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## **More than people and pots: identity and regionalization in Ancient Egypt during the second intermediate period, ca. 1775-1550 BC**

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## TELL EL-YAHUDIYAH WARE

The present chapter analyses the types of Tell el-Yahudiyah ware, a class of pottery found already during the Middle Kingdom, and most typical of the Second Intermediate Period; the last attestations are found during the New Kingdom.<sup>1</sup> This ware includes mostly juglets, namely small jugs, which were used to probably contain liquids, likely precious ones. This is suggested by the fact that many specimens come from tombs, thus that this ware was considered prestigious enough to be part of the funerary equipment, and the fact that these juglets have a narrow neck, which would prevent that the liquid they contained would be spilled or evaporate.<sup>2</sup> Chemical analyses of the contents of Tell el-Yahudiyah jugs from Tell el-Dab'a has demonstrated that they contained fatty substances, thus likely oils.<sup>3</sup> The fact that many specimens have been found in tombs further suggests that these vessels were used for religious purposes.<sup>4</sup>

The shape of the ovoid-shaped vessels can remind one of the poppy seeds, and in a few instances the incised decoration can remind one of the incisions made on the poppy seeds when they are collected. Therefore, it has been suggested that Tell el-Yahudiyah ware could also contain opium,<sup>5</sup> as suggested in a similar way for the Cypriot pottery.<sup>6</sup> Nevertheless, chemical analyses of the contents have failed to find the alkaloids expected if the vessels actually contained opium.<sup>7</sup>

Tell el-Yahudiyah ware is characterized by a surface which is burnished, namely rubbed and smoothed with a stone before the firing process, and with white incised decoration.<sup>8</sup> Vessels without incised decoration, included in the

1 D.A. Aston 2008; Aston and Bietak 2012, 551–56; Bietak 1989a; Kaplan 1980.

2 Åström 1971; Kaplan 1980, 123; Merrillees 1974b, 32–40.

3 Aston and Bietak 2012, 557–58.

4 Aston and Bietak 2012, 557–58.

5 Åström 1971, 418; Kaplan 1980, 123; Merrillees 1974b, 32–40.

6 Merrillees 1974b, 32–40.

7 Aston and Bietak 2012, 621–23.

8 Aston and Bietak 2012, 25; Kaplan 1980, 1–5.

Tell el-Yahudiyah ware in older publications,<sup>9</sup> are not considered a part of this group anymore, and have not been included in the newest publications. Therefore, they are not taken into consideration in the present work.<sup>10</sup>

This ware has been the subject of many studies concerning its origins, development, and chronology.<sup>11</sup> These studies follow slightly different typologies<sup>12</sup> on the basis of the main features, such as general shape of the vessels, their dimensions, the shape of different parts of the vessels, or the decoration, taken into consideration.<sup>13</sup> The typology used in the present work follows the one in the latest publication on Tell el-Yahudiyah ware.<sup>14</sup> In the description of the types, the following parts of the vessels are taken into consideration:

1. the rim, which includes:
  - a. the mouth, namely the top opening of a vessel;
  - b. the rim, namely the part connecting the mouth and the neck;
  - c. the lip, namely the outer part of the rim;
  - d. the neck, namely the part connecting the rim to the shoulder.
2. the body, which includes:
  - a. the shoulder, namely the part connecting the neck to the body;
  - b. the body, namely the central, main part of the vessel, described like a geometric figure;
3. the handle, namely the attachment that connects the neck to the shoulder and allows the vessel to be grabbed and moved.
4. the base, namely the part underneath the body and in contact with the support surface.

Tell el-Yahudiyah ware is found throughout the Eastern Mediterranean, from Egypt, and Nubia, to Cyprus, to coastal Syria Palestine, as inland as the Jordan Valley.<sup>15</sup> Based on stylistic similarities, it was at first thought that this ware

9 Åström 1971.

10 Aston and Bietak 2012.

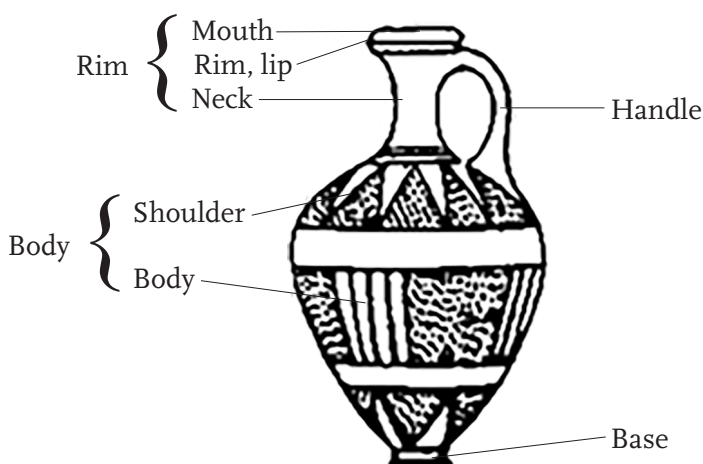
11 An overview can be found in: D.A. Aston 2008; Aston and Bietak 2012, 25–55.

12 In studies the earliest phase of the Tell el-Yahudiyah ware has even been called differently, namely El-Lisht ware: Merrillees 1974a; Merrillees 1974b; Williams 1975.

13 See for example: D.A. Aston 2008; Aston and Bietak 2012; Åström 1971; Kaplan 1980; Merrillees 1974a; Merrillees 1974b; Merrillees 1978b.

14 Namely, the typology used in: Aston and Bietak 2012.

15 See catalogues in: Aston and Bietak 2012; Kaplan 1980.



Drawing 4: Parts of a vessel as used in the description of the Tell el-Yahudiyah ware.  
Drawing after Aston and Bietak 2012.

originated in Egypt,<sup>16</sup> or in Nubia.<sup>17</sup> Nevertheless, the dating of the contexts where Tell el-Yahudiyah ware has been unearthed, as well as the typology constructed on the basis of the new data, shows that it originated in coastal Palestine during the Egyptian Late Middle Kingdom. From there, during the transition between the Egyptian Late Middle Kingdom and Second Intermediate Period, it spread to inner Syria-Palestine, Cyprus, and Egypt, where it was first imported and then locally imitated. During the Egyptian Second Intermediate Period, the ware further developed locally, and in Egypt it developed into an Egyptian branch, with distinct Egyptian features.<sup>18</sup>

Part of the vessels and sherds belonging to the Tell el-Yahudiyah pottery do not have known contexts of provenance, but the majority comes from excavated contexts. Considering that in Egypt it was mostly produced in Lower and Middle Egypt, with instances also in the Bahariya Oasis,<sup>19</sup> this ware allows to detect more specific contacts. However, similar types used at more sites still do not imply direct contacts between two specific places, but only that generally there were contacts, which could have followed a more indirect route that simply cannot be known yet.<sup>20</sup> This derives from the fact that the data analysed are not the totality of what has actually been produced, but only a

16 Aston and Bietak 2012, 25–55; Kaplan 1980, 60–66; Reisner 1923, 385–88.

17 Aston and Bietak 2012, 25–55; Junker 1921; Kaplan 1980, 121–23.

18 This development is explained in: D.A. Aston 2008; Aston and Bietak 2012, 551–56; Bietak 1989a.

19 The specimen from Qaret el-Toub in Bahariya could not be included in a specific subgroup, but only in the larger L.1 group, therefore is not included in the analysis: Aston and Bietak 2012, 54; Colin 2005, 44–46; Colin, Laisney, and Marchand 2000, 186.

20 Brughmans 2013, 638–39; Sindbæk 2007b, 66; Sindbæk 2013, 74–76, 82.

sample, namely what has been so far found and published.<sup>21</sup> Especially in the case of Tell el-Yahudiyah ware, it should be kept in mind that the data from outside Tell el-Dab'a is limited. However, as it will become clear with the correspondence analysis, this does not seem to distort the results of the analysis.

All in all, only specimens belonging to one of the specific types listed in the present chapter have been examined, because these types can be meaningful and show similarity between the sites. Moreover, the fabric used to produce is not always clear, thus in the analysis of the Tell el-Yahudiyah ware only the shape has been considered. However, Egyptian fabrics can be distinguished from the Levantine ones. Therefore, it appears that during the Late Middle Kingdom more specimens were made of fabrics from Syria-Palestine, while later specimens were made mostly in Egyptian fabrics and very rarely in other fabrics.<sup>22</sup>

Lastly, while the development of the Tell el-Yahudiyah ware has been reconstructed in its general lines and its chronology is generally known,<sup>23</sup> for this analysis it is actually the dating of the contexts that is important, because the present work is focused on how the objects were used during the Late Middle Kingdom and the Second Intermediate Period. Furthermore, the quality of the data reported in the publications used for the present work is often not good enough for using the Tell el-Yahudiyah ware for dating purposes. Therefore, only specimens coming from dated contexts have been included in the analysis.

## THE LATE MIDDLE KINGDOM

Of the contexts of the Late Middle Kingdom with Tell el-Yahudiyah ware (Table 10 in Appendix I; Appendix VI), more than half come from Tell el-Dab'a,<sup>24</sup> where the greatest variety of types was also found. These contexts are both in burials and settlement.<sup>25</sup> Other contexts where Tell el-Yahudiyah ware has been found are from burials in Lisht<sup>26</sup> and in the Theban area,<sup>27</sup> from settle-

21 Brughmans 2013; Brughmans, Isaksen, and Earl 2012; Knappett 2013; Östborn and Gerding 2014, 81–83; Peeples and Roberts Jr. 2013, 3002.

22 As shown by the catalogues in: Aston and Bietak 2012; Kaplan 1980.

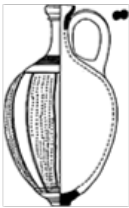
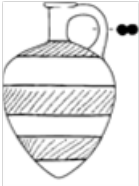




23 Aston and Bietak 2012, 551–56; Bietak 1989a.

24 Aston and Bietak 2012; Bietak 1968; Bietak 1975; Bietak, Mlinar, and Schwab 1991, 28; Kaplan 1980, fig. 128d; Schiestl 2009, 354 and fig. 310).



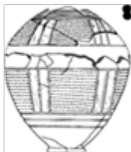


25 For a discussion on the contexts with Tell el-Yahudiyah ware from Tell el-Dab'a: Aston and Bietak 2012, 558.

26 Aston and Bietak 2012, 152, 169, 193, 288, 331; Bourriau 1996, 113 and fig. 8; Kaplan 1980, figs. 25a and 123a; Merrillees 1974b, 59 and fig. 49.

