentioned in the literature concerning the Lower Egyptian culture. So far, most of the authors, including the author of this article (*e.g.* Mączyńska 2011), only have stated that the Lower Egyptian society was characterised by a household mode of production and an egalitarian social organisation. However, recent investigations based largely on new data have allowed for more detailed investigations concerning these two problems. The author focuses on the recently obtained evidence and current interpretations concerning the mode of production and social organization in Egypt in 4th millennium BC, during Naqada I and II periods.

The aim of this paper is to focus mostly on Lower Egypt. For that reason some well known issues concerning the Naqada culture, particularly its social development, will not be addressed in detail. On the same grounds, theoretical considerations including hypotheses or theories and their interpretational problems will only be signalled in this study.

3.1. The development of craft specialization

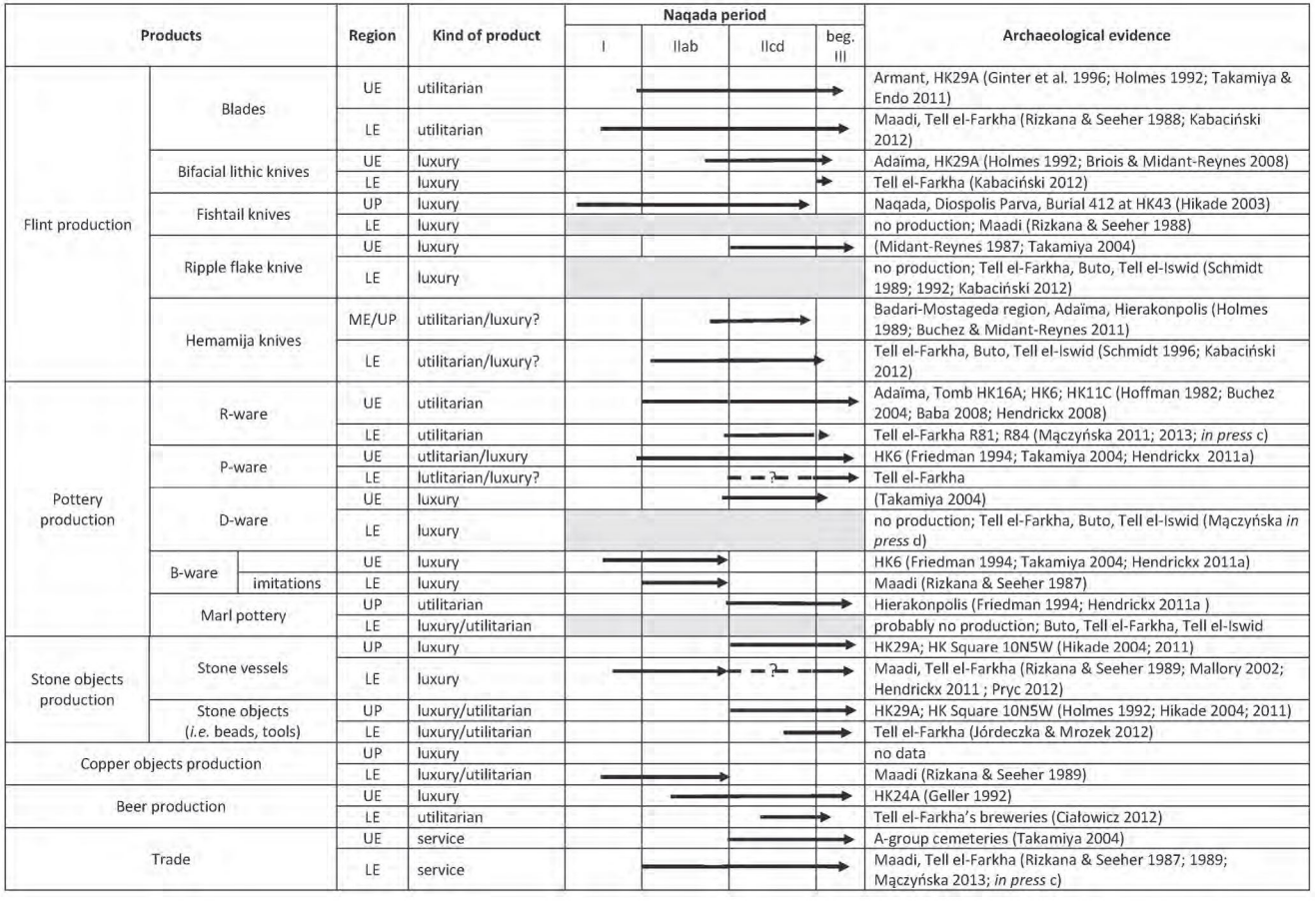
The first early Predynastic communities in the Nile Valley practiced agriculture combined with animal husbandry, satisfying their household needs through the production of goods in domestic context. This kind of subsistence economy created optimal, stable conditions for a steady growth of these populations. This in turn allowed for the accumulation of surpluses for the times of shortages, later transformed into the accumulation of goods for the exchange for other commodities. In response to growing demand for various items emerged the exchange market offering goods produced not in domestic context, but initially by part-time, and then by full-time specialists. It appears that pottery and stone implements were among the first goods that involved this mode of production. In the case of pottery standardization of vessels associated with specialised craftsmanship enabled easier and more effective production. Hence, the needs of growing population could be met, e.g. for basic, commonly used containers made from easily accessible Nile silt. Over time other workshops producing commonly available goods appeared. Furthermore, the demand for luxury goods associated with the increasing social stratification led to the appearance of a separate exclusive market offering commodities of high quality (e.g. flint knives, some types of pottery vessels, palettes). Goods of this type met the needs of emerging elites who used them to display their special position and validate their exceptional social status (Köhler 2010: 38-39).

3.1.1. The Naqada culture

In 2004 I. Takamiya presented the results of her research on the development of specialized production in the Naqada culture. According to the scholar in Naqada I period incipient specialization emerged in the lithic and pottery production (Fig. 2). Initially this was a part-time industry that involved the manufacturing of only a limited number of vessel types and flint implements. Among vessels produced by part-time specialists were probably Red polished and Black-topped wares. Their fine fabric, manufacturing techniques, surface treatment and firing conditions indicate that the production process must have been supervised by highly qualified persons. The same pertains to the vessels classified as D-ware. However, according to I. Takamiya a small quantity of D-wares, their non utilitarian character, wide distribution and style suggest that they were manufactured by full-time specialists.

