Chapter 8

Southern Levantine imports and their imitations in the Lower Egyptian culture

Inventories from certain Lower Egyptian sites include Southern Levantine imports: pottery and stone vessels, flint tools and copper objects. Their presence implies the existence of contacts between the Nile Delta and Canaan in the early and middle Predynastic period. Apart from products and materials imported from Southern Levant, researchers have also found items of local origin whose characteristic features, such as decoration or form, are linked to those of Southern Levantine items. This is the case *inter alia* as regards pottery. The aim of this chapter is to present imports and other items connected with Canaanite traditions. Such presentation will help one understand the relationship between the Delta and Southern Levant in the period from Naqada I to beg. Naqada IIIA1 (Tab. 18).

1. Buto – Tell el-Fara'in

Pottery

Southern Levantine pottery is present in the inventories of Buto's phase I and II. In phase I, pottery analogous to Chalcolithic vessels represents approx. 30% of the entire material. It includes thin-wall pottery made of paste containing only sand temper, with either painted or impressed surface decorations. Due to high sand content, the surface is rough, almost sand-paper-like (Faltings 1998b: 367; Watrin 1998: 1215; Faltings *et al.* 2002: 165-170). In phase Ia there are vessels denoting typically Southern Levantine fabric, form and decorations, while in phases Ib and IIa there appear vessels made of local materials, whose forms and decoration types are linked to Southern Levantine pottery. In phases Ib and II, larger admixtures of organic temper became increasingly common. According to D. Faltings (2002), these changes resulted from the presence of a group immigrants from southern Canaan who must have assimilated with the local community and adapted to its cultural traditions, including pottery. As a result of the merger of the Levantine and local ceramic styles, the so-called hybrid vessels began to be made in Buto. In time, technological innovations originally introduced by the comers from Southern Levant (such as the use of the turning device), were discarded, possibly due to the lack of specialized pottery workshops and the household mode of production.

Table 18. Southern Levantine imports and imitations on the sites of the Lower Egyptian culture.

	LOCALLY MADE POTTERY	IMPORTED POTTERY	POTTERY IMITATION	FLINT	STONE	COPPER	OBSIDIAN*	OTHER
Buto	x	x	x	x	x	x	x	
Heliopolis		x	x					malachite
Maadi		x		x	x	x		cedar wood, bone spatulas, shells
Maadi & Wadi Digla			x	x				
Minshat Abu Omar		x				x		malachite, shells
Tell el-Farkha		x				x	x	
Tell el-Iswid/ Tell Ibrahim Awad		x					x	

* Obsidian was transported probably via Levant.

Among vessels imported from the Chalcolithic Southern Levant, there are V-shaped bowls with a painted rim decoration of white stripes, vessels with a pie-crust rim and fenestrated bowl-stands. Typical EB I vessels include holemouth jars (fairly numerous in Buto) and large storage jars with white painted bands on the shoulder or a white strip applied on the upper part (Faltings 1998b: 367; 2002: 165-168; Faltings *et al.* 2000: 135-136). On the basis of fragments of bases, bodies and rims, T. von der Way (1997: 106-107, Taf. 44:16) reconstructed a Levantine jar with a cylindrical neck, simple rim and oval body, with a characteristic cream-colored surface. Due to the high mineral content (quartz), the walls were soft and have a floury feel. Petrographic analysis showed that some fragments of this vessel were made of typical Canaanite marl clay, characteristic for EB I in Southern Levant, found *e.g.* at the Azor site. In terms of morphology the reconstructed jar was reminiscent of Maadi jars, classified by I. Rizkana and J. Seeher (1987: 73) as Southern Levantine imports. Foreign origin is also attributed to two fragments of flat bases made of ceramic paste tempered with crushed bones. Other Southern Levantine elements include characteristic handles, knobs and a fragment of a churn or a bird vessel, again similar to a piece found in Maadi (von der Way 1997: 106; Faltings 1998b: 367; Faltings *et al.* 2000: 135-136).

In Buto, imitations of imported vessels, such as V-shaped bowls and holemouth jars first appeared in phase Ib. Although vessel shapes remained unchanged, their manufacturing technology was gradually adapted to local conditions. Potters began to use locally available clay and replaced mineral temper with increasing amounts of straw and chaff.