27 Aston and Bietak 2012, 288; Kaplan 1980, fig. 122a; Petrie and Walker 1909, 2–3 and pl. XII.

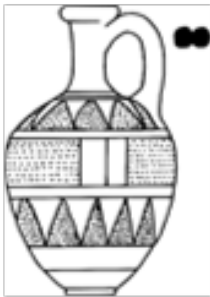
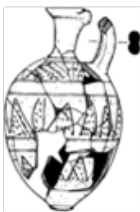


Type	Description	Outline
A.1.3-4	Rim: kettle, namely forming a convex curve, or candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: bipartite; made of a strip of clay with two round sections. Body: ovoid, namely oval or egg-shaped. Base: small and slightly set-off. Surface: usually brown, with incisions at the base of the neck and sometimes just above the base. On the body are vertical bands filled with indentations, or three-to-five horizontal zones of oblique lines or chevron decoration or standing or pendant triangles.	
B.3.1	Rim: straight, without lip. Handle: bipartite, sloping outwards at the upper attachment; made of a strip of clay with two rounded sections and ending near the base of the neck at the lower joint. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: small, pointed, namely ending in a tip, and slightly set-off, namely not continuous with the body. Surface: brown burnished, with three horizontal decorative bands on the body.	
B.4	Rim: candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: bipartite; made of a strip of clay with two round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: small, disc, namely disc-shaped, and set-off, namely not continuous with the body. Surface: brown burnished, with four horizontal decorative bands on the body	
E.1	Rim: unknown. Handle: unknown. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: unknown. Surface: red slipped, with five or more horizontal decorative bands on the body, of which three made of wavy bands filled with six-toothed comb imprints, and two made of running spirals.	
E.2	Rim: kettle, namely forming a convex curve. Handle: triple loop, going from the base of the handle to the base of the shoulder; made of a strip of clay with three round sections. Body: ovoid, namely oval or egg-shaped. Base: button, namely shaped like a button. Surface: four decorative bands with pendant or standing triangles on shoulder and body, with an incised wavy line both between the first and second bands, and between the third and fourth bands.	
F.1	Rim: rolled, namely thickened with rounded section. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: one wide band of large rectangles around a major part of the body	

(continued)






Type	Description	Outline
F.3	Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: incisions at the neck and three decorative bands with squares on the body	
F.4	Rim: probably kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: incisions at the base of the neck and two bands of rectangles on the body, of which one on the upper body and one on the lower body.	
F.5	Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: incisions at the base of the neck and two bands of rectangles on the body, of which one on the upper body and one on the lower body.	
H.1.2	Rim: candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: tripartite, running from the base of the neck to halfway down the shoulder; made of three attached straps of clay with round sections. Body: piriform, nearly biconical; taller than wide, with a sharper angle along the largest circumference, which is at the shoulder. Base: low ring, namely shaped like a think ring. Surface: orange burnished, with incisions at the base of the neck and four decorative bands on the body, of which an upper large one with rectangles, one with pendant triangles, one with swimming fish, and a lower zone with connected standing and pendant triangles.	
I.1.5	Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: incisions at the neck and four decorative bands on the body, varying for each vessel.	

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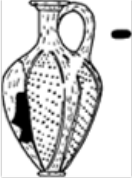


Type	Description	Outline
I.2.2	<p>Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections.</p> <p>Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring.</p> <p>Surface: incisions at the neck and three decorative bands on the body, with variations. One variation displays an upper band with standing triangles, a central band with rectangles, and a lower band with pendant triangles. Another variation displays an upper band with standing triangles, a central band with rectangles, and a lower band with rectangles. Another variation displays an upper band with standing triangles, a central band with joined pendant and standing triangles, and a lower band with standing triangles.</p>	
I.2.3	<p>Rim: candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: incisions at the base of the neck and three decorative bands on the body, all with standing triangles or the upper band with pendant triangles, the central band with rectangles, and the lower band with pendant triangles.</p>	
I.3.1	<p>Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections.</p> <p>Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring.</p> <p>Surface: incisions at the base of the neck and two decorative bands, of which one on the upper body, with standing triangles, and one on the lower body, with pendant triangles.</p>	
I.3.2	<p>Rim: kettle, namely forming a convex curve. Handle: double; made of two attached straps of clay with round sections.</p> <p>Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: disc or button, namely shaped like a disc or a button. Surface: incisions at the base of the neck and two decorative bands, of which one on the upper body, with standing triangles, and one on the lower body, with pendant triangles or, less commonly, intersecting pendant and standing triangles separated by a zigzag zone.</p>	



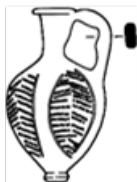


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Type	Description	Outline
I.5.1	Rim: candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: three decorative bands on the body, of which an upper and a lower one with intersecting pendant and standing triangles separated by zigzag zones, and a central one with rectangles.	
I.5.2	Rim: rolled, namely thickened with rounded section. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: three decorative bands on the body, of which an upper one with standing triangles and a central and lower one with pendant triangles.	
I.5.3	Rim: rolled, namely thickened with rounded section. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: three decorative bands on the body, with two variations. The first one sports an upper and a lower band with alternating pendant and standing triangles separated by a zigzag zone, and a central band with rectangles. The second variation sports an upper and middle band with intersecting pendant and standing triangles separated by a zigzag zone, and a lower band with pendant triangles.	
I.5.4	Rim: unknown. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: three decorative bands on the body, of which the upper one with alternating pendant and standing triangles, a central one with rectangles, and a lower one with pendant triangles.	
I.5.5	Rim: unknown. Handle: double; made of two attached straps of clay with round sections. Body: small piriform; small and taller than wide, with the largest circumference at the shoulder. Base: button, namely shaped like a button. Surface: two decorative bands on the body, of which the upper one with standing triangles, and the lower one with pendant triangles.	





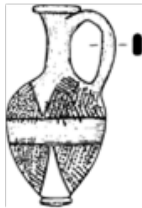

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Type	Description	Outline
I.6.1	Rim: rolled, namely thickened with rounded section. Handle: bipartite; made of a strip of clay with two round sections. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring, namely shaped like a ring. Surface: three decorative bands on the body, of which the upper one with standing triangles, the central one with rectangles, and the lower one with pendant triangles.	
I.6.2	Rim: rolled, namely thickened with rounded section. Handle: bipartite; made of a strip of clay with two round sections. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring, namely shaped like a ring. Surface: two decorative bands on the body, of which the upper one with standing triangles and the lower one with pendant triangles, and a horizontal filled band just above the base.	
I.6.3	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical to piriform; with a sharper angle along the largest circumference, which is at the shoulder. Base: ring, namely shaped like a ring. Surface: two decorative bands on the body, of which the upper one with touching standing triangles and the lower one with touching pendant triangles, and a horizontal filled band just below it.	
J.1	Rim: candlestick, namely with the upper part first going outward and then slightly inward or up, or rolled, namely thickened with rounded section, or everted, namely going outward. Handle: double or strap; made of two attached straps of clay with round sections or one strap of clay with oval section. Body: piriform, to squat piriform, to biconical; with a sharp angle along the largest circumference, which is at the shoulder, or in the upper body, or in the middle of the body. Base: ring or button to offset button, namely shaped like a ring or a button, which can be not continuous with the body. Surface: sometimes burnished, with decoration of lotus flowers and lotus petals or birds on the shoulder and body, sometimes with rishi pattern.	
L.1.1	Rim: candlestick, namely with the upper part first going outward and then slightly inward or up. Handle: strap; made of a strip of clay with oval section. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: decoration of vertical lozenges on the body, running from the shoulder to the base. These lozenges have incised contours and are filled with rows of dots made with a comb.	




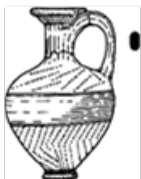

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Type	Description	Outline
L.I.2	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: large piriform; large and taller than wide, with the largest circumference at the shoulder. Base: ring or disc, namely shaped like a ring or a disc. Surface: decoration of large vertical lozenges on the body, running from the shoulder to the base. These lozenges have incised contours and are filled with rows of dots following a zig-zag pattern	
L.I.3	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: piriform to rounded; taller than wide, with a slightly larger circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: burnished, with decoration of two-to-five vertical lozenges on the body, running from the shoulder to the base. These lozenges have incised contours and are filled with rows of dots following a herringbone pattern.	
L.I.4	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: piriform to rounded; taller than wide, with a slightly larger circumference at the shoulder. Base: disc, namely shaped like a disc. Surface: burnished, with decoration of two-to-four vertical lozenges on the body, running from the shoulder to the base. These lozenges have incised contours and are filled with rows of dots following a herringbone pattern.	
L.I.5	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: piriform to rounded; taller than wide, with a slightly larger circumference at the shoulder. Base: button, namely shaped like a button. Surface: burnished, with decoration of three or four vertical lozenges on the body, running from the shoulder to the base. These lozenges have incised contours and are filled with rows of dots following a herringbone pattern.	
L.I.6	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: large piriform to rounded; large and taller than wide, with a slightly larger circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: burnished, with decoration of vertical lozenges on the body, running from the shoulder to the base. These lozenges have no contours and are made of rows of dots following a herringbone pattern.	






(continued)

Type	Description	Outline
L.1.7	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: piriform to rounded; taller than wide, with a slightly larger circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: burnished, with decoration of vertical lozenges on the body, running from the shoulder to the base. These lozenges have no contours and are made of rows of dots following a herringbone pattern.	
L.2.1	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: slender piriform to biconical; slender and with a sharper angle along the largest circumference, which is at the shoulder. Base: ring, namely shaped like a ring. Surface: decorative bands on shoulder and body, made of non-touching rounded rectangles containing a herringbone pattern.	
L.2.2	Rim: ledged, namely with ledges on the outside. Handle: round; made of a strip of clay with round section. Body: ovoid, namely oval or egg-shaped. Base: ring, namely shaped like a ring. Surface: two decorative bands on the body, of which the upper one with standing triangles, and the lower one with pendant triangles.	
L.2.3	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring or offset disc, namely shaped like a ring or a disc not continuous with the body. Surface: two decorative bands on the body, of which the upper one with standing triangles, and the lower one with pendant triangles.	
L.2.4	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: button, namely shaped like a button. Surface: two decorative bands on the body, of which the upper one with standing triangles, and the lower one with pendant triangles. The triangles are filled with a herringbone pattern and can be touching or not.	
L.2.5	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical to piriform; with a sharper angle along the largest circumference, which is at the shoulder. Base: ring, namely shaped like a ring. Surface: two decorative bands on the body, of which the upper one with standing triangles, and the lower one with pendant triangles. The triangles can be touching or not.	

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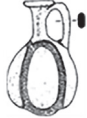
Type	Description	Outline
L.3	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical, also carinated. Base: disc or ring, namely shaped like a disc or a ring. Surface: one variation has decorative band on the shoulder, with filled standing triangles. Another variation has filled vertical lozenges on the body, running from the shoulder to the base and delineated by incised lines.	
L.4	Rim: rolled, namely thickened with rounded section, and with swollen neck, or everted. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring or button, namely shaped like a ring or a button. Surface: burnished and with two decorative bands, of which one on the shoulder, with standing triangles, and one on the body, with pendant triangles.	
L.5.1	Rim: rolled, with swollen neck, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring, namely shaped like a ring. Surface: burnished and with two decorative bands of chevrons, of which one on the shoulder and upper body, and one on the lower body.	
L.5.2	Rim: rolled, namely thickened with rounded section, with swollen neck. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: button, namely shaped like a button. Surface: burnished and with two decorative bands of chevrons, of which one on the shoulder and upper body, and one on the lower body.	
L.5.3	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring or disc, namely shaped like a ring or a disc. Surface: burnished and with two decorative bands, of which one on the shoulder and upper body, and one on the lower body. They can be filled with horizontal chevrons or with oblique lines, sometimes radiating from the base of the neck.	

(continued)

Type	Description	Outline
L.5.4	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: button, namely shaped like a button. Surface: burnished and with two decorative bands of chevrons, of which one on the shoulder and upper body, and one on the lower body.	
L.5.5	Rim: unknown. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: button, namely shaped like a button. Surface: burnished and with one decorative band on the body, containing a wavy line.	
L.6	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: large biconical; large and with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring, namely shaped like a ring. Surface: two decorative bands, of which one on the upper body and one on the lower body. They can be filled both with chevrons, or both with horizontal dots, or the upper one can contain diagonal lines and the lower one a herringbone pattern, or the upper one can contain standing triangles and the lower one large pendant triangles, all filled with a vertical herringbone pattern	
L.7	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: large biconical; large and with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: round, making a round convex curve. Surface: two decorative bands on the body, of which a large upper one with non-delineated vertical chevrons, and a lower one with straight lines radiating out from the base.	
L.8.1	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: ring or disc, namely shaped like a ring or a disc. Surface: two decorative bands, of which one on the shoulder and upper body, and one on the lower body. Both can contain horizontal chevrons or oblique lines, or combine motives such as herringbone pattern, chevrons, horizontal dots, and oblique lines, by using one motive in one band and another one in the other band.	