Pottery from settlement sites dated to Naqada I and the beginning of Naqada II periods was represented mostly by utilitarian vessels classified as Rough ware (Friedman 1994; Mączyńska in press b), which were produced in domestic context in order to meet certain household needs. This observation suggests that specialisation in the south had a limited scope, including mainly symbolic contexts (grave goods). The good example in this case is settlement of Adaïma, where the majority of cooking vessels dated to the beginning Naqada II were produced in households for domestic purposes (Buchez 2004: 678-680). From the second half of Naqada II period onwards some types of vessels including Petrie's R81, R84 and L30 show a degree of standardization, pointing towards the production outside the domestic sphere. Specialised production of these vessels may have been associated with their function as early beer jars (Hendrickx *et al.* 2002; Buchez 2004: 680). This hypothesis can be further supported by the finds of pottery kilns in the brewery complex at Hierakonpolis (site HK11C), as well as by the relationship between brewery HK24A and the firing installation HK25D (Takamiya 2008: 200).

Interesting discoveries related to craft specialisation of the Naqada culture were made at Hierakonpolis (HK6). In Tomb16A a large number of vessels were found, with the majority of Rough jars with flat bases, low shoulder, wide mouth and simple, slightly reinforced rim (Hendrickx 2008). All of them are highly uniform, which suggests that they may have been produced in a single workshop or even by a single potter at HK11C (*cf.* Baba 2008: 665). They do not bear any traces of use, unlike other vessels from this tomb including Blacktopped jars with the traces indicating even heavily use. According to S. Hendrickx (2008: 77) Rough jars probably served the function of symbolic storage vessels provisioning the dead



Products			Region	Kind of product	Naqada period				Archaeological evidence
					I	IIab	IIcd	beg. III	
Flint production	Blades		UE	utilitarian					Armant, HK29A (Ginter et al. 1996; Holmes 1992; Takamiya & Endo 2011)
			LE	utilitarian					Maadi, Tell el-Farkha (Rizkana & Seeher 1988; Kabaciński 2012)
	Bifacial lithic knives		UE	luxury					Adaïma, HK29A (Holmes 1992; Briois & Midant-Reynes 2008)
			LE	luxury					Tell el-Farkha (Kabaciński 2012)
	Fishtail knives		UP	luxury					Naqada, Diospolis Parva, Burial 412 at HK43 (Hikade 2003)
			LE	luxury					no production; Maadi (Rizkana & Seeher 1988)
	Ripple flake knive		UE	luxury					(Midant-Reynes 1987; Takamiya 2004)
			LE	luxury					no production; Tell el-Farkha, Buto, Tell el-Iswid (Schmidt 1989; 1992; Kabaciński 2012)
	Hemamija knives		ME/UP	utilitarian/luxury?					Badari-Mostageda region, Adaïma, Hierakonpolis (Holmes 1989; Buchez & Midant-Reynes 2011)
			LE	utilitarian/luxury?					Tell el-Farkha, Buto, Tell el-Iswid (Schmidt 1996; Kabaciński 2012)
Pottery production	R-ware		UE	utilitarian					Adaïma, Tomb HK16A; HK6; HK11C (Hoffman 1982; Buchez 2004; Baba 2008; Hendrickx 2008)
			LE	utilitarian					Tell el-Farkha R81; R84 (Mączyńska 2011; 2013; *in press* c)
	P-ware		UE	utlitarian/luxury					HK6 (Friedman 1994; Takamiya 2004; Hendrickx 2011a)
			LE	lutlitarian/luxury?			?		Tell el-Farkha
	D-ware		UE	luxury					(Takamiya 2004)
			LE	luxury					no production; Tell el-Farkha, Buto, Tell el-Iswid (Mączyńska *in press* d)
	B-ware		UE	luxury					HK6 (Friedman 1994; Takamiya 2004; Hendrickx 2011a)
		imitations	LE	luxury					Maadi (Rizkana & Seeher 1987)
	Marl pottery		UP	utilitarian					Hierakonpolis (Friedman 1994; Hendrickx 2011a)
			LE	luxury/utilitarian					probably no production; Buto, Tell el-Farkha, Tell el-Iswid
Stone objects production	Stone vessels		UP	luxury					HK29A; HK Square 10N5W (Hikade 2004; 2011)
			LE	luxury			?		Maadi, Tell el-Farkha (Rizkana & Seeher 1989; Mallory 2002; Hendrickx 2011 ; Pryc 2012)
	Stone objects (*i.e.* beads, tools)		UP	luxury/utilitarian					HK29A; HK Square 10N5W (Holmes 1992; Hikade 2004; 2011)
			LE	luxury/utilitarian					Tell el-Farkha (Jórdeczka & Mrozek 2012)
Copper objects production			UP	luxury					no data
			LE	luxury/utilitarian					Maadi (Rizkana & Seeher 1989)
Beer production			UE	luxury					HK24A (Geller 1992)
			LE	utilitarian					Tell el-Farkha's breweries (Ciałowicz 2012)
Trade			UE	service					A-group cemeteries (Takamiya 2004)
			LE	service					Maadi, Tell el-Farkha (Rizkana & Seeher 1987; 1989; Mączyńska 2013; *in press* c)

Fig. 2. Development of craft specialization in Upper and Lower Egypt (on the basis of Takamiya 2004: tab.1)

in the hereafter. The scholar claims that the Rough jars from Tomb 16A "are the proof of specialized production which was probably organized in a professional workshop" (Hendrickx 2004: 80). In his opinion these vessels were not produced for daily use, but to serve a symbolic storage function. A large number of them placed in the tomb may have denoted the economic position of the deceased. Based on the dating of Tomb 16A to the beginning of the Naqada II period, Hierakonpolis is considered to have been the earliest centre of specialization in Egypt known so far.