V-shaped bowls with spiral reserved decoration are another important element in interpreting the contacts of Buto's residents with Cannan. 13 fragments of at least 10 different bowls have been found here. Although a controversial hypothesis on their Mesopotamian origin had once been presented, the said fragments eventually came to be considered as imports from Chalcolithic Southern Levant, where they are quite common, for instance in the vicinity of Beersheba and the northern Sinai (see Chapter 3; Faltings 1998b: 367-371).

T. von der Way's hypothesis (1992b: 217-220; 1997: 113-114) on Mesopotamian origin of so-called clay nails found in the layers of the Lower Egyptian culture (phase IIb) as well as in Proto- and Early Dynastic layers (phases III and IV) also proved incorrect. D. Faltings (1998b: 374-375) concluded that the nails should be linked to unusual ceramic forms – cornets, known from nearly all Beersheba sites. Clay nails have also been found in inventories at other archeological sites in Egypt, both in the Delta (*e.g.* Tell el-Farkha), and in Upper Egypt (*e.g.* Hierakonpolis Locality 11) (Friedman 2000: 13).

The presence of Levantine pottery imports in Buto was confirmed by petrographic and chemical analyses. N. Porat (1997: 223-231) divided the analyzed samples into several groups. The first one included vessel fragments made of local Nile clay; another one consisted of marl clay pottery. The third group contained pottery made of Beach Rock clay, currently known from Alexandria. Local pottery showing typological similarities to Southern Levantine vessels formed the fourth group. Petrographic analysis showed that in this group clay was tempered with phosphorite and had high concentrations of P and Ca. This type of pottery was unknown in the early and middle Predynastic period, either in Egypt or in the area of today's Israel. Buto was thus the only place where this technology was used. According to N. Porat (1997: 229), phosphorites could have been added to clay in order to preserve the bright surface color. As a result, vessels were similar to Levantine pottery not only in terms of shape, but in terms of color as well. The fact that on the basis of microscopic analysis Buto pottery was classified as Levantine shows that the local potters were quite successful.

As a result of the research by N. Porat, only five samples were classified as Canaanite imports. It turned out that the pottery was made of calcareous clay tempered with well sorted sand and quartz, and in some cases with calcite. Precise identification of the origin of this clay proved impossible, because sources of calcareous clay can be found all over Canaan. Similar petrographic and chemical features have been observed *e.g.* in the pottery from Azor. According to N. Porat (1997: 231), it goes beyond reasonable doubt that the analyzed samples came from vessels manufactured in Southern Levant.

Flint artefacts

As far as flint inventories are concerned, the links between Buto and the Southern Levant are rather unimpressive. K. Schmidt (1987: 253; Abb. 5:6-7, 10-11) mentions two bifacial sickle blades with flat surface retouch. He sees the genesis of the sickle blades in the Chalcolithic

Canaan, where such artefacts are fairly common. Another finding associated with the Chalcolithic period in Canaan are microlithic endscrapers, with distinctive little retouch on their working edges (Schmidt 1986: 204; 1993: 275).

Eastern origins can also be attributed to flat tabular scrapers made of characteristic flat flint nodules. The scrapers were oval and had cortex on the dorsal surface. According to K. Schmidt (1988: 297-306, Abb. 9.1-3; 1996: 270), they should be considered to have been imported from Levant, where their manufacturing traditions are dated from the Chalcolithic to EB III (Rosen 1983: 79-86; 1997:75; *in press*).

During explorations held from 1996 to 1999 at Buto, an obsidian core was found in phase IIa layers. According to K. Schmidt the material was imported from the east (Faltings *et al.* 2000: 138). Its provenance was confirmed by analysis made by L. Bavay *et al.* (2004), who indicates the Nemrut Dag volcano as the place of origin of the raw material.

Stone artefacts

From among a number of basalt vessels T. von der Way (1997: 109, Taf. 48-51, 54) distinguished a fragment of a bowl with a characteristic swelling of the walls between the rim and the base. The origin of the basalt material has not been fully confirmed, even after petrographic analyses. In terms of shape, the bowl is reminiscent of those found in EB I contexts in Southern Levant (von der Way 1997: 110, footnote 623).

Copper artefacts

Lower Egyptian culture materials from Buto contained three copper artefacts: a fishing hook, a copper wire and a piece of unknown function. Just like copper items found in Maadi, they were made of copper from Araba in the area of Feinan and Timna in the Sinai (Pernicka & Schleiter 1997: 219-222).