(continued)




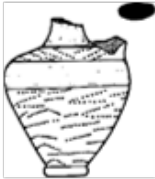




Type	Description	Outline
L.8.2	Rim: rolled, namely thickened with rounded section. Handle: round; made of a strip of clay with round section. Body: bi-conical; with a sharper angle along the largest circumference, which is in the upper or middle part of the body. Base: round, making a round convex curve. Surface: two non-delineated bands with horizontal dots, of which one on the shoulder and upper body and one on the lower body and base.	
L.9.1	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: globular, namely with more or less spherical body, and wheel-made. Base: round, making a round convex curve. Surface: burnished, with two decorative bands on the body, of which the upper one with standing triangles and the lower one with pendant triangles.	
L.9.3	Rim: unknown. Handle: unknown. Body: globular, namely with spherical body, and wheel-made. Base: round, making a round convex curve. Surface: decorative band on the body, with three delineated circles filled with chevrons.	
L.9.4	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: drop-shaped, wheel-made; taller than wide, with the largest circumference near the base. Base: round, making a round convex curve. Surface: decorative band on the body, with three or four filled delineated lozenges.	
L.9.5	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: drop-shaped, wheel-made; taller than wide, with the largest circumference near the base. Base: round, making a round convex curve. Surface: one decorative band on the body, with non-delineated delineated lozenges, or two decorative bands on the body, with horizontal chevrons.	
L.9.6	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: large drop-shaped, wheel-made; taller than wide, with the largest circumference near the base. Base: round, making a round convex curve. Surface: two decorative bands, of which one on the shoulder and upper body with standing triangles, and one on the lower body with pendant triangles.	
L.10	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: quadri-lobal, with the body indented in such a way as to form four lobes. Base: round, making a round convex curve. Surface: each of the four lobes is encircled by incised decoration.	

(continued)



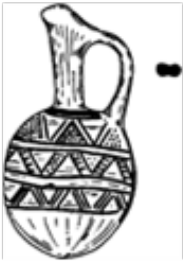



Type	Description	Outline
L.11	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: cylindrical, without change in the circumference. Base: ring, namely shaped like a ring. Surface: decoration of vertical chevrons or herringbone pattern on the body.	
L.12.1	Rim: rolled, namely thickened with rounded section, or everted, namely going outward. Handle: strap; made of a strip of clay with oval section. Body: cylindrical, without change in the circumference. Base: rounded, making a rounded convex curve. Surface: decoration of standing triangles or alternating standing and pendant triangles on the body.	
L.12.2	Rim: rolled, namely thickened with rounded section, or everted, namely going outward. Handle: strap; made of a strip of clay with oval section. Body: cylindrical, without change in the circumference. Base: rounded, making a rounded convex curve. Surface: decoration of horizontal or vertical chevrons, or of oblique or horizontal striations, or a mix of oblique lines and chevrons, on the body.	
L.13.1	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: disc, namely shaped like a disc. Surface: incised horizontal grooves on shoulder, body, and base.	
L.13.2	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: biconical to piriform; with a sharper angle along the largest circumference, which is at the shoulder. Base: ring or disc, namely shaped like a ring or a disc. Surface: incised horizontal grooves on shoulder and body.	
L.13.4	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: cylindrical, without change in the circumference. Base: rounded, making a rounded convex curve. Surface: incised horizontal grooves on body and base.	
L.14.1	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: small piriform to spherical; small and taller than wide, with the largest circumference nearly in the middle. Base: ring, namely shaped like a ring. Surface: decoration on the body, made of three or four lozenges filled with a herringbone pattern.	




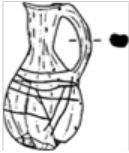
(continued)

Type	Description	Outline
L.14.2	Rim: rolled, namely thickened with rounded section. Handle: strap; made of a strip of clay with oval section. Body: small piriform to spherical; small and taller than wide, with the largest circumference nearly in the middle. Base: button, namely shaped like a button. Surface: decoration on the body, made of three or four lozenges filled with a herringbone pattern.	
L.14.4	Rim: unknown. Handle: strap; made of a strip of clay with oval section. Body: small piriform to spherical; small and taller than wide, with the largest circumference nearly in the middle. Base: ring, namely shaped like a ring. Surface: two decorative bands, of which one on shoulder and upper body, and one on the lower body. The upper band can contain standing triangles and the lower one can contain pendant triangles, or they can both be filled with lines of dots.	
L.15.1	Rim: in the beak, sometimes with spout. Handle: single or double; made of one strap of clay with oval section or two attached straps of clay with round sections. Body: shaped like a duck, sometimes with two bodies. Base: flat, as large as the body. Surface: decorated with rishi design or with comb incision.	
L.15.2	Rim: rolled, namely thickened with rounded section, rising from the head. Handle: strap; made of a strip of clay with oval section. Body: shaped like a hawk. Base: made of the end of the tail and of the legs. Surface: incised striations on wings, chest and back.	
L.15.3	Rim: rolled, namely thickened with rounded section, rising from the mouth. Handle: strap or bipartite, going from the mouth to under the gills; made of a strip of clay with one oval section or two round sections. Body: shaped like a fish, with dorsal and back fins made through a ridge and the ventral fins projected. Base: made of the end of the tail and of the legs. Surface: details, such as the eyes and the gills, are drawn, while the body is covered with a herringbone pattern.	
L.15.5	Rim: rising from the back. Handle: unknown. Body: shaped like a quadruped, probably a cow. Base: made of the end of the legs. Surface: lines of incised dots.	

(continued)

Type	Description	Outline
M.1	Rim: rolled, namely thickened with rounded section. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: button or offset disc, namely shaped like a button or a disc not continuous with the body. Surface: decoration of lozenges filled with zig-zag motives on body and shoulder.	
M.2	Rim: rolled, namely thickened with rounded section. Handle: double; made of two attached straps of clay with round sections. Body: piriform; taller than wide, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: decoration of non-delineated lozenges filled with zig-zag motives on body and shoulder.	
N.1	Rim: with cut-away spout. Handle: double, pushed through the vessel wall; made of two attached straps of clay with round sections. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished. Incisions are at the base of the neck and three decorative bands on the body, of which the upper one with standing triangles delineated by multiple incised lines, the central one with a zigzag delineated by multiple incised lines, and the lower one with groups of three incised lines in a zigzag pattern.	
N.2	Rim: slightly everted, namely going outwards, or kettle, namely forming a convex curve. Handle: double, pushed through the vessel wall; made of two attached straps of clay with round sections. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, with three variations for the decorative bands on the body. The first variation has an incised line at the height of the base of the handle and, starting from there, vertical incised lines running down towards the base. The second variation has two bands with standing triangles, and the third one has an upper band with standing triangles and a lower band with groups of three incised lines in zigzag.	

(continued)

Type	Description	Outline
N.3	Rim: slightly everted, namely going outward or kettle, namely forming a convex curve. Handle: strap, pushed through the vessel wall; made of a strip of clay with oval section. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, with two variations for the decorative bands on the body. The first variation has two bands with alternating standing and pendant triangles. The second variation has a band with alternating standing and pendant triangles, and a band with pendant triangles.	
N.4	Rim: upright. Handle: double, pushed through the vessel wall and running from the rim to low on the shoulder; made of two attached straps of clay with round sections. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, with four variations for the decorative bands on the body. The first variation has a band wrapped around the body. The second variation has a band of intersecting standing and pendant triangles separated by a reserved zigzag. The third variation has a horizontal band filled with vertical lines of dots above and a row of standing triangles below. The fourth variation has two bands of standing triangles.	
N.5	Rim: slightly everted, namely going outward, or kettle, namely forming a convex curve. Handle: double, pushed through the vessel wall and running from the rim to low on the shoulder; made of two attached straps of clay with round sections. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, incised decoration at the base of the neck and with a horizontal decorative band around the upper belly with impressed zigzag.	
N.6	Rim: everted, namely going outward. Handle: strap, pushed through the vessel wall and running from the rim to low on the shoulder; made of a strip of clay with oval section. Body: globular, namely with spherical body, and handmade. Base: round, making a round convex curve. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, with horizontal and oblique lines on the body.	

(continued)

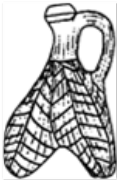






Type	Description	Outline
N.7	Rim: rolled, namely thickened with rounded section. Handle: double, pushed through the vessel wall and running from the rim to low on the shoulder; made of two attached straps of clay with round sections. Body: trilobal, divided into three vertical sections, handmade. Base: trilobal, made of three parts. Surface: brown polished, namely smoothed when nearly dry before firing, and burnished, with incised lines on shoulder and body.	
N.9	Rim: rolled, namely thickened with rounded section. Handle: double, pushed through the vessel wall and running from the rim to low on the shoulder; made of two attached straps of clay with round sections. Body: squat piriform, handmade; wider than tall, with the largest circumference at the shoulder. Base: ring, namely shaped like a ring. Surface: brown polished, namely smoothed when nearly dry before firing and burnished, with rishi pattern decoration around the neck.	
O	Rim: ridged, namely with ridges on the outside. Handle: none. Body: jar, open vessel with S-profile. Base: round, making a round convex curve. Surface: two horizontal decorative bands of dots filled with a white pigment.	
P.1.2	Rim: modelled, namely thickened or folded over, with triangular section. Handle: two or four. Body: dish. Base: probably ring, namely shaped like a ring. Surface: no decoration visible.	
P.2	Rim: modelled, namely thickened or folded over, with triangular section. Handle: none. Body: open vessel, probably a cup. Base: probably ring, namely shaped like a ring. Surface: decoration of spirals and zigzag.	
P.4	Rim: direct, with no modelling. Handle: none. Body: cup, open slender vessel with S-profile. Base: unknown. Surface: decoration of lotus flowers.	
P.5	Rim: direct, with no modelling. Handle: none. Body: beaker, open slender vessel with elongated S-profile. Base: rounded, making a rounded convex curve. Surface: decoration of lotus flowers.	

Table 4: Description and outline of the main types of Tell el-Yahudiyah ware. Drawings after Aston and Bietak 2012.

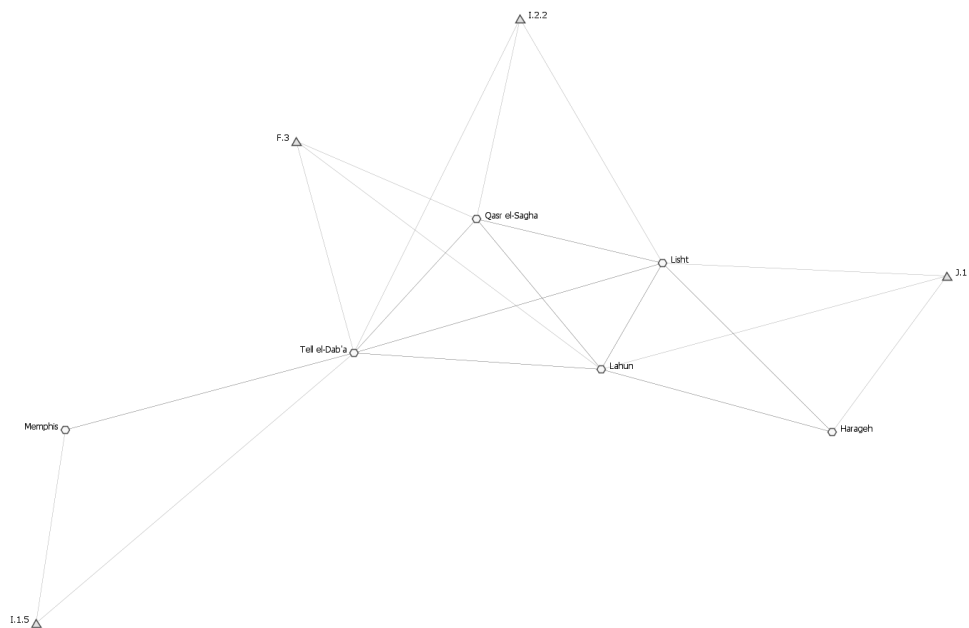


Figure 75: Contexts of the Late Middle Kingdom and the most common types of Tell el-Yahudiyah ware.

ment in Memphis,<sup>28</sup> Qasr el-Sagha,<sup>29</sup> and Lahun,<sup>30</sup> and from both burials and settlement in Harageh.<sup>31</sup> All in all, the contexts are nearly evenly split between funerary and settlement ones, and the types do not show a great variety.