Among other features probably associated with the development of specialisation in Naqada II period are technological changes in the production of pottery. In the opinion of R. Friedman (1994: 905-906) an increase in the occurrence of Rough wares can be observed at Upper Egyptian settlement sites dated to Naqada I to Naqada II periods. The growing number of Rough wares may have been associated with a decrease in fine ware pottery and the emergence of workshops. The production of Rough ware vessels was faster, cheaper and more efficient than the manufacturing of fine ware vessels. It was easier to make a workable paste tempered with dry straw, which additionally dried quickly, fired more rapidly and intensely. Due to the above characteristics, Rough wares could be produced on a mass scale. Vessels of this type, e.g. jars, were manufactured in workshops mostly for domestic purposes. By contrast, the production of fine ware pottery was labor-intensive, which is why the number of untempered Red polished wares diminished gradually and were finally replaced by Rough vessels. Other change possibly associated with specialised production was an increase in the number of marl clay vessels, well visible in the material dated the middle of Naqada II period onwards. According to R. F. Friedman (1994: 909), the appearance of marl clay ware in Upper Egypt may have been partly associated with the desire of the craftsmen to save labor and increase outputs. Possibly mainly for that reason Rough wares were gradually replaced by marl clay vessels starting from Naqada III period.

Significant technological progress in pottery production took place between Naqada IIIA1 and Naqada IIIA2 periods. Archaeological evidence points towards the production of standardized and cheaper vessels, the change associated probably with the appearance of pottery workshops in the settlement centres (Köhler 1997: 81-89; 1998: 63-72). The common use of rotating device and the production of many new vessel shapes is attested in that period. Furthermore , an increase in the number of good quality pottery of P-ware and S-ware can be observed. According to E. Ch. Köhler (1997: 81-89; 1998: 63-72) these changes may have been caused by increasing demand linked to the growing social complexity and/or changes in the socio-economic structure.

As far as flint production in the Naqada culture is concerned, D. Holmes (1989: 337-338) and I. Takamiya (2004) have shown that in Naqada I period some items, *e.g.* regular blades, were produced probably by part-time specialists. Research made by B. Ginter *et al.* (1996: 178-179) at the site of Armant has indicated the existence of blade workshop operated in Naqada I period. According to the scholars, at that time the settlement had some separated specialised sectors for the treatment of local raw material. In those sectors the researchers recorded the material representing a full sequence of production of blanks and bifacial tools, which would be a clear evidence for specialised production. In Naqada II period such specialized zones were replaced by workshops situated outside settlements, close to the local deposits of raw material. The exception in this case was the production of bifacial tools, which still took place within the settlement in that period.

Interesting observations have also been made in the case of flint finds recorded at Adaïma. F. Briois and B. Midant-Reynes (2008: 23-24) identified at the site two types of production: a local one involving simple methods, and a specialized one. The former was represented by the complete *chaîne opératoire* ranging from the raw material to finished tools. This was described by excavators as domestic production characteristic of a low level of technological advancement. In the case of second mode of production only finished tools were recorded in Adaïma, i.e. bifacial knives and roughly regular blades, the latter possibly used for the production of sickle blades. These items had probably been manufactured in specialized workshops outside the settlement.

In flint inventories dated to Naqada II period noteworthy are ripple flaked knives and fishtail knives. High quality of the knives with ripple flake surface retouch, attesting extensive skills of a flintknapper, suggests that they were produced in specialised workshops (Kelterborn 1984; Midant-Reynes 1987; Takamiya 2004: 1030; Briois and Midant-Reynes 2008: 21-22). According to T. Hikade (2003: 148-149) in the late Naqada II period late fish-tail knives were produced in the same workshops as ripple flaked knives, probably by the same group of flintknappers, most likely over many generations. Although those two types of knives were manufactured with different techniques, they both required a careful selection of raw material and several stages of production, each involving different range of skills until the knife was finished by a fine serration of the cutting edge. A flint workshop was recorded at HK29A site at Hierakonpolis. It specialised probably in manufacturing flint bifacial tools, i.e. knives and projectile points (Holmes 1992; Takamiya 2004; Hikade 2011: 84; Takamiya and Endo 2011: 740-741).

Over time, specialisation embraced also other crafts in Upper Egypt. Stone tools and stone beads, whose manufacturing required considerable effort and the amount of work, were produced in professional workshops, e.g. „temple workshop" HK29A or workshop at Square 10N5W at Hierakonpolis (Hikade 2004; 2011a: 84; Takamiya 2004).

Specialised production involved most likely the production of beer. The brewery HK 24A at Hierakonpolis produced probably 390 liters of beer per day, the amount exceeding the local needs (Takamiya 2004: 1032). In this case not only the production process, but also storage system and beer distribution had to be supervised by specialists.

Probably already in the Naqada II period, beside the local trade network, involving beer, pottery vessels and flint implements, there existed also a long distance distribution network of some goods, reaching probably Lower Egypt, Southern Levant and Nubia. Naqadian ripple flaked knives, palettes, beads and vessels were registered at Lower Egyptian sites in the context contemporary to Naqada I and II period (Maadi, Buto, Tell el-Farkha). The appearance of these imports in the north, although in small quantities, must have been associated with the involvement of the Naqada culture representatives (traders?) interested in goods accessible in the north including, items imported from the east. Thus, the Naqadians would have been responsible for the exchange and negotiations with trade partners, i.e. Lower Egyptians and/or Southern Levantines.

In the Naqada III period specialised craftsmanship reached a mass production level, especially in the case of highly standardized pottery and lithic assemblages. This mode of production emerged in a variety of fields as a kind of response to the increasing demand for both utilitarian and symbolic prestige items (Hendrickx 2011a). Its development was influenced also by long-distance trade involving the movement of goods along the Nile to the south and north, as well as by growing complexity of the Naqadian society. In the Naqada III period already well established elites needed prestige goods to display their special position and validate their high social status.