2. Heliopolis

Pottery

Among all pottery items found at the Heliopolis necropolis, only three jars may have come from Southern Levant. However, they cannot be verified because all of them have been lost. According to F. Debono and B. Mortensen (1988: 30-31), their fabric was reminiscent of those of Southern Levantine vessels from Maadi. Most probably they were made of calcareous clay with numerous limestone inclusions, becoming cream or pink after firing. The clay was tempered with crushed limestone. The presence of crushed pottery, typical for Canaan, has not been confirmed in Heliopolis. Occasional red or reddish-to-brown inclusions had the same structure as the paste and could have been fine fragments of either pottery or ochre.

In terms of shape, there is not much differentiation among Heliopolis vessels. One jar has a round body, a wide and high conical neck with a straight rim and a wide, flat base (Debono & Mortensen 1988: pl. 8/13:1). Similar Levantine vessels are known from Maadi, although their necks are longer. In addition, jars of this kind have lug handles or plastic knobs.

Another jar is incomplete – only the base part has been preserved. It features a plastic knob, typical for Canaanite pottery. The third vessel probably from Southern Levant found in Heliopolis is a round jar with a wide base, a high neck and a straight rim. Similar jars with handles are known from Maadi. Verification being impossible, it has not been determined whether the Heliopolis jar was originally fitted with handles. According to F. Debono and B. Mortensen (1988: 34), while Southern Levantine vessels from Heliopolis are characteristic for the beginning of EB IA, they show more similarity to Chalcolithic, rather than to EB I pottery.

Other eastern influence observed in Heliopolis pottery may be the coating of light, beige or cream wash that could have been applied in order to make local vessels like Southern Levantine cream ware (Debono & Mortensen 1988: 34). Apart from pottery, small fragments of malachite were also found in Heliopolis (Debono & Mortensen 1988: 36).

3. Maadi – settlement

Pottery

In the material from Maadi settlement, Southern Levantine pottery represents less than 3% of the entire collection described by I. Rizkana and J. Seeher (1987: 31). Its origin was confirmed by petrographic analyses carried out by N. Porat (Porat & Seeher 1988: 215-228), who concluded that Levantine pottery differed from local pottery in terms of fabric, surface treatment and forms with typically Canaanite elements: wide, flat base, distinguished neck as well as lug handles and ledge handles.

Paste of imported pottery was tempered with crushed calcite or limestone and sand. Sometimes crushed pottery was also added. It seems however that it was merely an addition to the mineral admixture and did not play an important role in pottery making. The diameter of admixture grains was typically below 2mm, although in the case of crushed stones 5mm particles are not uncommon. Vessels were hand made from clay coils. Surface color after firing ranged from yellow to bright red. The break zone was homogenous in most cases, and its color matched the surface color. Darker areas were uncommon, which implies low temperatures and short times of firing. Prior to firing the surface of wet vessels was smoothed with a soft object either vertically or diagonally. Due to the high content of coarse temper the surface usually remained uneven (Rizkana & Seeher 1987: 31-32; Porat & Seeher 1988: 215-228).

The dominating form of Levantine pottery from Maadi are round jars with wide, flat bases, high and well discernible shoulders and more or less distinguished tabular or conical necks constituting approx. 1/3 of the vessel's height. The bottom part of

the vessel is usually V-shaped, and the greatest diameter is just under the neck. Jars of this kind were most probably used for storing goods brought in from Southern Levant (Rizkana & Seeher 1987: 53, pls. 72-77).

Nearly all imported jars had lug or ledge handles (Rizkana & Seeher 1987: 53, pls. 72-77). Plastic knobs were fitted to jar handles as decoration. In Maadi, imported pottery further includes a fragment of a jar decorated with rows of short, incised strokes and a fragment with more or less vertical, parallel painted lines (Rizkana & Seeher 1987: 52-54, pls. 39:2, 77:5,7; Tutundžić 1993: 33-55; Watrin 1999).