The most common types of Tell el-Yahudiyah ware found in Late Middle Kingdom contexts, visible in Figure 75, are jugs and juglets: with piriform body and kettle rim, double handle, ring base, and decorative bands on the body with squares, rectangles and standing and pendant triangles; with piriform, to squat piriform, to biconical body and candlestick, or rolled, or everted rim, double or strap handle, ring or button to offset button base, and decoration of lotus flowers and lotus petals or birds and sometimes rishi pattern on the shoulder and body (types F.3, I.1.5, I.2.2, J.1). Also recovered in contexts of this period are jugs and juglets: with ovoid body, kettle or candlestick rim, bipartite handle, and slightly set-off base, and incised vertical bands or horizon-

28 Aston and Bietak 2012, 144; Bader 2009, 497.

29 Aston and Bietak 2012, 137 and 152; Šliwa 1992a, 188.

30 Aston and Bietak 2012, 137, 193, 265; Kaplan 1980, 89–90, figs. 8b and 28a; Merrillees 1974b, 64, figs. 42 and 56; Petrie et al. 1891, 10. However, the stratigraphic situation left to us by the excavator is not clear. Therefore, while the specimen of Tell el-Yahudiyah ware here examined is considered to come from a context of the Late Middle Kingdom, future research could indicate a slightly different date for it.

31 Aston and Bietak 2012, 169 and 200; Engelbach and Gunn 1923, 10–13 and pls. X, XLI, LVIII–LXII; Kaplan 1980, figs. 37 a–b and 126e; Merrillees 1974b, 64 and fig. 51b.

tal bands of oblique lines or chevron or standing or pendant triangles on the body; with biconical body, red slipped surface with horizontal bands of wavy lines and spirals; with small piriform body, rolled rim, double handle, button base, and a band of large rectangles on the body; with piriform body, kettle rim, double handle, ring base, and bands of large rectangles on the body; with piriform body, kettle rim, double handle, ring or button or disc base, and bands of large rectangles or standing and pendant triangles on the body; with piriform body, candlestick rim, double handle, button base, and bands of rectangles and triangles and pendant triangles on the body; with nearly biconical body, candlestick rim, tripartite handle, ring base, and bands of rectangles and pendant triangles and fish on the body; with cylindrical body, rolled or everted rim, strap handle, rounded base, and standing and pendant triangles on the body; duck-shaped with single or double handle and sometimes with spout; hawk-shaped with strap handle; handmade with globular body, slightly everted or kettle rim, double handle, round base, and decorations of incised lines or stranding triangles and/or zig-zag patterns (types A.1.3-4, E.1, F.1, F.5, H.1.2, I.2.3, I.3.1, I.3.2, L.12.1, L.15.1, L.15.2, N.2, N.5). Lastly, during this period are found also open vessels with modelled rim and decorations of spirals and zig-zag patterns (type P.2).

As far as the fabrics are concerned, they are mostly of Egyptian origins. Only in Memphis and Tell el-Dab'a fabrics of Levantine origins, namely from Syria-Palestine, are reported.

### *The first one-mode graph*

The network detected for the Late Middle Kingdom on the basis of the Tell el-Yahudiyah ware (Figures 76–79) involves mostly Tell el-Dab'a, Qasr el-Sagha, Lahun, and Lisht, thus the sites in Lower Egypt and in the Memphis-Fayyum area. The specimen in the Theban area is of a type not shared with the other sites and, given that its fabric is not known, it cannot be determined if it was locally produced or if it was transported there from another place.

Concerning the centrality measures (Tables 28, 41, 54, 67 in Appendix II), the closeness centrality is very similar for all the sites, thus it is not very informative because it does not show differences in how the sites could be reached in the network. Furthermore, Tell el-Dab'a, Lisht, Lahun, and Qasr el-Sagha score in the high ranks for the degree and the eigenvector centrality. Therefore, they are the better-connected sites, namely the sites with higher amount and the better type of connections, in the network of the Tell el-Yahudiyah ware. Harageh has a similar pattern too, but it scores in the middle ranks: this would suggest a less prominent role for the site in the network.

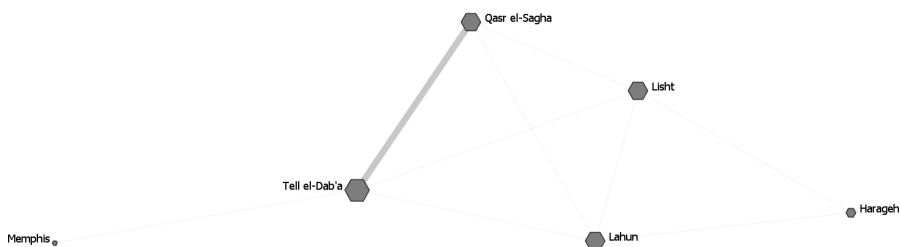


Figure 76: Degree centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LMK.

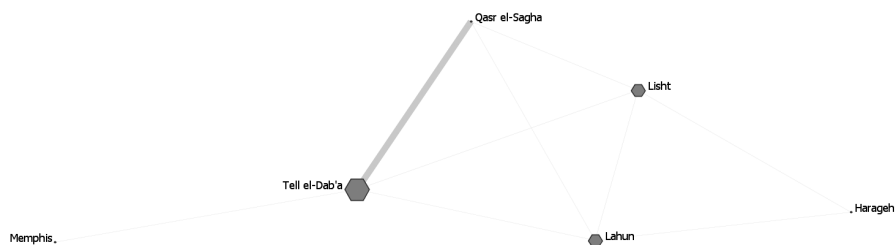


Figure 77: Betweenness centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LMK.

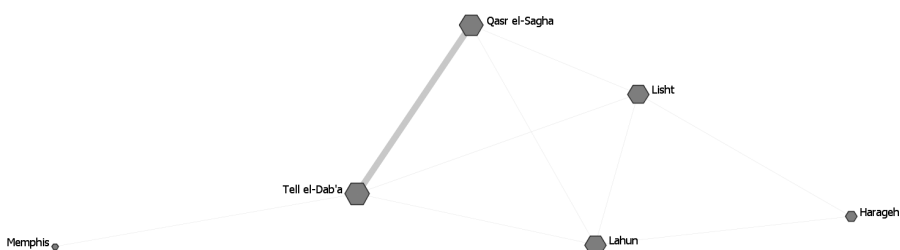


Figure 78: Eigenvector centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LMK.

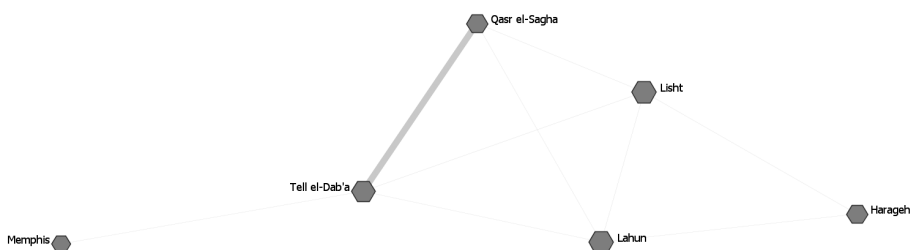


Figure 79: Closeness centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LMK.



In addition, Tell el-Dab'a has a very high score also for the betweenness centrality. This suggests its role also as an intermediary in the network of the Tell el-Yahudiyah ware. Lastly, Memphis and the Theban area, score in low or very low ranks. This implies that they created no, or very weak, connections in the network of the Tell el-Yahudiyah ware, based on the available data. While, especially in the case of Memphis, the results could partially derive from the fact that Tell el-Yahudiyah ware was not much used in settlements, they also seem to depend on the type found at the site, which is less common than types found at other settlements, such as Qasr el-Sagha.

#### *The one-mode graph based on the Jaccard similarity*

The structure of the network constructed through the Jaccard algorithm (Figures 80–83) is, as usual, like the one of the first one-mode graph, detected based on the shared types. The centrality measures (Tables 80, 93, 106, 119 in Appendix III) again show that the closeness centrality is similar for all the sites, with the exception of the Theban area, that scores lower than the other sites; however, only one specimen from the site is included in the analysis, thus the results need to be taken carefully.

Concerning the other centrality measures, they follow a pattern like the one of the first one-mode graph for Memphis, the Theban area, Lahun, and Qasr el-Sagha. Therefore, while the last two are still among the better-connected sites, the first two are the sites with the lowest scores in the network of the Tell el-Yahudiyah ware. Lisht and Harageh have a similar pattern too, but they respectively score higher for the betweenness and the eigenvector centrality. Hence, they appear slightly more important in the network of Tell el-Yahudiyah ware when their full range of types is considered. This difference derives from the fact that their range of types of Tell el-Yahudiyah ware did not include many of the types more in common among the sites.

Lastly, Tell el-Dab'a has a pattern in the second one-mode graph, because it has high or very high scores for the betweenness centrality and the closeness centrality, thus displaying the pattern of an intermediary in the network of the Tell el-Yahudiyah ware. Also in this case, the difference is made by the amount more common types found in the range of Tell el-Yahudiyah ware: they form the major part, so that they give a more prominent role to the site when only the types in common are considered.

#### *Summary*

During the Late Middle Kingdom, the main players in the network created by the Tell el-Yahudiyah ware are Qasr el-Sagha, Lahun, Lisht and, especially when the full range of types is examined, Harageh. Thus, these could be the

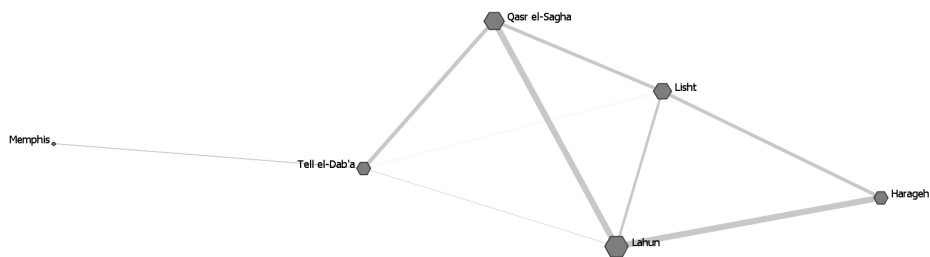


Figure 80: Degree centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LMK.

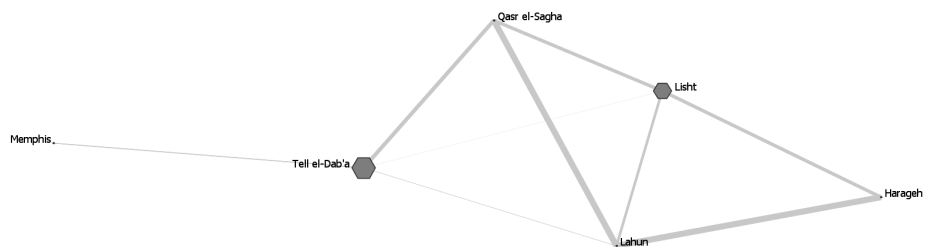


Figure 81: Betweenness centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LMK.

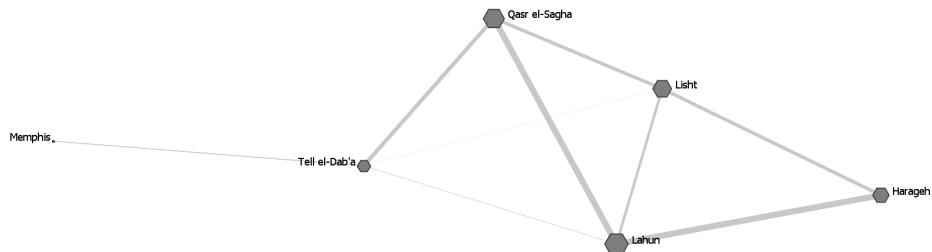


Figure 82: Eigenvector centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LMK.