3.1.2. The Lower Egyptian culture

The Lower Egyptian assemblages have often been regarded as unspectacular in comparison to Upper Egyptian ones. According to B. G. Trigger (1983: 26) the northern sites „are distinguished from those of Upper Egypt by their monochrome, mainly undecorated pottery and by greater scarcity of jewellery, sculpture and decoration". Hence, it was natural for scholars to assume that the Lower Egyp-

tian culture had been characterised by a domestic mode of production. Today our knowledge concerning Lower Egypt in the 4th millennium BC is more complex. We are aware of imbalance between the available data from the south and north of Egypt. From this perspective, it is worth to re-examine the assemblages of the Lower Egyptian culture in terms of craft specialisation.

Undoubtedly the production of tools and other objects by the communities of the Lower Egyptian culture was based primarily on local resources, i.e. silt, flint, stone and animal bones, which came mainly from the Delta and possibly from the neighbouring areas. The use of locally available raw materials is interpreted as a sign of the adaptation of the Lower Egyptian communities to their environment. These resources were relatively easily accessible and did not generate high costs of transportation. The only exception in this case was copper, the resource imported all the way from Sinai through EBI centres of the Southern Levant (Mączyńska 2013).

The artefacts of the Lower Egyptian culture are represented by a markedly predominant group of strictly utilitarian items used in households, i.e. pottery vessels, flint and stone implements, and bone tools (Mączyńska 2013). The majority of them were manufactured probably by the representatives of the Lower Egyptian culture in domestic context for the needs of daily activities. In the case of pottery, features such as technological properties, mode of production and firing conditions point towards the absence of specialised production. E. CH. Köhler (1997: 81-89) describes this time as a household production stage.

Probably also some basic flint tools (e.g. endscrapers, burins, perforators, backed pieces and truncated blades) were produced in households from a widely available gravel flint. At Maadi settlement a large number of unused pebbles and cores with one or two platforms were recorded, which had been abandoned due to their internal flaws. According to I. Rizkana and J. Seehera (1984: 237; 1988: 14-16) these finds may indicate that knapping process took place within the settlement. Bone implements found at the site (e.g. awls, spatulas, pins and needles) were produced from widely available post-consumption remains. As far as stone implements are concerned, only the simplest ones (grindingstones and hammerstones of sandstone quartzite) may have been produced in households for daily needs, as the production of other kinds of flint objects required more effort and expertise. Interesting observations have been made by M. Jórdeczka and M. Mrozek-Wysocka (2012) with regard to stone items recorded at Tell el-Farkha. The researchers demonstrated that grinding stones and hammerstones may have been multifunctional, having application in the processing of other stone tools, crushing and grinding of dyeing materials, as well as crushing and grinding of plant foods.

However, it appears that not all archaeological assemblages recorded at the sites of the Lower Egyptian culture were characterised by a household mode of production (Fig. 2). Some ceramics, flint and stone items could have been produced by specialists. The type of specialization (part-time or full time) and its degree are difficult to determine due to the scarcity of data, including the lack of recorded workshops in the north. Only in the case of some items at least partly specialised production can be identified.

In ceramic assemblages noteworthy are imitations of blacktopped vessels found at Maadi. Even if those items failed to achieve the quality of the Upper Egyptian ones, their production undoubtedly required special skills, including advanced knowledge of the manufacturing and firing process (Rizkana and Seeher 1987: 51-52; Mączyńska 2013; in press c). Also Red polished wares, which were recorded in Lower Egyptian pottery inventories in small quantities, may have been produced by specialized potters, similarly as in the case in Upper Egypt (Friedman 1994: 876; Takamiya 2004: 1030-1031). What distinguished these wares from Rough ware vessels was fine fabric, which had to be prepared from Nile silt, tempered with fine sand and covered with red slip. The manufacturing of Red polished vessels required adequate knowledge of the production process and firing conditions. We cannot rule out that some of the vessels covered by red slip and burnished came to the north from Upper Egypt. However, local derivation can be corroborated in the case of vessels made from Nile silt tempered with long and very thin organic filler typical for the north, known as fibrous temper (e.g. at Buto, Tell el-Farkha, Tell el-Iswid). The notion of specialised production of Red polished ware can be further supported by the presence of Rough vessels covered with red slip in ceramic assemblages (*e.g.* Tell el-Farkha). The latter, due to lower technological requirements, could be produced in domestic context.

Analysing the production of pottery throughout the course of the Lower Egyptian culture one can observe some technological changes that may have been related to the development of specialisation. These changes, comparable to ones that took place in the south, involved an increase of Rough wares and a decrease of Red polished wares (recorded at Tell el-Farkha) associated probably with the need to simplify production (Mączyńska in press a).

The manufacturing of some flint implements required skills in knapping and debitage techniques. Specialised production of these items is attested at the site of Maadi, where apart from the prevailing gravel flint, also nodular flint was recorded among raw material finds. The latter is represented mostly by long and wide blades. According to I. Rizkana and J. Seeher (1984: 237; 1988: 14-16) a small

number of cores recorded within the site may point to the existence of workshops beyond the settlement area. The fossil flint recorded at Maadi had been most likely extracted at Abu Rawash, 20 km north-west of the settlement. Another finds produced in professional workshops are the Hemamija knives found at the sites of Tell el-Farkha, Buto, Tell el-Iswid (Schmidt 1989; 1992; 1996; Kabaciński 2012).

Specialised craftsmanship may also have involved some stone implements and vessels. M. Jórdeczka and M. Mrozek-Wysocka (2012), who investigated stone material from Tell el-Farkha, identified the traces of activities associated with reworking of worn and damaged implements at the site. They based their conclusions on the finds of both finished objects and numerous flakes, as well as production waste generated during core drilling. Moreover, several dozens of quartzite and sandstone semi-finished products were recorded at the site with characteristics suggesting an early stage of preparation of grinding stones and hammerstones. Some other techniques applied to stone production were also identified in the material from the site, i.e. removal of protruding elements, surface roughing, grinding, smoothing and polishing. E. Ch. Köhler (in press) claims that basalt bowls may also have been produced by specialists, as their manufacturing required adequate skills and effort. Although no workshops have been recorded at Maadi, a large number of broken and repaired stone vessels found at the settlement may suggest that their production took place in the vicinity (Mallory 2000: 95-96; 179; Mallory-Greenough *et al.* 2002).