While the presence of Canaanite pottery in Maadi is unquestionable, its dating is much more challenging. Jars with cylindrical necks and ledge/lug handles are poor chronological markers, because they are present in Canaan from the Neolithic for the entire EB until as late as MB. A comparison of Maadi chronology with Southern Levantine chronology shows that the settlement was active in the Chalcolithic and in EB IA (Tab. 5). Analogies to lug handle jars from Maadi in the Chalcolithic Southern Levant are innumerous and can be found *e.g.* in Teleilat Ghassul. In EB IA, cylindrical neck jars are fairly common. Similar lug and ledge handle jars were found in Megiddo, level XX, XIX (Shipton 1939; Loud 1948), Beth-Shan, level XVII, XVIII (Fitzgerald 1934: 125), Meser, level I, II (Dothan 1959). Painted pottery (parallel vertical lines) similar to that from Maadi was registered in Megiddo, level XX and Meser, level I. At Tell el-Farah North, another important site from the period, no pottery forms similar to those known from Maadi have been identified (de Vaux 1951). However, the graves from that site contain a very high number of shells of *Aspatharia rubens*, which could have been bartered between Egypt and Southern Levant in the period in question.

All the sites listed above are located in northern Southern Levant, approx. 600km from Maadi. According to I. Rizkana and J. Seeher (1987: 73-77), contacts with those areas must have been via southern Canaanite sites, such as Lachish, 50 km west off the Dead Sea (Tufnell 1957). The inventories from that site featured artefacts analogous to those known from Maadi (lug and ledge handle jars, plastic knobs, pottery with parallel vertical painted lines) and via Bab edh-Dhra (Schaub 1979: 45-68) on the eastern coast of the Dead Sea (jars with lug handles, ledge handles, round bodies and cylindrical necks), as well as via En Besor H (McDonald 1932) (jars with ledge handles, lug handles and the presence of Egyptian black topped ware). All those sites could have served as stopovers at the trade route to Maadi. On the basis of the aforementioned facts, I. Rizkana and J. Seeher (1987: 73-77) concluded that imports in Maadi do not come from EB IA proper, but from a vaguely defined transition phase between the Chalcolithic and EB.

In a discussion at a conference on the changes in the Delta area in the 4th and 3rd millennium BC held in 1990, J. Seheer once again spoke on Maadi chronology and hinted at a certain discrepancy (van den Brink 1992b: 483) resulting from the unsynchronized chronology between Southern Levant and Egypt. He linked that discrepancy to the dating of Levantine artefacts from EB IA found at the sites in the Nile Delta. In Maadi, EB I

imports were dated to Naqada IC-IIAB, whereas Egyptian materials found in Southern Levant in the context of the local EB IA belonged to Naqada IIC-D. J. Seeher was of the opinion that the resulting discrepancy could be explained either by extending the lifetime of Maadi settlement, or by shifting the beginning of EB IA in Southern Levant. The said issue was subsequently tackled by D. Faltings (1998a: 35-45; 1998b: 365-375), who once again analyzed the chronology of the sites in the Delta. Relying on the presence of ledge handles on the vessels from Maadi and phase II of the Wadi Digla necropolis, she shifted the lifetime of Maadi settlement to Naqada IIC and moved the beginning of EB IA to NIIC as well. According to D. Faltings, the beginning of phase I in Buto would occur in the Chalcolithic period in Southern Levant, contemporary to Naqada IC and IIA-B in Egypt, while phase II in Buto would be dated to EB I in Canaan and to Naqada IIC-D1 in Egypt. The problem of correlation of the Maadi findings with Levantine chronology is still open (Tab. 5; *cf.* Braun 2011: 122; Czarnowicz 2012b: tab. 1).

Flint artefacts

Flint tools registered in Maadi included items closely linked to Southern Levantine territories, such as tabular scrapers and Canaanean sickle blades (Rizkana & Seeher 1985: figs. 7, 10). Both sets of tools were made of high quality raw material in specialized workshops. The origin of the material was identified only for scrapers: it came from the western part of the Negev Desert. Analogous flint items were fairly common in the Chalcolithic Levant and Lebanon and on sites located more to the north-east, such as Habuba Kebira in Syria. In its turn, the manufacturing technology of Canaanean blades was much more widespread in terms of territorial range. They were found not only on EB sites in Southern Levant and Lebanon, but also in Syria, Iraq and Kazakhstan (Rizkana & Seeher 1985: 237-254).