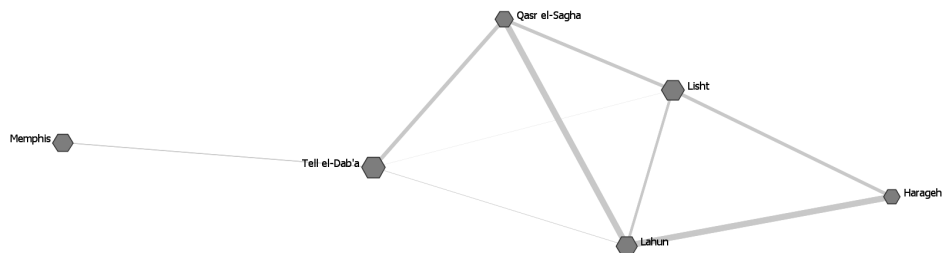


Figure 83: Closeness centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LMK.

starting or ending points of the lines of communication in the network, and where new trends could be spread from.<sup>32</sup> Tell el-Dab'a was probably among the better-connected sites, and constantly appear as an intermediary, thus as a passageway or a (re)distribution centre: the Tell el-Yahudiyah ware could be channelled or (re)distributed from there. Lisht probably played a similar role, too.<sup>33</sup>

## THE EARLY SECOND INTERMEDIATE PERIOD

The sites with Tell el-Yahudiyah ware analysed for this period are only three (Table 16 in Appendix I; Appendix VII) and include Tell el-Dab'a,<sup>34</sup> Memphis,<sup>35</sup> both of which are also found in the analysis of the Late Middle Kingdom, and Abydos.<sup>36</sup> Tell el-Dab'a<sup>37</sup> counts for nearly the totality of the contexts with Tell el-Yahudiyah ware, nearly all from burial contexts, and in a few instances from the settlement.<sup>38</sup> The variety of types is still noticeable, like in the Late Middle Kingdom. For Memphis<sup>39</sup> and Abydos<sup>40</sup> only one example each has been included in the analysis, respectively from a settlement and from a burial context.

As visible in Figure 84, the types found in this period are jugs and juglets: with piriform body, straight direct rim, bipartite handle, pointed base, and horizontal bands of lines on the body; with piriform body, candlestick rim, bipartite handle, disc base, and horizontal bands of lines on the body; with piriform body, candlestick rim, double handle, button base, and decoration of standing or pendant triangles and rectangles on the body, found also in the Late Middle Kingdom; with piriform body, candlestick rim, strap handle, ring base, and decoration of filled lozenges on the body; with piriform body, kettle rim, double handle, ring or disc or button base, and bands of rectangles and/or standing and/or pendant triangles on the body, which are found also during the Late Middle Kingdom; with small piriform body, candlestick rim, dou-

32 Östborn and Gerding 2015.

33 Gjesfeld 2015; Rivers, Knappett, and Evans 2013.

34 Aston and Bietak 2012; Bietak 1970; Bietak, Mlinar, and Schwab 1991, 64–67 and 86–91; Forstner-Müller 2008, 140–217; Kaplan 1980, figs. 16b, 27c, 34 a and d; McGovern and Harbottle 1997, 107 and pl. 9d.

35 Aston and Bietak 2012, 144; Bader 2009, 497.

36 Aston and Bietak 2012, 169; Peet and Loat 1913, 54 and pl. XIII.

37 Aston and Bietak 2012; Bietak 1970; Bietak, Mlinar, and Schwab 1991, 64–67 and 86–91; Forstner-Müller 2008, 140–217; Kaplan 1980, figs. 16b, 27c, 34a and d; McGovern and Harbottle 1997, 107 and pl. 9d.

38 There is the possibility that the specimens from settlement contexts come from tombs or temples: Aston and Bietak 2012, 558.

39 Aston and Bietak 2012, 144; Bader 2009, 497.

40 Aston and Bietak 2012; Peet and Loat 1913, 54 and pl. XIII.



Figure 84: Contexts of the Early Second Intermediate Period and their Tell el-Yahudiyah ware.

ble handle, ring base, and decoration of standing and pendant triangles and rectangles and zig-zag lines on the body; with small piriform body, rolled rim, double handle, button base, and decoration of standing and pendant triangles and rectangles and zig-zag lines on the body; with ovoid body, kettle rim, triple loop handle, button base, and bands of standing and pendant triangles and wavy lines on the body; with biconical body, rolled rim, bipartite handle, ring base, and decoration of standing and pendant triangles and rectangles on the body; with biconical body, rolled rim, strap handle, button base, and decoration of filled standing and pendant triangles on the body; with biconical body, rolled and with swollen neck or everted rim, strap handle, ring or button base, and decoration of standing and pendant triangles on the body; with piriform, to squat piriform, to biconical body, candlestick or rolled or everted rim, double or strap handle, ring or button to offset button base, and decoration of lotus flowers and lotus petals or birds and sometimes rishi pattern on the shoulder and body; handmade with globular body, slightly everted or kettle rim, double or strap handle, round base, and decoration of vertical lines and/or standing and /or pendant triangles and/or zig-zag patterns on the body,

which are found also in the Late Middle Kingdom (in particular types N.2 and N.5); with trilobal body, thickened rolled rim, double handle, trilobal base, and decoration of incised lines on body and shoulder (types B.3.1, B.4, which is probably an heirloom, E.2, F.5, I.1.5, I.2.2, I.2.3, I.3.1, I.3.2, I.5.1, I.5.2, I.5.3, I.5.4, I.5.5, I.6.1, I.6.2, J.1.2, J.1.4, J.1.5, J.1.6, L.1.1, L.2.4, L.4, N.2, N.3, N.4, N.5, N.7). Lastly, during this period are found also open vessels with ridged rim and S-profile and decoration of filled dots, or with modelled rim and decorations of spirals and zig-zag patterns (types O and P.2); the latter is found also in the Late Middle Kingdom.

Regarding the fabrics, they are mostly of Egyptian origins. Fabrics of Levantine origins are quite rarer than during the Late Middle Kingdom and are recorded only in Memphis<sup>41</sup> and in Tell el-Dab'a.<sup>42</sup>

### *Contacts in the Early Second Intermediate Period*

For the Early Second Intermediate Period (Figure 85), only Tell el-Dab'a shares one type, with each of the other two sites in the network, namely Abydos and Memphis. This shows contacts between Tell el-Dab'a and the other two sites during this period. However, the sample examined is very small, and most specimens come from Tell el-Dab'a. Therefore, the possibility for further contacts, not yet visible through the available data, even between more sites should be kept in mind.

So far, it can only be remarked that the available results show what is suggested also from other sources, such as pottery and stelae: that there were contacts, though not always intense, between Tell el-Dab'a and Memphis<sup>43</sup> and Abydos.<sup>44</sup>

## THE LATE SECOND INTERMEDIATE PERIOD

Of the sites with Tell el-Yahudiyah ware examined for this period (Table 22 in Appendix I; Appendix VIII), only Tell el-Dab'a<sup>45</sup> is present in the analysis

41 Aston and Bietak 2012, 144; Bader 2009, 497.

42 Aston and Bietak 2012; Bietak 1970; Bietak, Mlinar, and Schwab 1991, 64–67 and 86–91; Forstner-Müller 2008, 140–217; Kaplan 1980, figs. 16b, 27c, 34 a and d; McGovern and Harbottle 1997, 107 and pl. 9d.

43 Bader 2007; Bader 2008; Bader 2009; Mourad 2013.

44 Mourad 2013.

45 Adam 1959, 207 and pl. 16.2; Aston and Bietak 2012; Bader 2009, 129 and fig. 59; Bietak 1968; Bietak 1970; Bietak 1990; Bietak, Mlinar, and Schwab 1991, 54–57 and 112–113; Forstner-Müller 2008, 221–384; Fuscaldo 2000, 82; Kaplan 1980, figs. 6a and c and e, 16c, 22d, 34c, 50a and d–g, 92b, 93a, 127b and d, 128a; Kopetzky 2008, 198–200, figs. 3–4 and 6; V. Müller 2008, 294 and fig. 168.

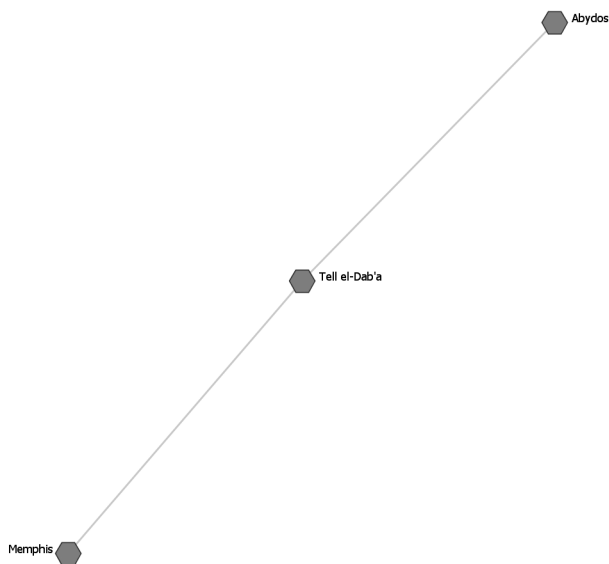


Figure 85: First one-mode graph of the Tell el-Yahudiyah ware during the ESIP.

of both previous periods, while Harageh<sup>46</sup> and Abydos<sup>47</sup> are part of the analysis not only of the Late Second Intermediate Period, but also respectively of the Late Middle Kingdom and the Early Second Intermediate Period. The remaining sites, namely Tell el-Yahudiyah,<sup>48</sup> Sedment,<sup>49</sup> Mostagedda,<sup>50</sup> Hu,<sup>51</sup> Tell Hebua,<sup>52</sup> Rifeh,<sup>53</sup> and Edfu,<sup>54</sup> are included only in the analysis of the Late Second Intermediate Period.

46 Aston and Bietak 2012, 257; Engelbach and Gunn 1923, 2–5 and 10–13, pls. XLI and LVIII–LXII; Kaplan 1980, fig. 19c.

47 Aston and Bietak 2012, 200, 231, 257; Garstang, Newberry, and Milte 1901, 12; Randall-MacIver, Mace, and Griffith 1902, 92, 97–98.

48 Adam 1958, 309; Aston and Bietak 2012, 206–88; Griffith 1890, 39–40; Kaplan 1980, figs. 7c, 13f, 14b, 22a–d, 47a, 57d, 86b, 90a and c, 92c, 94c, 95c and e, 100f, 121a, 125 e–f, 126 a–d; Petrie and Duncan 1906, 11 and 15.