Although archaeolgical evidence on metallurgy in the Lower Egyptian culture is scarce, it seems likely that the production of copper items, requiring adequate equipment and the knowledge of production process, was a specialised activity. So far the largest number of copper objects has been recorded at Maadi. Most probably the resource reached Lower Egypt in the form of ore as well as smelted semi-finished products. No traces of activities related to the smelting of ore were recorded at the site. A mention about the existence of metallurgical workshop at Maadi was made by K. H. Dittmann in 1936, in the publication concerning the archaeological investigations in Egypt, with reference to oral information by M. Amer (Dittmann 1936: 158). The majority of scholars claim that the ore was used more as a green dye than a raw material in metallurgy. I. Rizkana and J. Seeher (1989: 79) also believe that smelted copper found at the site may not have derived from the same source as the ore. Probably it was uneconomic for the inhabitants of Maadi to import large amounts of heavy ore, and then process it at the site. They may have preferred to import already smelted material in the form of ingots of a specified weight (3 ingots are known weigh-

ing ca. 825g) for producing implements (Rizkana and Seeher 1989: 17, pl. 4). Stylistic analysis of copper items from Maadi has indicated that they were local forms, different from those recorded in the Levant. According to B. Midant-Reynes (1992: 102) the Maadi community adopted the resource and processing techniques from their eastern neighbours, and then developed their own forms and stylistics of copper objects, adding to the metallurgy of the Delta in the 4th millennium BC. On the other hand, the absence of traces pointing to the smelting of ore is not necessarily the evidence that the activity was not performed at the site. According to L. Watrin (1998, 1218; 1999) a workshop specialised in copper processing may have been situated in the part of the settlement which was destroyed or not examined so far.

Craft specialisation within the Lower Egyptian culture involved probably also other activities. Discoveries of several big breweries at Tell el-Farkha point towards the existence of a large brewery centre producing beer on a great scale (Cichowski 2008; Adamski and Rosińska-Balik 2014). It seems that beer production involved a certain form of specialization. Producing a beverage of good quality depended on following the adequate procedure. Beer production required one to prepare cereals and then to monitor the brewing process (Kubiak-Martens and Langer 2004). A relatively large number of breweries discovered at Tell el-Farkha, as well as their well-organized network suggest the presence of a person (or persons) in charge of supervising beer production, and probably also the distribution of ready-made beverage. The separation of the breweries from other parts of the settlement by means of a mudbrick wall also suggests that beer production was a specialized occupation (Takamiya 2004: 1031-1032; Mączyńska 2013; in press c).

Finally, specialization may have involved trade activity, which required the engagement of people in transport and negotiations with trade partners (Takamiya 2004: 1033). Numerous imports from Upper Egypt and Southern Levant were recorded at the sites of the Lower Egyptian culture (Mączyńska 2003; 2006; 2013; 2014; in press c).Their presence suggests the existence of centres (e.g. Maadi, Tell el-Farkha), which were responsible for long-distance contacts and exchange with the above mentioned regions (Chłodnicki and Geming 2012; Ciałowicz 2012). They could have served as meeting places for people of different origins, who were most likely exchange partners: Naqadians, Southern Levantines and Lower Egyptians. The local societies took part in, probably organized and benefited from the exchange of goods and ideas in an active way.

3.1.3. Summary

The analysis of available data has not shown significant differences in craftsmanship between Upper and Lower Egypt (Fig. 2). They rather indicate a parallel development of the two regions. At this point it should be emphasised that our knowledge concerning craft specialization in Upper Egypt is based primarily on the material that came from cemeteries, i.e. grave goods, which due to their sophisticated character and very high quality must have been made by specialists. The problem of the character and organisation of specialised workshops has not been addressed due to insufficient data. Some new information concerning the development of craft specialistaion in Upper Egypt may be provided by the research carried out in recent years at the sites of Hierakonpolis i Adaïma.

As demonstrated above, the Lower Egyptian culture has long been compared to the Naqadian one without considering the character of the data, which often resulted in erroneous conclusions. Our knowledge of the northern culture has been enriched in recent years due to the excavation works carried in the region, particularly at Buto and Tell el-Farkha.

The analysis of the available data has shown that the development of craft specialization in the north began approximately at the same period as in the south, and its course was somehow parallel in both the regions. However, the communities in question lived in two different environments, had access to varied resources, and in effect generated different needs. Also the relationships with neighbouring regions may have had some impact on the needs of a given group, and in consequence, on craft organization.

A feature that both the regions have in common is a distinct specialised production of utilitarian and symbolic items. However, while in the south symbolic objects were put into graves to denote social position of the dead from the end of Naqada I, in the north the practice of equipping burials in luxury items did not appear until the second part of Naqada II. According to E. Ch. Köhler (in press) the northern communities did not have a custom of depositing valuable objects in graves.

3.2. Social organization

The development of craft specialization in Egyptian societies was strongly associated with their social organisation. Stable economy and abundant environment permitted the accumulation of surpluses not only for the times of hunger. The accumulated goods could be further transformed into other forms of wealth – pottery, stone or flint objects etc. The growing disparity in wealth between members of the same community resulted in the emerging of new elites in Naqada II period (Köhler 2010).

The process of social differentiation and the emergence of elites are difficult to interpret on the basis of archaeological evidence. The investigations concerning social organization of the past societies are inseparably linked with the study of funerary rituals, in accordance with the notion that social divisions in earthly life could have affected the organization of a given community's afterlife (*cf.* Savage 1997; Stevenson 2009). Social status of an individual could have been preserved also after his/her death by means of grave architecture, grave goods or even funerary rites. Large number of offerings, sometimes highly valuable, or unusual grave structure, may have denoted the individual's position (vertical differentiation) or his/her sex or age (horizontal differentiation). The existence of relationships between social organization on the one hand, and funerary practices on the other, has been frequently discussed among archeologists and anthropologists (*i.e.* Binford 1972: 208-243; Hodder 1982: 201; O'Shea 1984). However, scholars investigating the problem must remember that a funerary practices of a given society should not be treated as a consequence of an isolated process, but rather of a number of intertwining processes - demographic, social, ritual, symbolic, geological, depositional, and statistical (Braun 1981: 412). Also many other factors, elusive from an archeologist's perspective, could have affected funerary practices (Ucko 1969: 275).