Stone artefacts

The most remarkable stone items imported from Canaan to Maadi include fragments of basalt V-shaped bowls and discs (Rizkana & Seeher 1985: fig. 11; 1988: pl. 95). N. Porat carried out a petrographic analysis of material sampled from those artefacts. It showed that basalt used for manufacturing the bowls is not available on the territory of today's Israel and clearly differs from locally available materials. According to N. Porat, this type of basalt may have come from the eastern Delta or from the Black Desert in Jordan. In their turn, analyses of stone discs showed that their material is similar to basalt from the Negev Desert, used in the Chalcolithic and EB I in Southern Levant. However, she remarked that similar material is also available on the Golan Heights, in Galilee and in Jordan, and it is thus not impossible that the material came from one of those locations.

A turquoise bead is another artefact considered to be an eastern import. Its material could have been mined by Canaanites in the southern Sinai in the late Chalcolithic (Rizkana & Seeher 1988: 109).

Copper artefacts

In Maadi copper is available in a variety of forms, including finished tools, semi-finished products and ore (see Chapter 7; Rizkana & Seeher 1989: pls. 3-4). In their first report, O. Menghin and M. Amer (1932: 48) mention the presence of a large amount of copper. That remark gave rise to a number of speculations about the nature of the settlement. According to E. Baumgartel (1955: 122), the existence of Maadi settlement should be interpreted from the perspective of commercial exchange of copper and other goods between Southern Levant and Upper Egypt. In her opinion Maadi was apparently an en-route trade station for caravans traveling between the two destinations.

Bearing in mind the results of studies held recently, E. Baumgartel's theory should be assessed with a sound dose of skepticism. Copper was a very rare metal at Predynastic sites, both in the Delta and in Upper Egypt. In graves dated to Naqada I and early Naqada II, copper items are uncommon. Had there existed developed copper trade between Southern Levant and Upper Egypt, one should expect greater amounts of copper in the south. It is more justifiable to exclude copper from so defined long distance exchange. A.M. Hoffman (1979: 207-208) rightly pointed that metal items known from southern Egyptian cultures of Badarin and Naqada I differed in terms of technology from Maadi items, as the former were hammered from locally available natural copper, rather than smelted from ore. Copper was shipped to the Delta from the Sinai via Southern Levant. Mineralogical analysis showed that copper from Maadi originates from the deposits in Timna and Feinan in Wadi Araba in the Sinai (Rizkana & Seeher 1989: 78-79). Despite the use of imported material and eastern manufacturing technology, copper items from Maadi are a local product in terms of style.

Architecture

Levantine influences are visible also in the architecture of Maadi settlement. Well-known, traditional above-ground structures are accompanied by innumerous, oval subterranean dwellings, discovered in the northern part of the explored area (Rizkana & Seeher 1989: figs. 15-18). In the 1990s an expedition from the El-Azhar University headed by F.A. Badawi discovered a pit house, differing from the earlier ones by the use of stone (Watrin 2000: fig. 6). In the years 1999 to 2002, an excavation project of the German Archaeological Institute (DAI) led to the discovery of a subterranean dwelling similar to those known from the publication of I. Rizkana and J. Seeher (Hartung 2004). According to U. Hartung, all known subteranean structures from Maadi denote gradual development of the settlement's architecture, linked to increasingly vast experience of builders and inclusion of a new building material (stone) in constructing residential structures.

Prior to the discovery of the first pit houses in Maadi, no similar structures had been known all over the Near East. The situation changed 20 years afterwards, when J. Perrot (1955) published a paper on Chalcolithic studies held at the sites in the area of Beersheba in the northern part of the Negev Desert. Further studies and ensuing publications made it possible to compare both types of structures (Perrot 1984). As a result, pit houses have been

considered to be a typical dwelling in the Beersheba Valley in the Chalcolithic period (see Chapter 3). However, in the recent years it has been claimed that the structures from Maadi seem far remote from the Beersheba sites (Commenge & Alon 2002: note 14). E. Braun & E.C.M. van den Brink (2008: 649-650) suggest even that their chronology is later – EB I.

A comparison of the subterranean structures from Levant and from Maadi allowed I. Rizkana and J. Seeher (1989: 55) to conclude that they were analogous in terms of construction. The researchers interpret this similarity as a confirmation of the presence of Levantine merchants or metallurgists in Maadi. This assertion could be supported by the existence of a cluster of pit houses in the northern part of the settlement, isolated from the remaining buildings (Rizkana & Seeher 1989: 80; Faltings 1998b: 374; Watrin 1998: 1218).