49 Aston and Bietak 2012, 278; Kaplan 1980, fig. 117d; Petrie and Brunton 1924, pls. XLV–XLVI.

50 Aston and Bietak 2012, 265; Brunton and Morant 1937, 117.

51 Aston and Bietak 2012, 206 and 231; Bourriau 2009, 72; Kaplan 1980, figs. 46a and 85d; Petrie and Mace 1901, 50–52.

52 Aston and Bietak 2012, 288; Maksoud 1998, 201–2.

53 Aston and Bietak 2012, 206–11 and 254–57; Petrie, Thompson, and Crum 1907, 20–21.

54 Aston and Bietak 2012, 257; Kaplan 1980, fig. 17e.

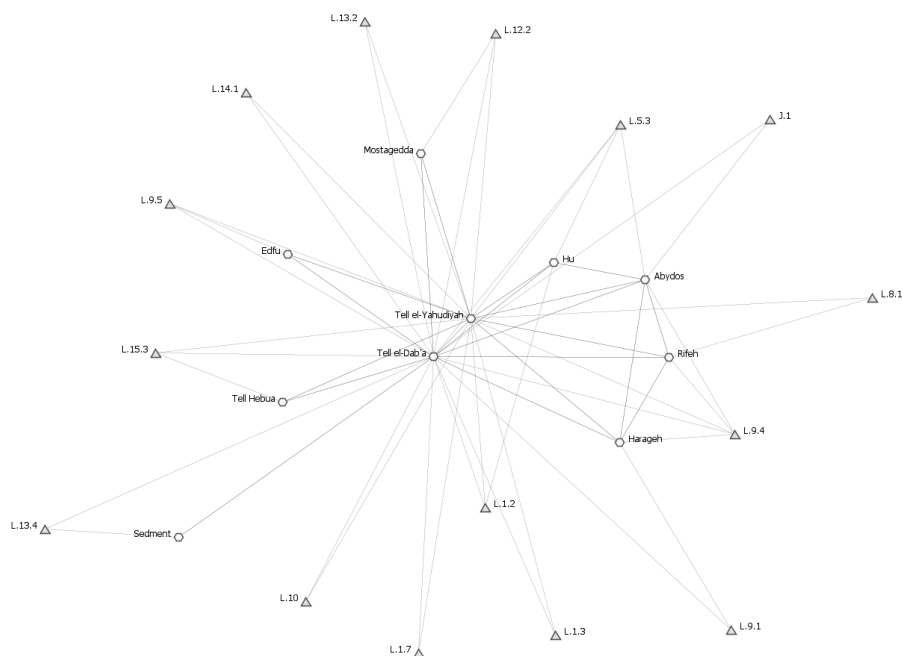


Figure 86: Contexts of the Late Second Intermediate Period and the most common types of Tell el-Yahudiyah ware.

Nearly all the contexts analysed, and also the greatest variety of types, are found in Tell el-Dab'a<sup>55</sup> and in Tell el-Yahudiyah.<sup>56</sup> Unfortunately, for the latter it is not possible to know the exact number of contexts where the pottery has been found. Nevertheless, both sites have contributed both burial and settlement contexts.<sup>57</sup>

55 Adam 1959, 207 and pl. 16.2; Aston and Bietak 2012, 129 and fig. 59; Bietak 1968; Bietak 1970; Bietak 1990; Bietak, Mlinar, and Schwab 1991, 54–57 and 112–113; Forstner-Müller 2008, 221–384; Fuscaldò 2000, 82; Kaplan 1980, figs. 6a and c and e, 16c, 22d, 34c, 50a and d–g, 92b, 93a, 127b and d, 128a; Kopetzky 2008, 198–200, figs. 3–4 and 6; V. Müller 2008, 294 and fig. 168.

56 Adam 1958, 309; Aston and Bietak 2012, 206–88; Griffith 1890, 39–40; Kaplan 1980, figs. 7c, 13f, 14b, 22a–d, 47a, 57d, 86b, 90a and c, 92c, 94c, 95c and e, 100f, 121a, 125 e–f, 126 a–d; Petrie and Duncan 1906, 11 and 15.

57 There is the possibility that the specimens from settlement contexts come from tombs: Aston and Bietak 2012, 558.

Burial contexts with Tell el-Yahudiyah ware are found also in Harageh,<sup>58</sup> Sedment,<sup>59</sup> Rifeh,<sup>60</sup> Mostagedda,<sup>61</sup> Abydos,<sup>62</sup> Hu,<sup>63</sup> and Edfu,<sup>64</sup> while settlement contexts come from Tell Hebua.<sup>65</sup> However, generally speaking, the contexts examined are nearly evenly split between burial and settlement contexts.

During the Late Second Intermediate Period, as visible in Figure 86, the most common type of Tell el-Yahudiyah ware retrieved at the sites includes jugs and juglets with piriform to rounded body, rolled rim, strap handle, ring base, and decoration of filled lozenges on the body (type L.1.3), followed by jugs and juglets: with piriform to rounded body, rolled rim, strap handle, disc or button base, and decoration of filled lozenges on the body; with biconical body, rolled rim, strap handle, ring or disc base, and bands of oblique lines or chevrons on the body and shoulder (types L.1.4, L.1.5, L.5.3, and L.9.4).

Less common during this period are jugs and juglets: with piriform, to squat piriform, to biconical body, candlestick or rolled or everted rim, double or strap handle, ring or button to offset button base, and decoration of lotus flowers and lotus petals or birds and sometimes rishi pattern on the shoulder and body, found also in the previous two periods; with large piriform body, rolled rim, strap handle, ring or disc base, and decoration of filled lozenges on the body; with piriform to rounded body, rolled rim, strap handle, ring base, and decoration of filled lozenges on the body; with small piriform body, rolled rim, strap handle, ring base, and decoration of filled lozenges on the body; with biconical body, rolled rim, strap handle, ring or disc base, and bands of chevrons and/or oblique lines and/or herringbone pattern on the body; with biconical to piriform body, rolled rim, strap handle, and incised grooves on shoulder and body; with globular or large drop-shaped body, rolled rim, strap handle, round base, and decoration of standing and pendant triangles on the body; with drop-shaped body, rolled rim, strap handle, round base, with decoration of lozenges or bands of chevrons on the body; with quadrilobal body, rolled rim, strap handle, round base, and incised decoration; with cylindrical body, rolled or everted rim, strap handle, rounded base, and decoration of

58 Aston and Bietak 2012, 257; Engelbach and Gunn 1923, 2–5 and 10–13, pls. XLI and LVIII–LXII; Kaplan 1980, fig. 19c.

59 Aston and Bietak 2012, 278; Kaplan 1980, fig. 117d; Petrie and Brunton 1924, pls. XLV–XLVI.

60 Aston and Bietak 2012, 206–11 and 254–57; Petrie, Thompson, and Crum 1907, 20–21.

61 Aston and Bietak 2012, 265; Brunton and Morant 1937, 117.

62 Aston and Bietak 2012, 200, 231, 257; Garstang, Newberry, and Milte 1901, 12; Randall-MacIver, Mace, and Griffith 1902, 92, 97–98.

63 Aston and Bietak 2012, 206 and 231; Bourriau 2009, 72; Kaplan 1980, figs. 46a and 85d; Petrie and Mace 1901, 50–52.

64 Aston and Bietak 2012, 257; Kaplan 1980, fig. 17e.

65 Aston and Bietak 2012, 288; Maksoud 1998, 201–2.



chevrons and/or oblique lines or horizontal striations on the body; with cylindrical body, rolled rim, strap handle, rounded base, and incised grooves on body and base; fish-shaped, with strap or bipartite handle (types J.1, L.1.2, L.1.7, L.8.1, L.9.1, L.9.5, L.9.6, L.10, L.12.2, L.13.2, L.13.4, L.14.1, and L15.3).

Finally, types that are found only in Tell el-Dab'a include jugs: with piriform body, kettle rim, double handle, ring base, and decoration of rectangles on the body; with piriform body, kettle rim, double handle, disc or button base, and decoration of standing and pendant triangles and/or zig-zag pattern, found also in the two previous periods; with piriform body, rolled rim, strap handle, disc base, and incised grooves on shoulder and body and base; with piriform body, rolled rim, double handle, button or disc or ring base, and decoration of filled lozenges on the body; with small piriform body, rolled rim, double handle, button base, and decoration of standing and pendant triangles and zig-zag pattern, found also in the Early Second Intermediate Period; with biconical to piriform body, rolled rim, strap handle, ring base, and decoration of standing and pendant triangles and sometimes horizontal filled band on the body; with large piriform to rounded body, rolled rim, strap handle, ring base, and decoration of filled lozenges on the body; with slender piriform to biconical body, rolled rim, strap handle, ring base, and decoration of filled rounded rectangles on the body; with small piriform to spherical body, rolled rim, strap handle, button base, and decoration of filled lozenges on the body; with small piriform to spherical body, strap handle, ring base, and decoration of standing and pendant triangles on the body; with ovoid body, ledged rim, round handle, ring base, and decoration of standing and pendant triangles on the body; with biconical body, rolled rim, strap handle, ring or disc or button base, and decoration of pendant and standing triangles on the body; with biconical body also carinated, rolled rim, strap handle, disc or ring base, decoration of standing triangle or lozenges on the body; with biconical body, rolled and with swollen neck or everted rim, strap handle, ring or button base, and decoration of pendant and standing triangles on the body, found also in the Early Second Intermediate Period; with biconical body, rolled rim with swollen neck, strap handle, ring or button base, and decoration of bands of chevrons on the body; with biconical body, rolled rim, strap handle, button base, and decoration of bands of chevrons or wavy lines on the body; with biconical body, rolled rim, round handle, round base, and decoration of bands of dots on the body; with large biconical body, rolled rim, strap handle, ring base, and decoration of bands of chevrons or diagonal lines and herringbone pattern or pendant and standing triangles; with large biconical body, rolled rim, strap handle, round base, and decoration of bands of chevrons and diagonal lines; with globular body, round base, and decoration of circles with chevrons on the body; handmade with globular body, spouted rim, double handle,

round base, and decoration of standing triangles and zig-zag pattern on the body; handmade with globular body, upright rim, double handle, round base, and decoration of standing and/or pendant triangles and/or zig-zag pattern on the body, found also in the Early Second Intermediate Period; handmade with globular body, everted rim, strap handle, round base, and decoration of horizontal and oblique lines on the body; with cylindrical body, rolled rim, strap handle, ring base, and decoration of chevrons or herringbone pattern on the body; with cylindrical body, rolled or everted rim, strap handle, rounded base, and decoration of standing and pendant triangles on the body, found also in the Late Middle Kingdom; with squat piriform body, rolled rim, double handle, ring base, and decoration of rishi pattern on the neck; duck-shaped, with single or double handle, found also in the Late Middle Kingdom; hawk-shaped, with strap handle, found also in the Late Middle Kingdom; probably cow-shaped (types F.4, I.3.2, I.5.3, I.6.3, L.1.6, L.2.1, L.2.2, L.2.3, L.2.4, L.2.5, L.3, L.4, L.5.1, L.5.2, L.5.4, L.5.5, L.6, L.7, L.8.2, L.9.3, L.11, L.12.1, L.13.1, L.14.2, L.14.4, L.15.1, L.15.2, L.15.5, M.1, M.2, N.1, N.4, N.6, N.9).

The specimens of this period from Tell el-Dab'a include also open vessels: cups with ridged rim and S-profile and decoration of filled dots, found also in the Early Second Intermediate Period; cups with modelled rim and ring base, and decoration of spirals and zig-zag pattern, found also in the previous two periods; cups and beakers with S-profile and direct rim, and decoration of lotus flowers; dishes with modelled rim, two to four handles, and ring base (types O, P.1.2, P.2, P.4, and P5).

The fabric used to produce the Tell el-Yahudiyah ware during the Late Second Intermediate Period is almost exclusively Egyptian, with few instances of Levantine fabrics in Tell el-Dab'a<sup>66</sup> and Tell el-Yahudiyah.<sup>67</sup>

### *The first one-mode graph*

The network elaborated for the Tell el-Yahudiyah ware during the Late Second Intermediate Period (Figures 87–90) demonstrates the central role of Tell el-Dab'a and Tell el-Yahudiyah in the network, because all the other sites are connected to them more than they are connected among themselves. The links shared by Harageh, Rifeh, and Abydos could show through which areas the communications between Lower and southern Upper Egypt were passing by. Nevertheless, the network appears to rely mostly on sites in Lower and Middle Egypt.