3.2.1.The Naqada culture

In the case of the southern sites social changes can be best observed in funerary practices, which show an increase in the quantity of grave goods and, at the same time, a decline in a number of richly equipped graves. Given that the quantity and quality of offerings were meant to reflect the rank of a deceased, the differentiation according to social status is clearly visible in the material from Upper Egyptian cemeteries from the beginning of Naqada II period, and its first traces are recorded even at the close of Naqada I period (Guyot 2011: 1258). Social divisions in the Naqada culture were additionally emphasised by the existence of isolated parts of cemeteries or even separate burial grounds for the elites, *e.g.* cemetery T at Naqada, cemetery U at Umm el-Qaab, HK6 at Hierakonpolis (Midant-Reynes 2003: 191-216; Wilkinson 2000; Köhler 2010; Friedman *et al.* 2011).

B. Midant-Reynes (2003: 163-165) draws attention to two important phenomena in the funeral practices recorded at Naqadian cemeteries, namely accumulation and ostentation, which were associated with the separation of elites from the society in Naqada II period. High number of rich graves, and the quantity and quality of grave goods were to reflect social divisions (Savage 1997: 244-247; Bard

2000: 62). According to E.Ch. Köhler (2010: 44) at this stage a ranked or two-tiered society emerged consisting of elites and commoners.

The archaeological evidence on the existence of elites is considerable, as it includes ca. 15000 graves (Hendrickx and van den Brink 2002). However, the majority of graves were explored in the 19th century according to the contemporary standards, which caused significant loss of information concerning different aspects of funeral practices. Hence, much attention is paid today particularly to the recent research conducted in the region, among other sites at Hierakonpolis (Friedman et al. 2011).

The elite cemetery HK6 at Hierakonpolis is one of the most interesting sites showing the development of social complexity of the Naqadian society. Particularly notable is the Tomb 16 complex, the largest known one of this kind in NIC-IIA (Friedman et al. 2011). It had probably a superstructure, and was interconnected with a wider complex of enclosures containing a range of smaller tombs. Apart from huge amount of pottery and probably two ceramic masks recorded at the site, noteworthy is the whole organization of the complex, with fences, numerous human and animal burials, indicating that the special social rank of the diseased was emphasised already in that period (Friedman et al. 2011: fig. 3).

The development of the southern communities resulted in the emergence of polities governed by rulers in Naqada III period. This kind of a society was characterised by several social ranks including family members, officials, artisants, craftmen, farmers and laborers (Köhler 2010: 44).

3.2.2. The Lower Egyptian culture

The Lower Egyptian community has generally been seen as egalitarian, and thus free from social differentiation (Midant-Reynes 1992: 116; Commenge and Alon 2002: 140; Kemp 1989). This view has been based primarily on frequent comparisons of the Lower Egyptian culture to its contemporary Naqada culture, which showed a contrast between rich Naqadian graves and simple burials recorded in the north. However, such comparisons are not entirely reliable due to the imbalance of data available for those two cultural units. In the case of the Naqada culture 85 necropolises are known, while in the Lower Egyptian culture only several ones have been recorded so far. Despite the ongoing research in the north the knowledge concerning funerary practices of the Lower Egyptian culture is still poor. By now only 3 separate studies, concerning the material from the cemeteries at Maadi, Wadi Digla and Heliopolis, have been published. The cemetery at Kom el-Khilgan still awaits publication. Undoubtedly, important

moment for the discussion about burial customs of the Lower Egyptian communities, and hence their social structure, has been the identification of the oldest graves from the cemetery at Minshat Abu Omar as Lower Egyptian ones (Köhler 2008; Mączyńska 2013; 2014).

In terms of size and depth grave pits recorded at all known Lower Egyptian cemeteries are similar and they do not seem to indicate the social status or the age of the deceased. Even the youngest Lower Egyptian graves from group I at Minshat Abu Omar were shallow, and bodies were interred in them without any special preparations, probably immediately after the pit was dug. K. Kroeper (2004) concluded that neither the size nor the depth of graves was of importance in the period in question, and there was no a standardized grave size. Initially burials were characterised by a high degree of similarity and scarcity of offerings. This may have indicated the similar social status of the dead. In the oldest Lower Egyptian communities, which buried their dead at the cemeteries at Maadi, Wadi Digla or Heliopolis, it was uncommon to emphasise the importance of a dead person by means of a number and/or unique character of goods. Similar situation can be observed in the graves dated to Naqada IIC at the necropolis of Kom el-Khilgan. Only burials of group I from Minshat Abu Omar show considerable differences in terms of grave goods (Fig. 3).

Considering the available data, it would seem that one important element in the development of the Lower Egyptian culture is missing, namely the moment of change in burial customs, which manifested itself in the greater number and better quality of grave goods. The absence of graves dated to Naqada IID at Kom el-Khilgan is certainly an obstacle in the investigating of this problem. However, the data from settlement sites, including Buto and Tell el-Farkha, have not indicated any change in Naqada II period that would have been so important as to result in major changes in burial customs. The archaeological evidence points rather to continuous development of all the aspects of the Lower Egyptian communities, including craft specialisation, as was described above.