Miscellanea

Cedar wood artefacts are yet another group of items most likely to have been imported from Levant. The artefacts found in Maadi include a cedar vessel lid and several small cedar sticks rods, most probably used as incense. It has not been determined whether they were manufactured locally or imported to the Delta as ready-made products (Rizkana & Seeher 1989: 25).

Also, nine bone spatulas found in a cache come from Southern Levant (Rizkana & Seeher 1989: 22, pl. 8:4-15). Similar spatulas made of calf ribs are known from Chalcolithic sites such as Teleilat Ghassul, where they were commonly used as weaving tools (Mallon *et al.* 1934: 77).

Giant shells of *Tridacna maxima* and *Tridacna squamos* were also imported from Levant. In Maadi they were used as a kind of containers. In nature they can be found in the Bay of Suez and in the Red Sea (Rizkana & Seeher 1989: 21).

4. Maadi, Wadi Digla – cemeteries

Pottery

Maadi graves did not contain vessels either linked to Southern Levantine traditions or imported from Southern Levant (Rizkana & Seeher 1990: 26). Vessels found in the graves of the necropolis in Wadi Digla contained only vessels whose decorations or fabric follow eastern traditions. They were found in graves from the younger stage of the cemetery, in its central and south-eastern parts. The paste used for manufacturing those vessels was tempered with crushed limestone, in some cases added in great amounts. However, petrographic analysis showed that the key component of the paste was local Nile clay.

Wadi Digla vessels with Levantine features include three Ware II red burnished jars with lug-handles on the neck (graves WD 257, 260) (Rizkana & Seeher 1990: pls. 4; 34, 47). According to I. Rizkana and J. Seeher (1990: 87), they most probably imitate stone vessels that were fairly common in Southern Levant. Also, this group further includes five jars whose technology is reminiscent of Ware II, although they contain too much crushed stone

and are not covered with red slip. These include: a jar with two plastic knobs on the opposite sides and a row of impressed dots at the neck, found in grave WD 11; another similar jar with three knobs and two rows of impressed dots, found in grave WD377; a jar with two rows of impressed dots and four pierced knobs, found in grave WD XIX; a partially preserved jar with most probably one row of impressed dots on the neck and knobs below the neck, found in grave WD XIX; and finally one more jar from grave WD XIX with only three knobs on the shoulders. Similar vessels are known from Southern Levant. The jar from grave WD XIX is reminiscent of one from Lachish, featuring four lug handles and a row of impressed dots and strokes (Tufnell 1957: pls. 56, 21), as well as of a jar from Bab edh-Dhra with three knobs symmetrically arranged on the shoulders (Schaub 1979: figs. 18.4).

Flint artefacts

Flint items are a very uncommon type of grave goods in Lower Egyptian culture cemeteries. In Wadi Digla a single tabular scraper was recorded (grave WD401), whose material and form are reminiscent of scrapers well known from Maadi, interpreted as Canaanite imports (Rizkana & Seeher 1990: 90).

5. Minshat Abu Omar

Pottery

Grave offerings from the necropolis at Minshat Abu Omar yielded 20 Southern Levantine vessels. Most of them were found in the oldest graves, dated to Naqada IIc-d (Kroeper 1989a). One of the most intriguing artefacts is a jar with ledge handles used as a coffin for a fetal burial (grave 316). The jar was made of yellowish clay tempered with ceramic and mineral temper. It had a flat bottom, wide body, rounded shoulders, concave neck and rounded, overhanging rim. The surface showed traces of red paint and also a diagonal strip decorated in a rope-like pattern. Vessels similar in terms of form and fabric are known from Maadi (Kroeper 1989a: 407-410, fig. 2a). In grave 840 the bottom part of a similar vessel with ledge handles was found; however, in the upper part of the body a fragment of a loop handle was preserved. Due to the vessel's incompleteness, one cannot preclude that on the opposite side of the vessel there was another loop handle (Kroeper 1989a: 410, fig. 3). Loop handles are also present on a fully preserved vessel from grave 799. In addition, there is a horizontal strip of clay between the handles, deeply scored vertically. Both vessels represent one of the most frequent vessel types known from EB I sites in Southern Levant, *e.g.* in Arad, Ai and Jericho (Kroeper 1989a: 411).