66 Aston and Bietak 2012, 137 and 529–30; Bietak, Mlinar, and Schwab 1991, 152 and 163–64.

67 Aston and Bietak 2012, 265; Griffith 1890, 39–40; Kaplan 1980, fig. 7c; Petrie and Duncan 1906, 11.

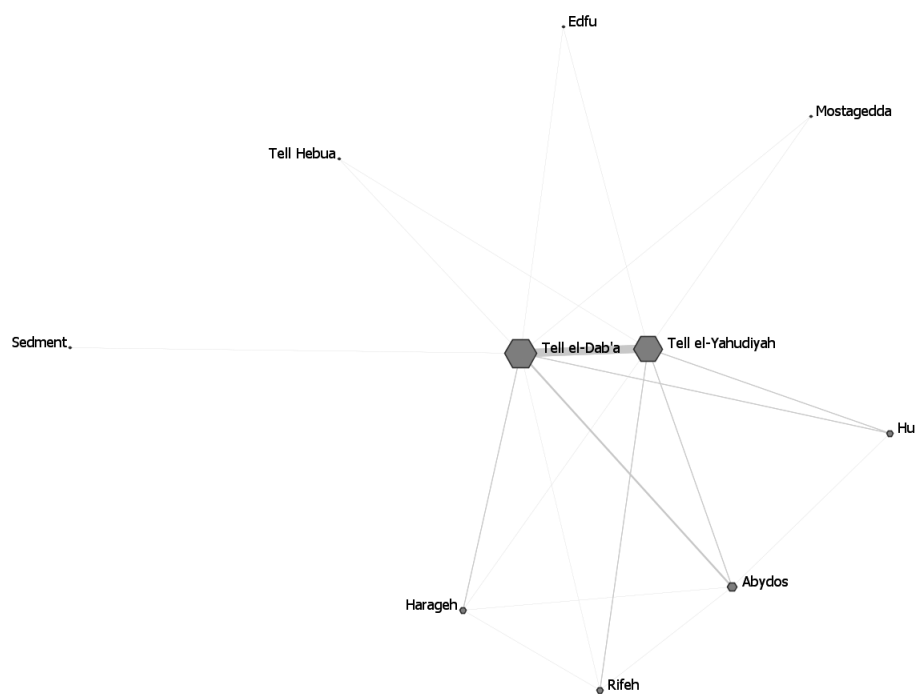


Figure 87: Degree centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

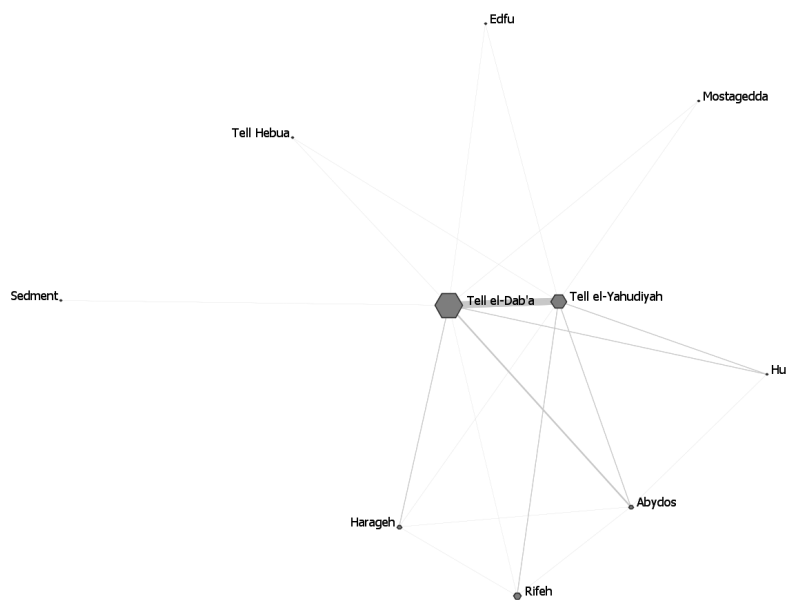


Figure 88: Betweenness centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

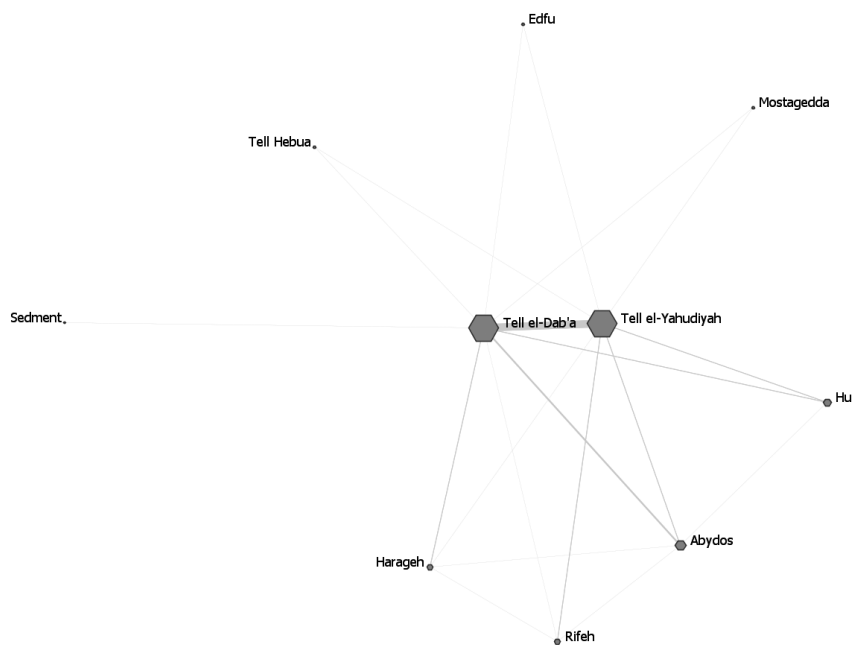


Figure 89: Eigenvector centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

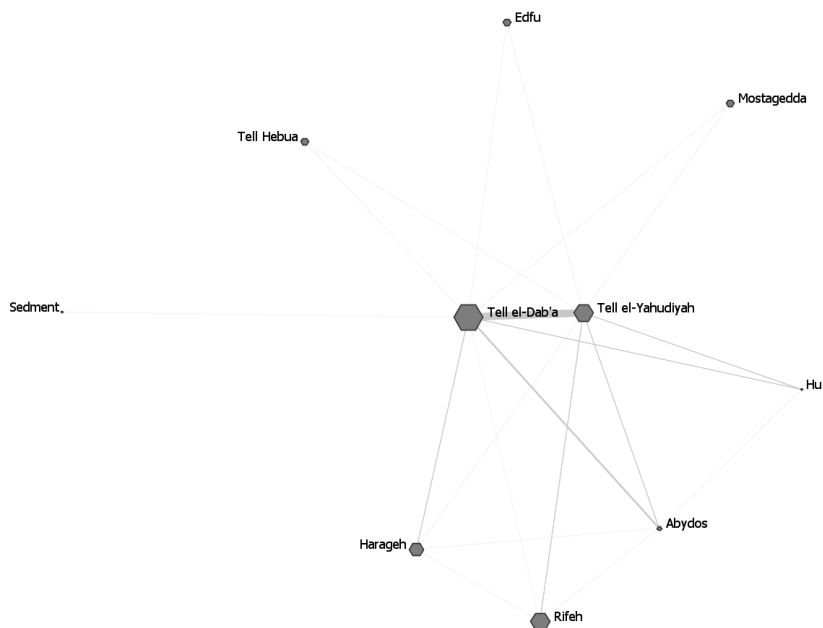


Figure 90: Closeness centrality of the first one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