We can accept the hypothesis that initially the inhabitants of Lower Egypt had no need to distinguish their dead through architecture, grave size, or quantity and quality of grave goods. This does not mean, however, that a special social status was not validated in a different way. Maadi is one of the key settlements for the understanding of this problem. The research at the site corroborated the existence of trade exchange with Upper Egypt and Southern Levant and the emergence of specialized production of certain items (copper objects, basalt bowls). Although the inhabitants of Maadi possessed certain exotic imports (vessels, knives, pal-

SITE	NO GRAVES	PIT SHAPE	BODY POSITION	ORIENTATION OF				AVERAGE NO. OFFERINGS	NO. ALL OFFERINGS IN THE RICHEST GRAVE (NO OF CERAMIC VESSELS)
				BODY	HEAD	FACE	HANDS		
MAADI	75	OVAL	CONTRACTED, IN SOME CASES WRAPPED	LEFT OR RIGHT SIDE	NORTH SOUTH	WEST EAST	BEFORE FACE	1-2	4 (3)
WADI DIGLA	470	OVAL	HALF CONTRACTED	LEFT OR RIGHT SIDE	NORTH SOUTH	WEST EAST	BEFORE FACE	1-2	48 (1)
				WDII – MOSTLY RIGHT SIDE	SOUTH	EAST			
HELIOPOLIS	71	OVAL	HALF CONTRACTED WRAPPED	RIGHT SIDE	SOUTH	EAST	BEFORE FACE	1-10	12 (10)
KOM EL-KHILGAN	226*	OVAL	CONTRACTED	LEFT OR RIGHT SIDE	NORTH WEST	WEST EAST	BEFORE FACE	1-2	?
MINSHAT ABU OMAR	255	OVAL	HALF CONTRACTED	LEFT SIDE	NORTH	WEST	BEFORE FACE	2-5	33 (16)

* All graves dated to phases 1 to 3 including Naqadian graves (Buchez & Midant-Reynes 2011: 835)

Fig. 3. The Lower Egyptian cemeteries

ettes) they did not use them as grave goods. Among the more interesting finds recorded at Maadi are Blacktopped vessels and their imitations. In Upper Egypt vessels with black tops were used mostly as grave goods, and thus they are hardly found at settlements. It appears that although Lower Egyptians from Maadi used vessels imported from the south and imitated them locally, they did not follow the southern custom of their use as grave goods. Blacktopped vessels were not recorded in any grave at Maadi and Wadi Digla cemeteries, as they had been used probably only the settlements (Mączyńska 2013; in press a). The above context gives a new meaning to the statement by M. A. Hoffman (1979: 209) quoted by E. K. Köhler (in press) discussing social complexity of the Maadi inhabitants: "[merchants from this site] preferred to invest most of their extra wealth in trade, storage and metallurgy rather than in fancy tombs and luxury goods".

Different situation can be observed in the oldest graves at Minshat Abu Omar. Over 20% of them contain 1 or no offering, and more than 50% comprise 2 to 5 ones. The remaining burials contain more than 6 grave goods, which distinguishes this cemetery from Maadi, Wadi Digla and Heliopolis (Fig. 3; Kroeper 2004: Tab. 6). Grave 330, the richest one of group I, enshrining a female (?) aged 17 or 18 contained 33 offerings: locally manufactured pottery vessels, a single vessel of Southern Levantine origin, stone vessels, stone beads, flints, shells and a bone spoon (Kroeper and Wildung 1994: 116-122). Grave 231 with the second largest number of goods belonged to a male aged 20 to 40 and contained 25 items, including a W-ware vessel, stone balls, a flint knife and two decorated needles.

According to K. Kroeper (2004) the number of grave goods was the key factor differentiating graves from one another. She stated that the 33 offerings could have accompanied a leader or chieftain, and the high number of offerings reflected his/her social status rather than wealth. However, the analysis of grave offerings from Minshat Abu Omar suggests that it was not only the number of offerings that mattered. Particularly remarkable are grave goods from beyond Lower Egypt (from the south and the east), innumerous when compared to local objects, and distinguished in terms of form and raw material. All imported items were found in graves containing at least 3 offerings, while most of them were registered in graves with more than 6 offerings. Limited availability of goods imported from beyond Lower Egypt, as well as their different form and material must have made them particularly valuable. A fine example is grave 313, containing only 3 items, 2 of which are local Rough ware vessels and the third one is a Southern Levantine keg form vessel. Judging by the number of grave goods only, one would classify this particular burial as poor. However, it seems likely that the value of one of the grave goods, i.e. the Southern Levantine vessel, denoted a special position of a woman buried in that grave. It seems that the presence of rich graves at Minshat Abu Omar was associated with active participation of the community that buried their dead at that cemetery in the exchange between Upper Egypt and Southern Levant. Possibly the exchange was supervised by individuals-leaders, who in the result were given a special social status and access to imported goods. Naqadian or Levantine vessels, copper objects, stone vessels or flint knives may have been the items of local exchange, as well. However, in this case, due to their high value, items of this kind would have been possessed only by some members of the society (Mączyńska 2013; 2014; in press b).

The presence of a leader (or leaders) in Lower Egyptian communities can be inferred also from other discoveries. The high number breweries at Tell el-Farkha and their highly-organized structure suggest the presence of a person (or persons) in charge of supervising beer production. Although we are unable to determine the social status of such a supervisor(s), it seems likely that the function itself distinguished one(s) within the community. Furthermore, it is unquestionable that the amount of beer produced in this large brewery center must have been greater than the local demand for this liquid. Food surpluses – such as beer or even pork meat – could have been exchange goods (Mączyńska 2013).

Excavation works revealed two major buildings at the settlement of Tell el-Farkha which are markedly different in terms of form and size from all the previously known Lower Egyptian structures. The first one, located in the central part