Another interesting group of vessels consists of 2 spouted jars. The first of them, found in grave 303, had a broad, flat base, round body and probably a conical neck. The spout was located in the upper part of the vessel, at the body-to-neck transition. At the same height two loop handles were attached. The other jar was smaller, had a round body,

a very short neck and a simple rim slightly everted to the outside. The spout was located in the upper part of the body. K. Kroeper (1989a: 416) mentions Southern Levantine parallels from Fâr'ah and Jericho for both of those jars.

Vessels known as churns come from graves 787 and 313. The first one is a small oval vessel with a spout at the top, flanked by two upright loop handles. The other vessel had an oval body and an asymmetrical spout flanked by two loop handles. Its top was decorated with impressed parallel rows of small circles. Both vessels had remarkable fabric – brittle and flaky (Kroeper 1989: 416-417, figs. 8a, 9a). Churns similar to vessels from Minshat Abu Omar have been found in Southern Levant, but even there they are considered rare. Thus far, 11 such specimens have been collected, *e.g.* in Azor, Gezer, Jericho, Palmahim Quarry, Tel Erani and Horvat Ilin Tahtit (Braun & van den Brink 1998: 82; Czarnowicz 2012b: 248-249). Other eastern imports include a small jar with two lugs from the grave 221 (Kroeper 1989a: 412, fig. 5a).

All the vessels presented above were classified as imports by K. Kroeper (1989a). However, detailed studies showed that in two cases – the churn from grave 313 and the ledge handles jar from grave 840 – the clay is more similar to normal Egyptian Nile clay rather than to Canaanite clay. According to K. Kroeper (1992: 30) both these vessels were made locally, but by means of a new technology involving the use of crushed limestone and calcite as tempers. J. Riederer (1992) linked the calcite temper from these two vessels to the Eocene Theban formation extending between Cairo and Esna. K. Kroeper is of the opinion that this new technology may have been shown to the local population by foreign potters, but did not gain popularity due to the low firing temperature required for the process.

Copper artefacts

Copper items were found in several of the oldest graves of the necropolis. Attention should be drawn to a harpoon with a single barb (length: 12.7cm, diameter: 1cm, barb width: 2.7cm), found in grave 761 (Kroeper & Wildung 1994: 151, Taf. 41) and to a bracelet made of thin twisted copper wire, found in grave 806 (Kroeper & Wildung 2000: 30). Copper beads were found in two graves: grave 755, containing 2 cylindrical beads made of copper sheet (2.3cm and 1.9cm long, 0.6cm in diameter) (Kroeper & Wildung 1994: Taf. 8:17) and grave 663, containing a small round bead (2mm in diameter, 4mm high) (Kroeper & Wildung 1994: 49). In grave 224 a strongly corroded needle (7.2 long, 0.9cm in diameter) was found. Grave 231 contained a strongly corroded needle-shaped object with a swelling on one end, no eye, 8.5cm long. In grave 323 a small item was found. It is similar to a copper needle, 8mm long, 3mm in diameter (Kroeper & Wildung 1994). Thus far no information about the origin of the copper material used to manufacture the items from Minshat has been published. Due to the necropolis's vicinity to the Sinai it is reasonable to assume that copper came from the deposits in the region. In some graves malachite was found. Its origin is strongly linked to copper.

6. Tell el-Farkha

Pottery

Thus far, the exploration of Lower Egyptian layers at Tell el-Farkha has yielded only a handful of Levantine imports, mostly vessel fragments with characteristic ledge handles. In the oldest Lower Egyptian layers a single fragment made of yellowish-to-brown paste was found (10YR6/4 on the Munsell scale) (Pl. 10). Due to the fact that clay was tempered with considerable amounts (approx. 20%) of medium-sized round grains of sand, the surface of the handle is coarse and fragile. This type of handles, commonly referred to as "folded" ledge handles, first appeared in Southern Levant in EB IA (Braun 1996: 93). Handles of this kind are well known from numerous locations at Site H (Roschwalb 1981: fig. H.7:5) Taur Ikhbeineh III-IV (Oren & Yekutieli 1992: 337, fig. 12:11) and Azor (Golani & van den Brink 1999: fig. 12.9).

Pottery imported from Levant was recorded also during explorations of phase 2 layers. Attention should be drawn to a large jar, almost completely preserved, made of light, creamy clay with coarse mineral temper making the walls rough (Pls. 22-23). In terms of form – a broad, oval body, narrow, slightly everted rim, two ledge handles in the lower part of the body and a narrow base – it is reminiscent of jars known from EB I sites in southern Israel, such as Site H, Afridar Quarter of Ashqelon (Mączyńska 2003a; Czarnowicz 2012b: 246-247).