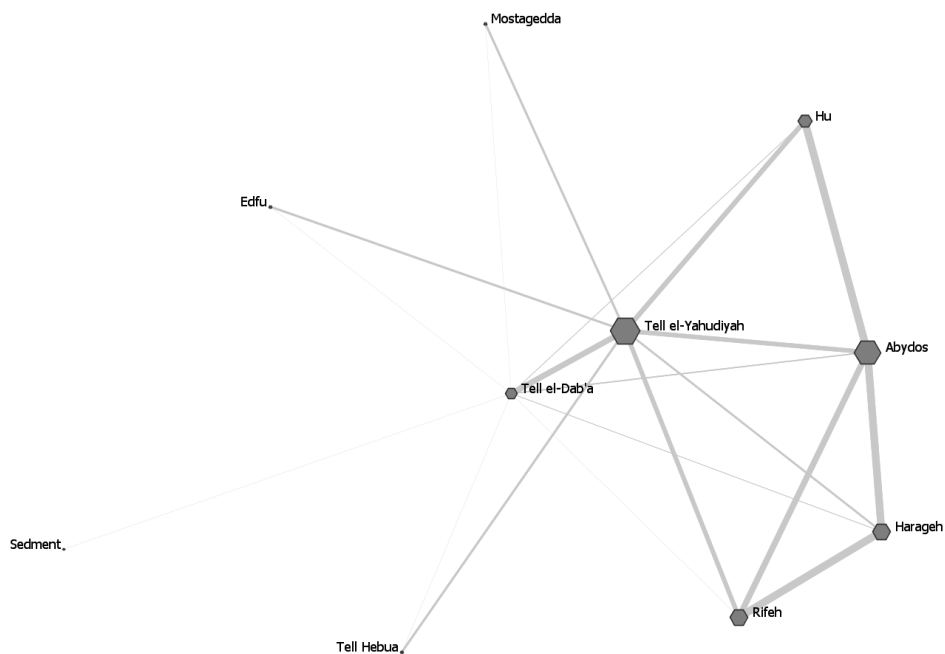


Figure 91: Degree centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

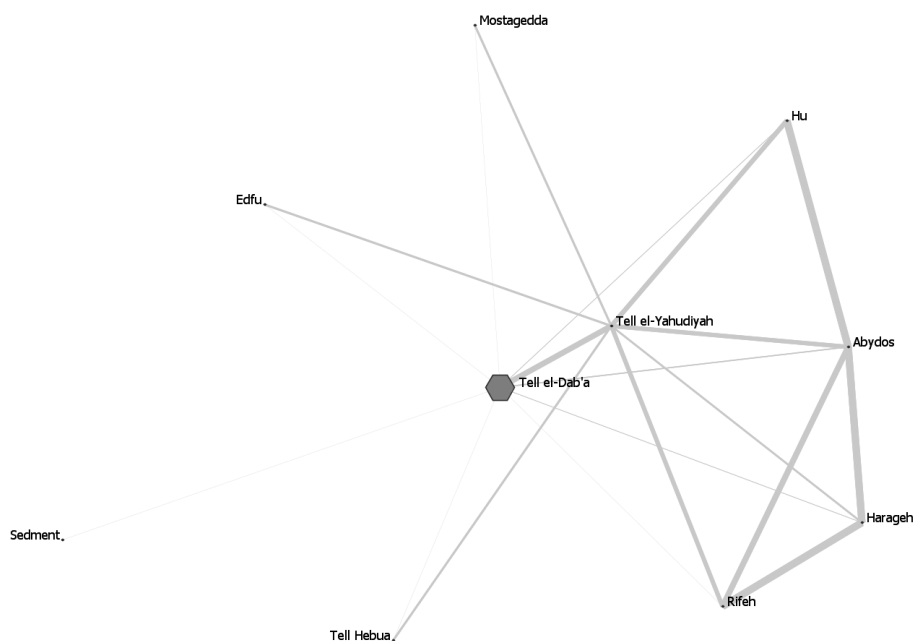


Figure 92: Betweenness centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

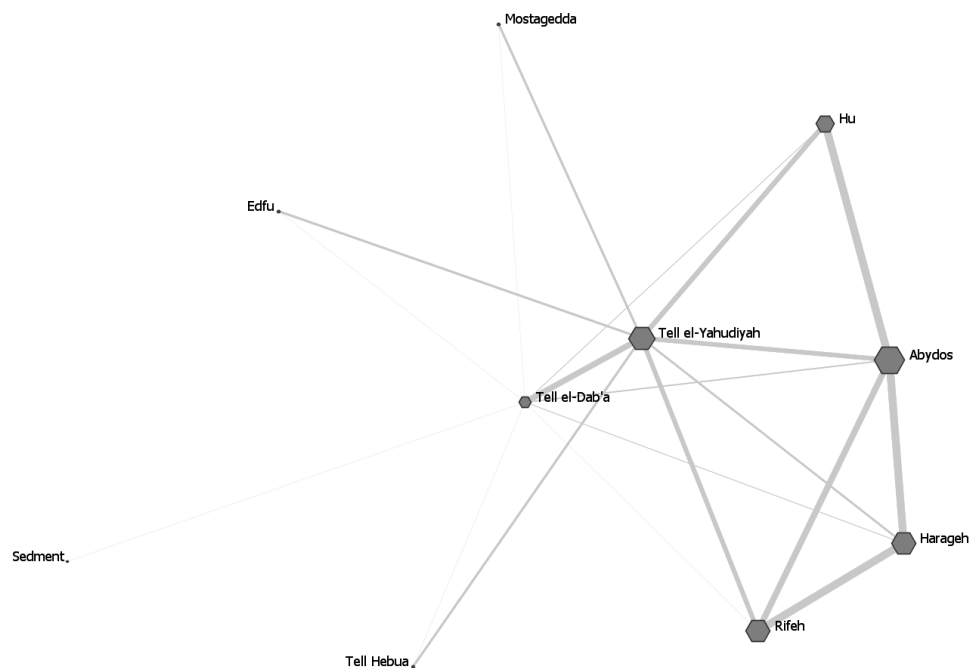


Figure 93: Eigenvector centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

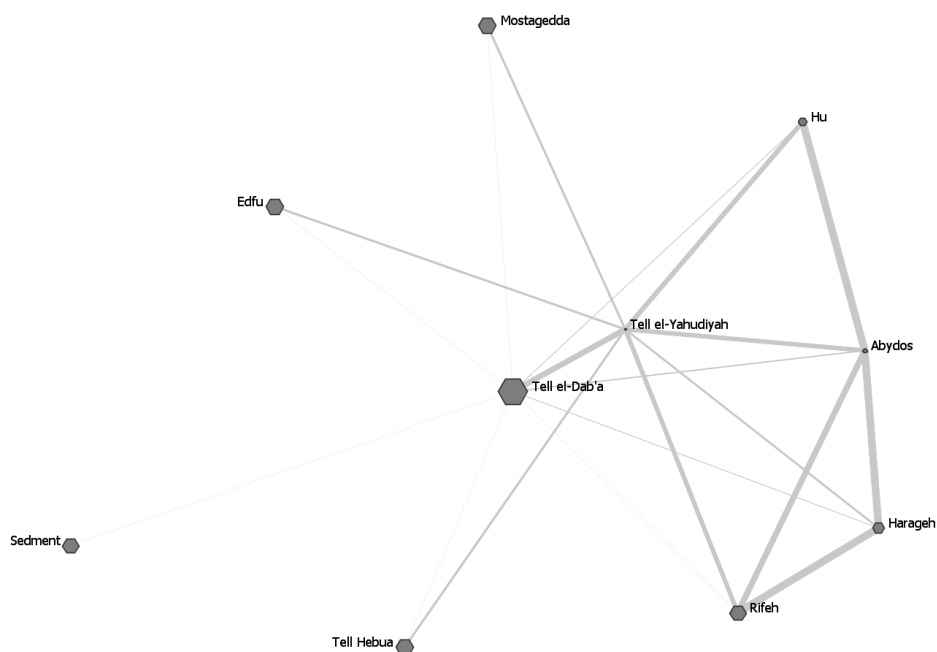


Figure 94: Closeness centrality of the second one-mode graph of the Tell el-Yahudiyah ware during the LSIP.

The centrality measures (Tables 35, 48, 61, 74 in Appendix II) indicate that Tell el-Dab'a and Tell el-Yahudiyah were the main players in the network, because they score in the high or very high ranks for all the measures, apart from the middle rank of the betweenness centrality of Tell el-Yahudiyah.

The remaining sites, namely Harageh, Sedment, Rifeh, Mostagedda, Abydos, Hu, Edfu, Tell Hebua, score all in the low or very low ranks, with the exception of the closeness centrality of Harageh and Rifeh, which is respectively in the high and in the middle rank. This means that though these two sites, like the other sites, have no strong connections in the network, were more easily accessible than the others.

#### *The one-mode graph based on the Jaccard similarity*

The network built through the Jaccard algorithm (Figures 91–94) has, again, the same structure as the first one-mode graph. The centrality measures (Tables 87, 100, 113, 126 in Appendix III) suggest, like in the previous graph, a major role for Tell el-Yahudiyah, which scores in the very high rank for the degree and eigenvector centrality.

Among the better-connected sites, namely sites with many connections of good quality, are also Harageh, Rifeh, Abydos, and Hu, which score between the middle, only for Hu, high, and very high ranks for the degree and the eigenvector centrality. Hence, their importance is increased when the full range of types is examined. This situation derives from the fact that, while these sites have part of their range of Tell el-Yahudiyah ware types in common with the other sites, this does not include the most widespread types. Therefore, these sites look less important when only the shared types are considered.

This is also the reason why Sedment, Mostagedda, Edfu, and Tell Hebua seem slightly more important in the second one-mode graph: even though they score mostly in the low and very low ranks, their closeness centrality is between the middle and the high ranks, implying that they were easily accessible in the network of the Tell el-Yahudiyah ware.

Finally, Tell el-Dab'a shows a completely different pattern from the previous graph, because now it scores in the very high rank only for the betweenness and the eigenvector centrality, thus appearing like an intermediary. This is also due to the influence that the proportion of more common and more rare types in the range of Tell el-Dab'a has in the two one-mode graphs.

#### *Summary*

During the Late Second Intermediate Period, the main players in the network based on the Tell el-Yahudiyah ware are Tell el-Yahudiyah and, when the full range of types is examined, Harageh, Rifeh, and Abydos. Therefore, these

sites were probably the starting or ending points of the lines of communication in the network, and where new trends could start.<sup>68</sup> Lastly, Tell el-Dab'a, while it was probably one of the better-connected sites, constantly appear as an intermediary, thus as a passageway or a (re)distribution centre. Hence, the Tell el-Yahudiyah ware could pass through or be (re)distributed from there.<sup>69</sup>

### *Nubia*

Tell el-Yahudiyah ware is found also in Nubia,<sup>70</sup> both in the Early and in the Late Second Intermediate Period. The specimens come from the sites of Kerma,<sup>71</sup> Buhen,<sup>72</sup> Aniba,<sup>73</sup> and Mirgissa.<sup>74</sup> Nubian sites are not included in the analysis, because the relationships with Nubia go beyond the scope of the present work. Nevertheless, Nubia is one of the main areas where Tell el-Yahudiyah ware has been found. Therefore, considering the connections created between Nubia and Egyptian sites through the types shared can give interesting insights.

Kerma is one of the main sites in southern Nubia, inhabited between the fourth millennium and the Egyptian New Kingdom. During the Egyptian Second Intermediate Period, it became the centre of a large kingdom. From this period, a palace-like structure and tombs, of both upper and lower classes, have been excavated.<sup>75</sup> Buhen was a small settlement, inhabited between the Egyptian Old Kingdom and New Kingdom. During the Middle Kingdom a large Egyptian fortress, with a temple of Horus, was built and occupied also during the New Kingdom.<sup>76</sup> From the Second Intermediate Period, tombs have been excavated at the site.<sup>77</sup> Mirgissa was inhabited from the fourth millennium B.C. but is known for the Egyptian fort built during the Middle Kingdom.<sup>78</sup> From the Second Intermediate Period, tombs have been excavated at the site.<sup>79</sup> Aniba is known for the Egyptian fort of the Middle Kingdom. The

68 Östborn and Gerding 2015.

69 Gjesfeld 2015; Rivers, Knappett, and Evans 2013.

70 Randall-MacIver and Woolley 1911, 161–77, 201–16, 310–11 and pls. 49, 92; Reisner 1915, 77 and fig. 9; Reisner 1923, 381–88 and pls. 70.3, 76.6; Steindorff 1937, 38–40, 125–37, 167–70, 194–97, 227–29 and pls. 81.36b4, 86.45a1, 86.45b1–5.

71 Reisner 1915, 77 and fig. 9; Reisner 1923, 381–88 and pls. 70.3, 76.7.

72 Randall-MacIver and Woolley 1911, 161–77, 201–6, 310–11 and pls. 49, 92.

73 Steindorff 1937, 38–40, 125–37, 167–70, 194–97, 227–29 and pls. 81.36b4, 86.45a1, 86.45b1–5.

74 Vercoutter 1965; Vercoutter 1975, 44–49.

75 Reisner 1923.

76 Emery 1963; Randall-MacIver and Woolley 1911.

77 Randall-MacIver and Woolley 1911.

78 Vercoutter 1970.

79 Vercoutter 1975; Vercoutter 1976.



site, with settlement and cemeteries, was occupied already in the third millennium B.C. and at least until the New Kingdom, but also material dated to the Egyptian Second Intermediate Period has been found.<sup>80</sup>

While it can be seen that the Nubian sites have types in common mostly with Tell el-Dab'a and Tell el-Yahudiyah, they also share types with sites in the Memphis-Fayyum area and in Middle Egypt, and rarely with southern Upper Egypt. These sites include Harageh, Rifeh, Mostagedda, Abydos, and Hu. Therefore, while the stronger connections are with the sites in the Eastern Delta, there are connections also with sites in the Nile Valley, but outside of the Theban region. There were connections through the Western Desert and the oases, such as Bahariya,<sup>81</sup> but this cannot be shown through the Tell el-Yahudiyah ware yet, because the specimen found at Bahariya cannot be included in a precise subgroup.<sup>82</sup> For the rest, the internal network of the Egyptian sites, thus the overall connections between the Egyptian sites and their role, do not change with the inclusion of the Nubian sites.

### THE CORRESPONDENCE ANALYSIS

The scores detected in the analysis of the Tell el-Yahudiyah ware have been run also through correspondence analysis, to study the relation between the variety of types discovered at the sites and the measures calculated in both graphs in this chapter. The results (Appendix IV) for the Late Middle Kingdom and the Late Second Intermediate Period demonstrate a slight tendency of sites with higher variety of types to score higher for the degree centrality and the eigenvector centrality, while the betweenness centrality is not affected. This tendency lessens when the scores of the second one-mode graph are considered. Hence, a larger quantity of types does not necessarily imply higher scores, and the results are not unavoidably biased by the number of archaeological finds.

### CONCLUDING REMARKS

During the Late Middle Kingdom, the sites of Lahun, Lisht and, possibly, Harageh appear like the sites where the Tell el-Yahudiyah ware was produced or destined to, and where new trends could be spread from. It is not surprising that the sites are mostly located in the Memphis-Fayyum area, given that was the area of the capital during the period.<sup>83</sup> Tell el-Dab'a probably belonged

80 Steindorff 1935; Steindorff 1937.

81 Agut and Moreno-García 2016, 292–94; Baud 1997; Colin 2005.

82 Aston and Bietak 2012, 54; Colin 2005, 44–46; Colin, Laisney, and Marchand 2000, 186.

83 Agut and Moreno-García 2016, 249–53; Grajetzki 2004; Quirke 2005.

to this group and was acting also like a passageway or (re)distribution centre, namely where the Tell el-Yahudiyah ware would pass by on its way to its destinations or could be (re)distributed from. Nevertheless, the circulation of this ware includes mostly sites in Lower and Egypt and the Memphis-Fayyum area.

During the Early Second Intermediate Period, the only contacts detected through the network of the Tell el-Yahudiyah ware are between Tell el-Dab'a and respectively Memphis and Abydos. Contacts between Tell el-Dab'a and Abydos, and the presence of Asiatics of middle and high ranks at the latter, are shown also from other sources, especially stelae.<sup>84</sup>

During the Late Second Intermediate Period, Tell el-Yahudiyah and, possibly, Harageh, Rifeh, and Abydos appear to be the sites where the Tell el-Yahudiyah ware was sent to or from, and where new trends could spread from. All in all, the network seems to involve mostly sites in Lower and Middle Egypt. Tell el-Dab'a was probably also part of this group, and it was also a passageway or (re)distribution centre, thus the place where the Tell el-Yahudiyah ware would be channelled through in order to reach other sites, or where it would be (re)distributed from.

84 Discussed in: Mourad 2013.