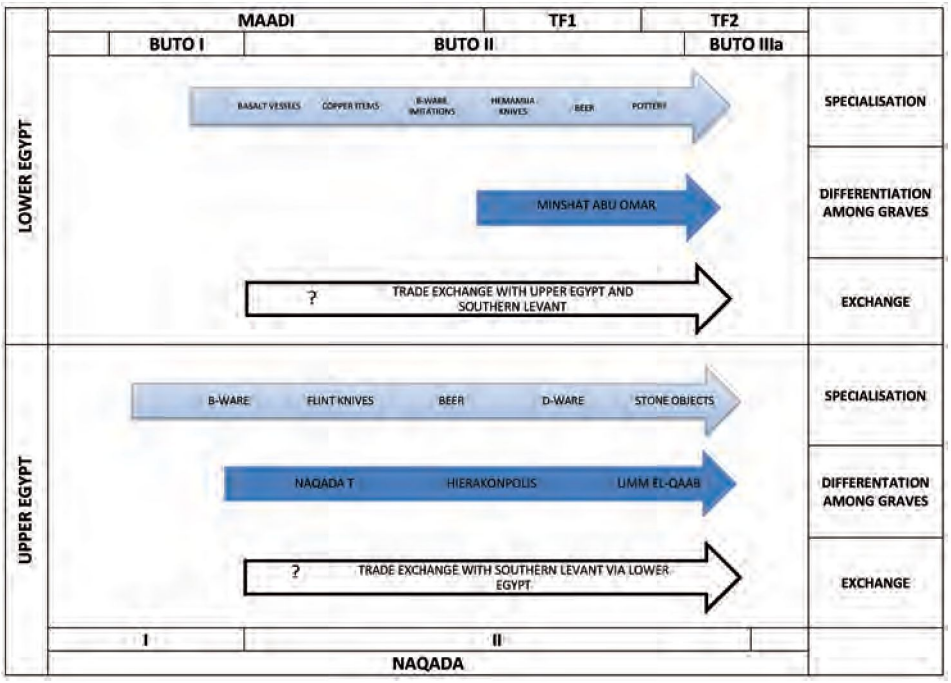


Fig. 4. The development of the Upper and Lower Egypt in the Predynastic period

of the hill, had a distinct courtyard and was divided into a number of rooms. Its location in the vicinity of the brewery may suggest that it was used not only for residential purposes (Cichowski 2001; Mączyńska 2013). The other building, referred to as the Lower Egyptian residence, is also unique due to its form, objects found within it and the presence of a mudbrick wall. It seems that the building, associated probably with commercial exchange, must have played an important role for the inhabitants of the settlement (Chłodnicki and Geming 2012).

3.2.3. Summary

In the light of the available data on craft specialization of the Lower Egyptian communities and their engagement in the exchange between Upper Egypt and Southern Levant it is difficult to maintain the notion about egalitarian character of the northern culture. We cannot exclude that social changes in the north had a similar course to those in the south (Fig. 4). Subsequent stages of social development can be observed in both the regions: economic stabilization and population growth, exceeding the household mode of production, and accumulation of

surpluses. Intensification of exchange in the middle of Naqada II period was an important factor in this development, as it enabled the access to imported objects, i.e. ceramic vessels, flint tools or stone objects, distinct from widely available, locally produced items. The data obtained from settlements, particularly from Tell el-Farkha and Buto, have shown that the quantity of imports from the south and east grew at that time. In the south, Naqada II was a period of intensive social stratification and formation of elites, who desired prestige goods for denoting and validating their special position and status. Luxury items could be obtained through the participation in the interregional trade network (Köhler 2010: 39; Guyot 2011: 1257). It seems that the Lower Egyptian culture saw changes in social complexity approximately at the same time. Those changes were related to the development of craft specialization and intensification of interregional contacts involving the exchange of goods and information. The community that buried their dead at Minshat Abu Omar took part in the exchange between Upper Egypt and Southern Levant and derived benefits from this participation and (likely) intermediation (cf. Mączyńska 2014; in press c). This activity must have had an impact on the social complexity. A similar situation relates to Tell el-Farkha, which, with its considerable number of discoveries (i.e. brewing center, special purpose buildings, imports, mudbrick walls and its location), is considered as a center of commercial exchange between Upper Egypt and Southern Levant (Chłodnicki and Geming 2012; Ciałowicz 2012; Czarnowicz 2012; Mączyńska 2013). Involvement in trade gave the inhabitants of Tell el-Farkha and Minshat Abu Omar easy access to imports. Items of the southern and eastern origin regularly reached the settlements, and some of them remained in the hands of their inhabitants. Undoubtedly, the exchange had to be managed and controlled by an individual or a group, who in the result gained a special social status. Furthermore, it is possible that such a function involved material benefits. At the current state of research and with a small number of publications our understanding of this issue is incomplete. The only archeological materials available for investigations are grave goods including imports distinguished from locally produced items by their form, material and probably value.

4. Conclusion

The problem of relationships between the Naqada and the Lower Egyptian cultures is still open to discussion. In the light of comparisons presented in the paper, the two units do not differ in terms of social organization and craft specialization to such an extent as was previously assumed. Undoubtedly they

underwent similar stages of development: the adaptation of new economic strategy, stability and population growth, the emergence and development of craft specialization, and the differentiation of society. Each of these stages was dependent on external factors (such as environment, available resources), and also on the choices of people being active participants in the culture. Therefore the development of both the units was not identical, and showed some regional features, *e.g.* prestige grave goods denoting social position of the dead in the south or the absence of such items in the graves of the north. In both the regions noteworthy are strong dependencies between craft specialization, social development and exchange activity.

The comparison of the Naqada and the Lower Egyptian cultures poses many problems, mainly due to the imbalance of archaeological data. The difficulties do not concern only the character of evidence (mortuary vs. settlement), but also the quantity and quality of the data available for both the regions. Hopefully, the information provided each year through excavations carried out in both the regions will supplement our knowledge on these two cultures.

An important step forward would be the recognition of the Naqada and Lower Egyptian cultures as non-homogenous units showing strong regionalism, with centres inhabited by societies similar with regard to features that resulted from belonging to a wider cultural community, but different in terms of location, access to resources, tradition, preferences and people's choices. The analyses of assemblages from Hierakonpolis, Abydos and Naqada regions made by R. Friedman (1994) have shown some variations within the Naqada culture. The Lower Egyptian culture is also regarded as a set of non-homogenous unites showing some features in common, but also many differences, not only in chronology, but in the degree of influence of environment and other local circumstances (Mączyńska 2011; 2013). On the one hand, the rejection of homogeneity of the two units makes their comparisons difficult. On the other, the identification of traits influenced by local circumstances allow for focusing on the fundamental features that those Predynastic cultures had in common.

Recent discoveries and research projects, including Tell el-Farkha, have shown that our knowledge of the Naqada and the Lower Egyptian cultures is constantly changing. The comparison of these two units, by challenging stereotypical views presented in the literature, sheds new light on the understanding of the Predynastic Egypt. Given the growing number of data, the comparisons involving other aspects of both the cultures would certainly be an invaluable source of information on the period in question.

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