Stone artefacts

Among materials of the Lower Egyptian culture an obsidian bifacial knife was found. In terms of technology, the knife is linked to Upper Egyptian knives. However, the raw material probably came from Anatolia, like the obsidian from Buto and Tell el-Iswid (Kabaciński 2003a: fig. 26).

Copper artefacts

During exploration of the Lower Egyptian residence a copper knife was registered (Pl. 17; Chłodnicki & Geming 2012: 98). Although only its triangular, rounded-tip blade was preserved, no analogous findings from other Lower Egyptian sites are known. Similar finds are known from the Ashqelon site in Israel dated to the EB IA2 period, corresponding to the period when Tell el-Farkha's Lower Egyptian residence was developed (Czarnowicz 2012a: 351).

An analysis of the chemical composition confirmed that the knife was made of arsenic copper with elevated nickel contents, and stable lead isotope analyses indicated Feinan as the probable place of origin of copper used to manufacture the knife (Rehren 2013).

Table 19. Groups of Southern Levantine imports or items linked to the Levantine tradition in Lower Egypt in first part of the 4th millennium BC.

1	EXCHANGED GOODS		cooper as a raw material, copper tools, obsidian as a raw material, cedar wood, food, ceramic vessels as containers, ceramic vessels
2	EQUIPMENT OF COMERS/TRADERS		ceramic vessels, flint tools, bone tools, new ideas (metallurgy, building technique), obsidian
3	LOCALLY MADE	BY COMERS	ceramic vessels, flints
		BY LOCALS	ceramic vessels (fabric, form or decoration)

7. Tell el-Iswid, Tell Ibrahim Awad

Pottery

Lower Egyptian layers at Tell el-Iswid yielded 95 fragments of vessels believed to have been imported from Southern Levant and Upper Egypt. No detailed information about those imports is available (van den Brink 1989: 67).

Similarly, no details have been published so far about pottery imported from Canaan, found in phase 7 layers at the site in Tell Ibrahim Awad (van den Brink 1988: 65-114; 1992b: 43-68).

Explorations carried out at Tell el-Iswid by the French Institute of Oriental Archaeology in Cairo (IFAO) revealed fragments of Southern Levantine vessels. They were made of loess clay tempered with coarse quartz and sand mixed with crushed calcite. Most imported vessel fragments were damaged beyond recognition. Only in one case (a ledge handle) identification was possible (Guyot *in press*: 2-3, 17, fig. 11.5).

Flint artefacts

Flint inventory from phase A in Tell el-Iswid bears all the characteristics of the Lower Egyptian culture. Apart from local blades and blade tools (knives) there are also imports from Upper Egypt (Schmidt 1996: 279-285). Traces of contacts with the east are very scarce. The only foreign, non-Egyptian item in the flint inventory is an obsidian bifacial knife found in layer IV. In terms of technology, the knife is linked to Upper Egyptian knives. However, the raw material used came from Nemrut Dag in Anatolia (Pernicka 1996: 286). It is likely that the material reached southern Egypt via Levant. In the form of a finished product it was traded between the Naqada culture centers and the settlement in Tell el-Iswid (Schmidt 1989: 90-91; 1992: 34).

8. Summary

Three groups of items linked to Southern Levant can be identified in Lower Egyptian sites (Tab. 19). The first group consists of merchandise exchanged on a purely commercial basis. It includes various types of pottery vessels, used as containers for imported goods and materials – copper, cedar wood and probably food which has not been preserved in archeological materials. Another group is represented by objects from Canaan that were not bartered, but were brought to the Delta area by their owners, *i.e.* representatives of either Chalcolithic or Early Bronze community. These objects include Canaanean sickle blades, bone spatulas, clay vessels and ideas *e.g.* the construction method of subterranean houses. The third group originated under the influence of Canaanite traditions adapted by local, Lower Egyptian communities. It includes first of all vessels made of local clay, yet linked to Canaanite traditions in terms of technology (use of crushed limestone), form (holemouth jars) or decorations (knobs, handles, wavy rims). The division presented above reflects a complex nature of Egyptian and Levantine relationships, reaching beyond commercial exchange to include the exchange of information and intertwining of cultures spurred by the coexistence of their members.